A FINAL REPORT OF THE
REVIEW AND EVALUATION OF THE
PERFORMANCE METRICS AND RELATED REMEDIES OF

VERIZON PENNSYLVANIA, INC.

(APPENDICES)

DOHERTY & COMPANY, INC.

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FEBRUARY 17, 2004

DOHERTY & COMPANY, INC.

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REVIEW OF PERFORMANCE METRICS AND RELATED REMEDIES

TABLE OF APPENDICES

DOHERTY & COMPANY, INC.

APPENDIX A – PRE-ORDERING METRICS

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This Appendix discusses each of the Verizon PA's Pre-Ordering metrics, and relevant sub-metrics.

A - INTRODUCTION

There are nine performance metrics in the Pre-Ordering domain.   In June 2003, PO-9 was eliminated from the Verizon PA Carrier-to-Carrier (C2C) Guidelines leaving eight (8) metrics, comprised of 24 sub-metrics.   These metrics generally report on Verizon PA's availability, timeliness, and responsiveness.

Not all of these performance metrics are included in Pennsylvania's Performance Assurance Plan (PAP) For April-May 2003 the following eleven sub-metrics: PO-1-01, PO-1-02, PO-1-03, PO-1-04, PO-1-05, PO-1-06, PO-2-02, PO-3-02, PO-3-04, PO-8-01, and PO-8-02 were included in Pennsylvania's PAP.   For June 2003, PO-1-02, PO-1-04, PO-1-05, PO-3-02, and PO-3-04 were removed from Pennsylvania's PAP, leaving only six Pre-Ordering sub-metrics in the PA PAP, specifically: PO-1-01, PO-1-03, PO-1-06, PO-2-02, PO-8-01, and PO-8-02.

The following Section (B – Specific Metrics) describes each of the relevant metrics and the processes for data collection, manipulation and reporting.   This is followed by Section C – Findings and Section D – Recommendations. Metrics discussed include:

- **PO-1:** Average Response Time
- **PO-1-01**: Average Response Time (Customer Service Record)
- **PO-1-02**: Average Response Time (Due Date Availability)
- **PO-1-03**: Average Response Time (Address Validation)
- **PO-1-04**: Average Response Time (Product And Service Availability)
- **PO-1-05**: Average Response Time (Telephone Number Availability And Reservation)
- **PO-1-06**: Average Response Time (Mechanized Loop Qualification, DSL)
- **PO-1-07**: Average Response Time (Rejected Query)
- **PO-1-08**: Average Response Time (Percent Timeouts)
- **PO-1-09**: Average Response Time (Parsed Customer Service Record)
- **PO-2:** OSS Interface Availability
- **PO-2-01**: Not In Use At Verizon PA.
- **PO-2-02**: OSS Interface Availability (Prime Time)
- **PO-2-03**: OSS Interface Availability (Non Prime Time)
- **PO-3:** Contact Center Availability
- **PO-3-02:** Ordering % Answered within 30 Seconds

- **PO-3-04:** Repair % Answered within 30 Seconds
- **PO-4:** Timeliness of Change Management Notice
- **PO-5:** Average Notification of Interface Outage
- **PO-6:** Software Validation
- **PO-7:** Software Problem Resolution Timeliness
- **PO-8:** Manual Loop Qualification

B – SPECIFIC METRICS

PO-1: AVERAGE RESPONSE TIME

Definition

This metric measures the response time of the OSS pre-ordering interface, as well as percent timeouts. For metrics PO-1-01 through PO-1-06, and PO-1-09, response time is the amount of time, rounded to the nearest 1/100th of a second, for a successful transaction. Successful transactions are those where the requested information was returned to the requestor, and errors are those responses that did not contain the requested information. For PO-1-07, response time is the amount of time, rounded to the nearest 1/100th of a second, between the issuance of a simulated pre-ordering query and the receipt of an error message associated with a rejected query. A rejected query is a query that cannot be processed successfully due to incomplete or invalid information submitted by the sender, which results in an error message back to the sender.[1]

Percent timeouts are measured in PO-1-08. A query is considered to be a time-out when the requested information (or an error message) is not provided within 60 seconds. Time-outs are set at long intervals to ensure that average response times include long response times, but do not include queries that will never complete.[2]

Sub-metrics

- **PO-1-01**: Average Response Time (Customer Service Record)
- **PO-1-02**: Average Response Time (Due Date Availability)
- **PO-1-03**: Average Response Time (Address Validation)
- **PO-1-04**: Average Response Time (Product And Service Availability)
- **PO-1-05**: Average Response Time (Telephone Number Availability And Reservation)
- **PO-1-06**: Average Response Time (Mechanized Loop Qualification, DSL)
- **PO-1-07**: Average Response Time (Rejected Query)
- **PO-1-08**: Average Response Time (Percent Timeouts)
- **PO-1-09**: Average Response Time (Parsed Customer Service Record)

Although included in Verizon PA's Network Metric Platform (NMP), only PO-1-01 through PO-1-06 were included in Verizon PA's PAP for the period April 2003 to May 2003, and only PO-1-01, PO-1-03, and PO-1-06 for June 2003.[3]

Report Dimension

CLEC Aggregate: Pennsylvania[4]

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[1] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 4)
[2] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 4)
[3] Information Response PM-004.8 (Incentive Plan Reports)/April-June PAPs

Most sub-metrics are disaggregated by the interface used to enter/receive the data, which include: EDI (6020) and CORBA (6030 or application-to-application interfaces), and web graphical user interface (6050).[5]

Metric Creation

DCI reviewed the WEB/GUI interface that is used by the CLECs and resellers for performing Pre-Ordering, Ordering, and Repair activities. These services are provided over a secured website (using secured sockets – i.e. https://wholesalegw/verizon/com) that requires a digital certificate and a username and password. The webpage that is presented allows Pre-Ordering, LSR, and Repair to be performed from various links on the page, although this can be somewhat controlled by the individual CLECs based on the rights assigned to various user logins. The application is a very thin client design (probably JAVA) with no use of ActiveX components (at least on the client side). The system design uses XML documents for moving information between the client and server. Each CLEC is given a SuperUser account, which is used for setting up other users and granting them the appropriate rights.[6]

Pre-Order: The various activities associated with Pre-Ordering are available from the Pre-Ordering pages. The various activities performed by an agent are retained within the system and can be retrieved from a history log. The history log is stored on the backend server for a period of time. The transaction forms contain the following types of fields that allow information to be provided to complete a query or activity:

- Red Dots – Required Fields
- Yellow Dots – Conditional Fields
- Green Dots – Optional Fields

The longest response times were associated with Directory Listing, Product Service Inquiries, and Loop Qualification.[7]

Repair: The various activities associated with Repair are available from the Repair page. The various activities performed by an agent are retained within the system and can be retrieved from a history log. The history log is stored on the backend server for a period of time. The transaction forms contain the following types of fields that allow information to be provided to complete a query or activity:

- Red Dots – Required Fields
- Yellow Dots – Conditional Fields
- Green Dots – Optional Fields

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[4] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 6)
[5] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)
[6] Interview C-010
[7] Interview C-010

Some of the repair tests take time to complete. The system has been designed to permit the agent to "move on" to another activity or test and then to return some time later to get the results of a test. The results of these activities are stored in the backend server table.[8]

An example of a test that requires time is the manual loop qualification. If an automatic qualification does not work the agent can request a manual qualification. This electronically sends a request to the engineering queue where it is worked and sent back.

Based on our understanding of the overall architectural design of these systems, it is impractical, if not impossible, to actually monitor CLEC results "from enter key to results returned" as specified in the C2C Performance Metrics. First, the workstation where the enter key is pressed is not on Verizon PA premises or within the control of Verizon PA. The lag time between the "enter key" and receipt by Verizon PA on its server is primarily a function of the speed of the CLEC workstation and the speed of transmission over the Internet, both of which are two things beyond Verizon PA control. Furthermore, the way the systems are design, it permits the agent to move to another activity without having to wait for a response. In certain cases, this might be more productive than waiting for a response. The agent can retrieve the results at a later time when it is more convenient. Therefore, measuring the response at the server is a practical solution[9]

The measurements for all PO-1 metrics (except PO-1-07) are derived from actual production transactions for CLEC transactions, and from simulated pre-ordering queries generated by Verizon PA's EnView system (formerly referred to as Sentinel) for Verizon PA retail transactions and CLEC PO-1-07 transactions.[10]

For CLEC transactions, response time is measured from receipt of the request at Verizon PA's interface between the CLEC and the underlying OSS to the time that the response is sent to the interface between the CLEC and the underlying OSS. For Verizon PA retail simulated transactions, performance is measured between the issuance of a pre-ordering query (when the request is sent by EnView to the OSS system) and the successful receipt of the requested information (when the EnView system receives the response from the OSS system).[11]

At least 10 Verizon PA retail (and CLEC PO-1-07) simulated queries are generated per hour for each type of query. The total number of simulated queries depends on the average response times.[12] EnView issues queries synchronously (that is, it waits until it receives a response, or until 60 seconds have passed without a response, before issuing another query). This means that longer response times cause fewer transactions to be simulated.[13] EnView also generates at least 10 simulated incomplete or invalid pre-ordering queries per hour to enable measurement of PO-1-07 (average response time – rejected query).[14]

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[8] Interview C-010
[9] Interview C-010
[10] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5) and Interview with Verizon Technical Staff, July 24, 2003
[11] Telephone interview with Verizon Technical Staff, Aug. 21, 2003
[12] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5) and Interview with Verizon Technical Staff, July 24, 2003
[13] Telephone interview with Verizon Technical Staff, Aug. 21, 2003
[14] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)

The documentation provided by Verizon PA for fields in the table used to select records and calculate results in PO-1 metrics is shown in Table A-1.[15]

Table A-1 – Creation of Data in TB_PRE_ORDER_FACT

Field Name	Contains	Valid Values
INTERFACE_SOURCE	Indicates the INTERFACE_SOURCE	C = for CORBA E = EDI/Netlink W = Web N = OSS transactions (retail)
STATE_CODE	A two character state code	14 states data only
COMPANY_CODE	Company code	IP Address in CORBA/ Company Code in EDI / Company Name in WEB
TRANSACTION_TYPE_SENT	Inbound transaction code up to 4 characters	
RETURNED_TRANSACTION_CODE	Returned transaction code up to 40 characters	
ARRIVAL_DATE	Arrival date and time of the transaction	YYYY-MM-DD HH24:MI:SS
OUTBOUND_DATE	Outbound date and time of the transaction	YYYY-MM-DD HH24:MI:SS
ORDER_ORIGIN	States whether the record is from the production feed or from EnView feed	P = for Production data N = for EnView Data
TIME_OUT_INDICATOR	Indicates whether the transaction was timed out or not	Y = Time Out N = Not timed Out
RESPONSE_TIME	Number	Actual response time in seconds calculated up to 3 decimal places
TEST_ACCOUNT_IND	Indicates whether the CLEC was test account or not	Y = Test CLEC V = Verizon Affiliates N = Actual CLEC

The documentation provided by Verizon PA for fields in the lookup table used to select records and calculate results in PO-1 metrics is shown in Table A-2.[16]

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[15] Information Response C-042 (PO-1 Fact Table Documentation)
[16] Information Response C-051 (Questions on metrics methodology)

Table A-2 – Creation of Data in TB_TRANSCTION_TYPE_CHILD_LKP

Field Name	Contains	Valid Values
TRANSACTION_TYPE_CHILD	Valid outbound transaction codes	• OSS_BOSS_BOSS_CSR_PA - Customer Service Record / Parsed CSR • OSS_LWG_ADDRVRFY_PA - Address Validation • OSS_LWG_DUEDATE_PA - Date Due Availability • OSS_LWG_PSA_PA - Product and Service Availability • OSS_LWG_TN_SELECT_PA - Telephone Number Availability and Reservation • OSS_LXR_PA - Facility Availability Loop Qualification • OSS_REJCSR_REJCSR_PA - Rejected Query
TRANSACTION_TYPE_HEADER	Transaction type	• ADV - Address Validation • CSR - Customer Service Record • DDA - Due Data Availability • LXA - Mechanized Loop Qualification • PCSR - Parsed CSR • PSR - Product and Service Availability • REJ - Rejected Query • TNS - Telephone Number Availability and Reservation

Verizon PA's first indication was that they believed the figures did not match due to rounding error by DCI[17]. Later, however, Verizon PA retracted that, amended the above information to indicate that there were more valid values for the TRANSACTION_TYPE_HEADER field: CSR_B, DDA_B, ADV_B, PSR_B, TNS_B, LXA_B, and that the field TB_PRE_ORDER_FACT.RETURNED_ TRANSACTION_CODE was a 40-byte field.[18]

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[17] Information Response C-012 follow-up
[18] Interview C-013

Exclusions

Normal exclusions include Saturday, Sunday, and major holidays, as well as hours outside of the normal report period.[19] According to Verizon PA's written documentation, data is reported based on transactions occurring between 8:00AM and 9:00PM Monday through Friday, excluding New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day.[20] (This is a subset of the list of holidays Verizon PA recognizes as specified on the web site http://www22.verizon.com/wholesale/attachments/VZ_E_2002_Holiday_Sched.pdf, which was a 2002 holiday schedule. A 2003 version was not available.)

Test transactions are excluded from all C2C metric calculations.[21] Although this was not indicated in the Pennsylvania version of the guidelines, Verizon PA employees indicated that the guidelines were in error and should have specified this exclusion.[22]

Verizon PA affiliate reporting (including VADI) is always excluded from CLEC aggregate data for all metrics.[23] Although this was not indicated in the Pennsylvania version of the guidelines, Verizon PA employees indicated that the guidelines were in error and should have specified this exclusion.[24] Later, it was determined that this exclusion was included in a global exclusion in the front section of the PA C2C Guidelines.

The guidelines specify that queries that time-out are excluded from the calculation of average response time.[25]

In determining which records to include in a report, Verizon PA does a join between the main table used in this metric and at least one dimension table. Dimension tables used in the queries include TB_GEOGRAPHY_ST_GRP_DIMENSION (which is used to choose records from a particular state or region) and TB_TRANSCTION_TYPE_CHILD_LKP (which is used to determine transaction types of retail data).[26]

Filters

This section lists those items that are not actual exclusions, but are used to retrieve the correct transactions from the database.

- dimensionTable.GROUP_NAME IN ('MD', 'DC', 'VA', 'WV', 'DE', 'PN'), which would filter out any transaction with a state code that is not listed in the parentheses.[27]

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[19] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)
[20] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)
[21] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 3)
[22] Telephone interview with Verizon Technical Staff, Aug. 21, 2003
[23] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 3)
[24] Telephone interview with Verizon Technical Staff, Aug. 21, 2003
[25] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 4)
[26] Information Response C-044
[27] Information Response C-044

DCI Methodology

For April results, DCI first attempted to replicate the results using the New York CMAs, because the domain workshops with Verizon PA representatives indicated that the documentation given to DCI after the sessions would be what was currently in use for Verizon PA. When it became clear in a meeting at Verizon PA on July 24, 2003, that the New York CMA actually were not those used at Verizon PA for April 2003, DCI recalculated the metrics using Pennsylvania CMA issued for April/May. April/May 2003 results were calculated using only the Pennsylvania CMA. When it became clear in a phone interview with Verizon PA on August 21, 2003, that the Pennsylvania CMA was incorrect, DCI recalculated the June metrics using Pennsylvania CMA for June.

DCI also used an upload ID code to identify which records belonged to a report period, because the data Verizon PA sent did not include the REPORT_PERIOD field from the table that the documentation said was used for these metrics.[28] Verizon PA employees indicated later that the documentation was in error and that there is no REPORT_PERIOD field; instead, Verizon PA uses the field OUTBOUND_DATE to determine which transactions to include in any given month's report.[29]

Additionally, DCI could not re-create all dimension and lookup tables because Verizon PA did not send schemas for those tables, as requested. Because of this situation, DCI instead created only those lookup tables vital to the evaluation of these metrics by looking at the data sent and making the best approximation possible of field sizes and data types.

PO-1-01: AVERAGE RESPONSE TIME (CUSTOMER SERVICE RECORD)

Definition

This sub-metric measures average response time for records with the transaction type that indicates they are customer service records.[30]

Formula

- **CLEC sub-metrics**: Sum of the response times for each transaction divided by the number of transactions.[31]
- **Retail sub-metrics**: Sum of the response times for each transaction divided by the number of simulated transactions for the transaction type.[32]

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[28] Information Response C-042 (*Verizon NY C2C Guidelines* Page X) and C-044 (*Verizon PA C2C Guidelines*)
[29] Information Response C-051 (Questions on metrics methodology)
[30] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 6)
[31] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Pages 5-6)
[32] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Pages 5-6)

DCI Derived Metric Statement

6020 for CLECs

```
SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME) ratio1016020
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND (A11.STATE_CODE = A12.STATE_CODE
AND A12.GROUP_NAME IN ('MD', 'DC', 'VA', 'WV', 'DE', 'PN')
AND a11.INTERFACE_SOURCE = 'E'
AND a11.ORDER_ORIGIN = 'P'
AND a11.TIME_OUT_INDICATOR = 'N'
AND a11.TEST_ACCOUNT_IND = 'N'
AND A11.TRANSACTION_TYPE_SENT = 'CSR'
AND A11.RETURNED_TRANSACTION_CODE IN ('CSA')
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY A12.GROUP_NAME,
TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');
```

6020 for Verizon

```
SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME) VZratio1016020
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12,
TB_TRANSCTION_TYPE_CHILD_LKP A13
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND A11.RETURNED_TRANSACTION_CODE = A13.TRANSACTION_TYPE_CHILD
AND (A11.STATE_CODE = A12.STATE_CODE
AND A12.GROUP_NAME IN ('MD', 'DC', 'VA', 'WV', 'DE', 'PN')
AND A11.INTERFACE_SOURCE = 'N'
AND A11.ORDER_ORIGIN = 'N'
AND A11.TIME_OUT_INDICATOR = 'N'
AND A13.TRANSACTION_TYPE_HEADER = 'CSR_B'
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');
```

6030 for CLECs

```
SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME) ratio1016030
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND (A12.GROUP_NAME IN ('DC', 'MD', 'VA', 'WV', 'DE', 'PN')
AND A11.INTERFACE_SOURCE = 'C'
AND A11.ORDER_ORIGIN = 'P'
AND A11.TEST_ACCOUNT_IND = 'N'
AND A11.TIME_OUT_INDICATOR = 'N'
AND A11.TRANSACTION_TYPE_SENT = 'CSR'
AND A11.RETURNED_TRANSACTION_CODE IN ('CSA')
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');
```

6030 for Verizon

Same as 6020

6050 for CLECs

```
SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME) ratio1016050
FROM TB_PRE_ORDER_FACT A11, TB_GEOGRAPHY_ST_GRP_DIMENSION A12
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND (A12.GROUP_NAME IN ('DC', 'MD', 'VA', 'WV', 'DE', 'PN')
AND A11.INTERFACE_SOURCE = 'W'
AND A11.ORDER_ORIGIN = 'P'
AND A11.TIME_OUT_INDICATOR = 'N'
AND A11.TEST_ACCOUNT_IND = 'N'
AND A11.TRANSACTION_TYPE_SENT = 'CSR'
AND A11.RETURNED_TRANSACTION_CODE IN ('CSA')
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');
```

6050 for Verizon

Same as 6020

Report Dimension

CLEC Aggregate: Pennsylvania[33]

Performance Standard

- **EDI and CORBA** (application-to-application interfaces): Parity with retail plus not more than four seconds. The four-second difference is designed to allow for variations in functionality and additional security requirements of interface. [34]
- **Web GUI**: Parity with retail plus not more than seven seconds. The seven-second difference is designed to allow for variations in functionality and additional security requirements of the interface.[35]

PO-1-02: AVERAGE RESPONSE TIME (DUE DATE AVAILABILITY)

Definition

This sub-metric measures average response time for records with the transaction type that indicates they are due date availability records.[36]

Formula

- **CLEC sub-metrics**: Sum of the response times for each transaction divided by the number of transactions. [37]
- **Retail sub-metrics**: Sum of the response times for each transaction divided by the number of simulated transactions for the transaction type.[38]

DCI Derived Metric Statement

6020 for CLECs

SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME)ratio1026020
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND (A11.STATE_CODE = A12.STATE_CODE
AND A12.GROUP_NAME IN ('MD', 'DC', 'VA', 'WV', 'DE', 'PN')

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[33] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 6)
[34] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)
[35] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)
[36] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 6)
[37] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)
[38] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)

AND A11.INTERFACE_SOURCE = 'E'
AND A11.ORDER_ORIGIN = 'P'
AND A11.TIME_OUT_INDICATOR = 'N'
AND A11.TRANSACTION_TYPE_SENT = 'DDA'
AND A11.RETURNED_TRANSACTION_CODE = 'DDR'
AND A11.TEST_ACCOUNT_IND = 'N'
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');

6020 for Verizon

SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME)VZratio1026020
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12,
TB_TRANSCTION_TYPE_CHILD_LKP A13
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND A11.RETURNED_TRANSACTION_CODE = A13.TRANSACTION_TYPE_CHILD
AND (A11.STATE_CODE = A12.STATE_CODE
AND A12.GROUP_NAME IN ('MD', 'DC', 'VA', 'WV', 'DE', 'PN')
AND A11.INTERFACE_SOURCE = 'N'
AND A11.ORDER_ORIGIN = 'N'
AND A11.TIME_OUT_INDICATOR = 'N'
AND A13.TRANSACTION_TYPE_HEADER = ('DDA_B')
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');

6030 for CLECs

SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME) ratio1026030
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND (A12.GROUP_NAME IN ('DC', 'MD', 'VA', 'WV', 'DE', 'PN')
AND A11.STATE_CODE = A12.STATE_CODE
AND A11.INTERFACE_SOURCE = 'C'
AND A11.ORDER_ORIGIN = 'P'
AND A11.TIME_OUT_INDICATOR = 'N'
AND A11.TRANSACTION_TYPE_SENT = 'DDA'
AND A11.RETURNED_TRANSACTION_CODE = 'DDR'

AND A11.TEST_ACCOUNT_IND = 'N'
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');

6030 for Verizon

Same as 6020

6050 for CLECs

SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME) ratio1026050
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND (A12.GROUP_NAME IN ('DC', 'MD', 'VA', 'WV', 'DE', 'PN')
AND A11.STATE_CODE = A12.STATE_CODE
AND A11.INTERFACE_SOURCE = 'W'
AND A11.ORDER_ORIGIN = 'P'
AND A11.TIME_OUT_INDICATOR = 'N'
AND A11.TRANSACTION_TYPE_SENT = 'DDA'
AND A11.RETURNED_TRANSACTION_CODE = 'DDR'
AND A11.TEST_ACCOUNT_IND = 'N'
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');

6050 for Verizon

Same as 6020

Report Dimension

CLEC Aggregate: Pennsylvania[39]

Performance Standard

- **EDI and CORBA** (application-to-application interfaces)*:* Parity with retail plus not more than four seconds. The four-second difference is designed to allow for variations in functionality and additional security requirements of interface. [40]

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[39] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 6)
[40] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)

- **Web GUI**: Parity with retail plus not more than seven seconds. The seven-second difference is designed to allow for variations in functionality and additional security requirements of the interface.[41]

PO-1-03: AVERAGE RESPONSE TIME (ADDRESS VALIDATION)

Definition

This sub-metric measures average response time for records with the transaction type that indicates they are address validation records.[42]

Formula

- **CLEC sub-metrics**: Sum of the response times for each transaction divided by the number of CLEC transactions. [43]
- **Retail sub-metrics**: Sum of the response times for each transaction divided by the number of simulated transactions for the transaction type.[44]

DCI Derived Metric Statement

6020 for CLECs

```
SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME) ratio1036020
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND (A11.STATE_CODE = A12.STATE_CODE
AND A12.GROUP_NAME IN ('MD', 'DC', 'VA', 'WV', 'DE', 'PN')
AND A11.INTERFACE_SOURCE = 'E'
AND A11.ORDER_ORIGIN = 'P'
AND A11.TEST_ACCOUNT_IND = 'N'
AND A11.TIME_OUT_INDICATOR = 'N'
AND A11.TRANSACTION_TYPE_SENT IN ('ADR', 'ADT', 'CADR', 'CADT')
AND A11.RETURNED_TRANSACTION_CODE IN ('ADA', 'ADI')
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');
```

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[41] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)
[42] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 6)
[43] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)
[44] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)

6020 for Verizon

```
SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME)VZratio1036020
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12,
TB_TRANSCTION_TYPE_CHILD_LKP A13
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND A11.RETURNED_TRANSACTION_CODE = A13.TRANSACTION_TYPE_CHILD
AND (A11.STATE_CODE = A12.STATE_CODE
AND A12.GROUP_NAME IN ('MD', 'DC', 'VA', 'WV', 'DE', 'PN')
AND A11.INTERFACE_SOURCE = 'N'
AND A11.ORDER_ORIGIN = 'N'
AND A11.TIME_OUT_INDICATOR = 'N'
AND A13.TRANSACTION_TYPE_HEADER = ('ADV_B')
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');
```

6030 for CLECs

```
SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME) ratio1036030
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND (A12.GROUP_NAME IN ('DC', 'MD', 'VA', 'WV', 'DE', 'PN')
AND A11.STATE_CODE = A12.STATE_CODE
AND A11.INTERFACE_SOURCE = 'C'
AND A11.ORDER_ORIGIN = 'P'
AND A11.TEST_ACCOUNT_IND = 'N'
AND A11.TIME_OUT_INDICATOR = 'N'
AND A11.TRANSACTION_TYPE_SENT IN ('ADR', 'ADT', 'CADR', 'CADT')
AND A11.RETURNED_TRANSACTION_CODE IN ('ADA', 'ADI')
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');
```

6030 for Verizon

Same as 6020

6050 for CLECs

SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME) ratio1036050
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND (A12.GROUP_NAME IN ('DC', 'MD', 'VA', 'WV', 'DE', 'PN')
AND A11.STATE_CODE = A12.STATE_CODE
AND A11.INTERFACE_SOURCE = 'W'
AND A11.ORDER_ORIGIN = 'P'
AND A11.TEST_ACCOUNT_IND = 'N'
AND A11.TIME_OUT_INDICATOR = 'N'
AND A11.TRANSACTION_TYPE_SENT IN ('ADR', 'ADT', 'CADR', 'CADT')
AND A11.RETURNED_TRANSACTION_CODE IN ('ADA', 'ADI')
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');

6050 for Verizon

Same as 6020

Report Dimension

CLEC Aggregate: Pennsylvania[45]

Performance Standard

- **EDI and CORBA** (application-to-application interfaces): Parity with retail plus not more than four seconds. The four-second difference is designed to allow for variations in functionality and additional security requirements of interface. [46]
- **Web GUI**: Parity with retail plus not more than seven seconds. The seven-second difference is designed to allow for variations in functionality and additional security requirements of the interface.[47]

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[45] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 6)
[46] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)
[47] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)

PO-1-04: AVERAGE RESPONSE TIME (PRODUCT & SERVICE AVAILABILITY)

Definition

This sub-metric measures average response time for records with the transaction type that indicates they are product and service availability records.[48]

Formula

- **CLEC sub-metrics**: Sum of the response times for each transaction divided by the number of transactions.[49]
- **Retail sub-metrics**: Sum of the response times for each transaction divided by the number of simulated transactions for the transaction type.[50]

DCI Derived Metric Statement

6020 for CLECs

SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME) ratio1046020
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND (A11.STATE_CODE = A12.STATE_CODE
AND A12.GROUP_NAME IN ('MD', 'DC', 'VA', 'WV', 'DE', 'PN')
AND A11.INTERFACE_SOURCE = 'E'
AND A11.ORDER_ORIGIN = 'P'
AND A11.TIME_OUT_INDICATOR = 'N'
AND A11.TRANSACTION_TYPE_SENT = 'PSA'
AND A11.RETURNED_TRANSACTION_CODE = 'PSR'
AND A11.TEST_ACCOUNT_IND = 'N'
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');

6020 for Verizon

SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME)VZratio1046020
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12,

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[48] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 6)
[49] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)
[50] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)

TB_TRANSCTION_TYPE_CHILD_LKP A13
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND A11.RETURNED_TRANSACTION_CODE = A13.TRANSACTION_TYPE_CHILD
AND (A11.STATE_CODE = A12.STATE_CODE
AND A12.GROUP_NAME IN ('MD', 'DC', 'VA', 'WV', 'DE', 'PN')
AND A11.INTERFACE_SOURCE = 'N'
AND A11.ORDER_ORIGIN = 'N'
AND A11.TIME_OUT_INDICATOR = 'N'
AND A13.TRANSACTION_TYPE_HEADER = ('PSR_B')
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');

6030 for CLECs

SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME) ratio1046030
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND (A12.GROUP_NAME IN ('DC', 'MD', 'VA', 'WV', 'DE', 'PN')
AND A11.INTERFACE_SOURCE = 'C'
AND A11.ORDER_ORIGIN = 'P'
AND A11.TIME_OUT_INDICATOR = 'N'
AND A11.TRANSACTION_TYPE_SENT = 'PSA'
AND A11.RETURNED_TRANSACTION_CODE = 'PSR'
AND A11.TEST_ACCOUNT_IND = 'N'
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');

6030 for Verizon

Same as 6020

6050 for CLECs

SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME) ratio1046050
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND (A12.GROUP_NAME IN ('DC', 'MD', 'VA', 'WV', 'DE', 'PN')

AND A11.STATE_CODE = A12.STATE_CODE
AND A11.INTERFACE_SOURCE = 'W'
AND A11.ORDER_ORIGIN = 'P'
AND A11.TIME_OUT_INDICATOR = 'N'
AND A11.TRANSACTION_TYPE_SENT = 'PSA'
AND A11.RETURNED_TRANSACTION_CODE = 'PSR'
AND A11.TEST_ACCOUNT_IND = 'N'
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');

6050 for Verizon

Same as 6020

Report Dimension

CLEC Aggregate: Pennsylvania[51]

Performance Standard

Parity with retail plus not more than 10 seconds.[52]

PO-1-05: AVERAGE RESPONSE TIME (TELEPHONE NUMBER AVAILABILITY & RESERVATION)

Definition

This sub-metric measures average response time for records with the transaction type that indicates they are telephone number availability and reservation records.[53]

Formula

- **CLEC sub-metrics**: Sum of the response times for each transaction divided by the number of transactions.[54]

- **Retail sub-metrics**: Sum of the response times for each transaction divided by the number of simulated transactions for the transaction type.[55]

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[51] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 6)
[52] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)
[53] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 6)
[54] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)
[55] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)

DCI Derived Metric Statement

6020 for CLECs

SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME) ratio1056020
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND (A11.STATE_CODE = A12.STATE_CODE
AND A12.GROUP_NAME IN ('MD', 'DC', 'VA', 'WV', 'DE', 'PN')
AND A11.INTERFACE_SOURCE = 'E'
AND A11.TEST_ACCOUNT_IND = 'N'
AND A11.ORDER_ORIGIN = 'P'
AND A11.TIME_OUT_INDICATOR = 'N'
AND A11.TRANSACTION_TYPE_SENT IN ('TNS', 'CTNV')
AND A11.RETURNED_TRANSACTION_CODE IN ('ADA', 'RTR')
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');

6020 for Verizon

SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME) VZratio1056020
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12,
TB_TRANSCTION_TYPE_CHILD_LKP A13
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND A11.RETURNED_TRANSACTION_CODE = A13.TRANSACTION_TYPE_CHILD
AND (A11.STATE_CODE = A12.STATE_CODE
AND A12.GROUP_NAME IN ('MD', 'DC', 'VA', 'WV', 'DE', 'PN')
AND A11.INTERFACE_SOURCE = 'N'
AND A11.ORDER_ORIGIN = 'N'
AND A11.TIME_OUT_INDICATOR = 'N'
AND A13.TRANSACTION_TYPE_HEADER = 'TNS_B'
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY a12.GROUP_NAME, TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');

6030 for CLECs

SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,

SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME) ratio1056030
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND (A12.GROUP_NAME IN ('DC', 'MD', 'VA', 'WV', 'DE', 'PN')
AND A11.STATE_CODE = A12.STATE_CODE
AND A11.INTERFACE_SOURCE = 'C'
AND A11.TEST_ACCOUNT_IND = 'N'
AND A11.ORDER_ORIGIN = 'P'
AND A11.TIME_OUT_INDICATOR = 'N'
AND A11.TRANSACTION_TYPE_SENT IN ('TNS', 'CTNV')
AND A11.RETURNED_TRANSACTION_CODE IN ('ADA', 'RTR')
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');

6030 for Verizon

Same as 6020

6050 for CLECs

SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME) ratio1056050
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND (A12.GROUP_NAME IN ('DC', 'MD', 'VA', 'WV', 'DE', 'PN')
AND A11.STATE_CODE = A12.STATE_CODE
AND A11.INTERFACE_SOURCE = 'W'
AND A11.TEST_ACCOUNT_IND = 'N'
AND A11.ORDER_ORIGIN = 'P'
AND A11.TIME_OUT_INDICATOR = 'N'
AND A11.TRANSACTION_TYPE_SENT IN ('TNS', 'CTNV')
AND A11.RETURNED_TRANSACTION_CODE IN ('ADA', 'RTR')
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');

6050 for Verizon

Same as 6020

Report Dimension

CLEC Aggregate: Pennsylvania[56]

Performance Standard

- **EDI and CORBA** (application-to-application interfaces): Parity with retail plus not more than four seconds. The four-second difference is designed to allow for variations in functionality and additional security requirements of interface. [57]
- **Web GUI**: Parity with retail plus not more than seven seconds. The seven-second difference is designed to allow for variations in functionality and additional security requirements of the interface.[58]

PO-1-06: AVERAGE RESPONSE TIME (MECHANIZED LOOP QUALIFICATION, DIGITAL SERVICE LINE (DSL))

Definition

This sub-metric measures average response time for records with the transaction type that indicates they are mechanized loop qualification (DSL) records.[59]

Formula

- **CLEC sub-metrics**: Sum of the response times for each transaction divided by the number of transactions.[60]
- **Retail sub-metrics**: Sum of the response times for each transaction divided by the number of simulated transactions for the transaction type.[61]

DCI Derived Metric Statement

6020 for CLECs

SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME) ratio1066020
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND (A11.STATE_CODE = A12.STATE_CODE

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[56] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 6)
[57] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)
[58] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)
[59] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 6)
[60] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)
[61] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)

AND A12.GROUP_NAME IN ('MD', 'DC', 'VA', 'WV', 'DE', 'PN')
AND A11.INTERFACE_SOURCE = 'E'
AND A11.TEST_ACCOUNT_IND = 'N'
AND A11.ORDER_ORIGIN = 'P'
AND A11.TIME_OUT_INDICATOR = 'N'
AND A11.TRANSACTION_TYPE_SENT = 'LXR'
AND A11.RETURNED_TRANSACTION_CODE = 'LXA'
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');

6020 for Verizon

SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME) VZratio1066020
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12,
TB_TRANSCTION_TYPE_CHILD_LKP A13
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND A11.RETURNED_TRANSACTION_CODE = A13.TRANSACTION_TYPE_CHILD
AND (A12.GROUP_NAME IN ('MD', 'DC', 'VA', 'WV', 'DE', 'PN')
AND A11.STATE_CODE = A12.STATE_CODE
AND A11.INTERFACE_SOURCE = 'N'
AND A11.ORDER_ORIGIN = 'N'
AND A11.TIME_OUT_INDICATOR = 'N'
AND A13.TRANSACTION_TYPE_HEADER IN ('LXA_B')
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');

6030 for CLECs

SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME) ratio1066030
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND (A12.GROUP_NAME IN ('DC', 'MD', 'VA', 'WV', 'DE', 'PN')
AND A11.TIME_OUT_INDICATOR = 'N'
AND A11.TEST_ACCOUNT_IND = 'N'
AND A11.ORDER_ORIGIN = 'P'
AND A11.INTERFACE_SOURCE = 'C'
AND A11.RETURNED_TRANSACTION_CODE = 'LXA'

AND A11.TRANSACTION_TYPE_SENT = 'LXR'
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');

6030 for Verizon

Same as 6020

6050 for CLECs

SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME) ratio1066050
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND (A12.GROUP_NAME IN ('DC', 'MD', 'VA', 'WV', 'DE', 'PN')
AND A11.STATE_CODE = A12.STATE_CODE
AND A11.INTERFACE_SOURCE = 'W'
AND A11.TEST_ACCOUNT_IND = 'N'
AND A11.ORDER_ORIGIN = 'P'
AND A11.TIME_OUT_INDICATOR = 'N'
AND A11.TRANSACTION_TYPE_SENT = 'LXR'
AND A11.RETURNED_TRANSACTION_CODE = 'LXA'
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');

6050 for Verizon

Same as 6020

Report Dimension

CLEC Aggregate: Pennsylvania[62]

Performance Standard

- **EDI and CORBA** (application-to-application interfaces): Parity with retail plus not more than four seconds. The four-second difference is designed to allow for variations in functionality and additional security requirements of interface.[63]

- **Web GUI**: Parity with retail plus not more than seven seconds. The seven-second difference is designed to allow for variations in functionality and additional security requirements of the interface.[64]

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[62] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 6)
[63] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)

PO-1-07: AVERAGE RESPONSE TIME (REJECTED QUERY)

Definition

This sub-metric measures average response time for records with the transaction type that indicates they are rejected query records.[65]

Formula

- **CLEC sub-metrics**: Sum of the response times for each transaction divided by the number of transactions for the transaction type.[66]
- **Retail sub-metrics**: Sum of the response times for each transaction divided by the number of transactions for the transaction type.[67]

DCI Derived Metric Statement

6020 for CLECs

```
SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME) ratio1076020
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12,
TB_TRANSCTION_TYPE_CHILD_LKP A13
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND A11.RETURNED_TRANSACTION_CODE = A13.TRANSACTION_TYPE_CHILD
AND (A11.STATE_CODE = A12.STATE_CODE
AND A12.GROUP_NAME IN ('MD', 'DC', 'VA', 'WV', 'DE', 'PN')
AND A11.INTERFACE_SOURCE = 'E'
AND A11.ORDER_ORIGIN = 'N'
AND A11.TIME_OUT_INDICATOR = 'N'
AND A13.TRANSACTION_TYPE_HEADER = 'REJ'
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY A12.GROUP_NAME, TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');
```

6020 for Verizon

```
SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME) VZratio1076020
FROM TB_PRE_ORDER_FACT A11,
```

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[64] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)
[65] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 6)
[66] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)
[67] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)

```
TB_GEOGRAPHY_ST_GRP_DIMENSION A12
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND (A11.STATE_CODE = A12.STATE_CODE
AND A12.GROUP_NAME IN ('MD', 'DC', 'VA', 'WV', 'DE', 'PN')
AND A11.INTERFACE_SOURCE = 'N'
AND A11.ORDER_ORIGIN = 'N'
AND A11.TIME_OUT_INDICATOR = 'N'
AND A11.RETURNED_TRANSACTION_CODE IN ('OSS_REJCSR_REJCSR_PA',
'OSS_REJCSR_REJCSR_VA')
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');
```

6030 for CLECs

```
SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME) ratio1076030
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12,
TB_TRANSCTION_TYPE_CHILD_LKP A13
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND A11.RETURNED_TRANSACTION_CODE = A13.TRANSACTION_TYPE_CHILD
AND (A12.GROUP_NAME IN ('DC', 'MD', 'VA', 'WV', 'DE', 'PN')
AND A11.STATE_CODE = A12.STATE_CODE
AND A11.INTERFACE_SOURCE = 'C'
AND A11.ORDER_ORIGIN = 'N'
AND A11.TIME_OUT_INDICATOR = 'N'
AND A13.TRANSACTION_TYPE_HEADER IN ('REJ')
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY A12.GROUP_NAME, TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');
```

6030 for Verizon

Same as 6020

6050 for CLECs

```
SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME) ratio1076050
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12
WHERE
A11.STATE_CODE = A12.STATE_CODE
```

AND (A12.GROUP_NAME IN ('DC', 'MD', 'VA', 'WV', 'DE', 'PN')
AND A11.STATE_CODE = A12.STATE_CODE
AND A11.INTERFACE_SOURCE = 'W'
AND A11.ORDER_ORIGIN = 'N'
AND A11.TIME_OUT_INDICATOR = 'N'
AND A11.RETURNED_TRANSACTION_CODE IN ('LSI-W_REJCSR_PA', 'LSI-W_REJCSR_VA')
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');

6050 for Verizon

Same ad 6020

Report Dimension

CLEC Aggregate: Pennsylvania[68]

Filters

This section lists those items those are not actual exclusions, but are used to retrieve the correct transactions from the database.

- This sub-metric uses filters slightly differently than most other sub-metrics. The for-CLEC PO-1-07-6020 query filters out records that do not have a company code of "ENVIEW5". [69] Although the EnView system is used to measure PO-1-07-6020 for EDI, CORBA and WebGui, the database receives only CORBA and WebGui Enview data from Enview. EDI transactions for PO-1-07-6020 submitted by EnView are sent to the database by the EDI application, and they are marked with "ENVIEW5" in the COMPANY_CODE field.[70]

- In addition to filtering on group name as listed above, PO-1-07 sub-metrics use this filter for CLECs, but not for retail data: dimensionTable.STATE_CODE IN ('CT', 'MA', 'ME', 'NH', 'NY', 'RI', 'VT', 'DC', 'MD', 'NJ'), which would filter out any transaction with a state code that is listed in the parentheses.[71]

Performance Standard

- **EDI and CORBA** (application-to-application interfaces)*:* Parity with retail plus not more than four seconds. The four-second difference is designed to allow for variations in functionality and additional security requirements of interface. [72]

---

[68] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 6)
[69] Information Response C-044 (Pages 39, 40)
[70] Information Response C-051 (Questions on metrics methodology)
[71] Information Responses C-044 (Pages 39, 40, 45) and C-042 (Pages 51, 52)
[72] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)

- **Web GUI**: Parity with retail plus not more than seven seconds. The seven-second difference is designed to allow for variations in functionality and additional security requirements of the interface.[73]

PO-1-08: AVERAGE RESPONSE TIME (PERCENT TIMEOUTS)

Definition

This sub-metric measures records with the transaction type that indicates they are timed-out records.[74]

Formula

Number of transactions that time out divided by the total number of transactions.[75]

DCI Derived Metric Statement

6020 for CLECs numerator

SELECT COUNT(A11.RESPONSE_TIME) NUM1086020
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND (A12.GROUP_NAME IN ('MD', 'DC', 'VA', 'WV', 'DE', 'PN')
AND A11.INTERFACE_SOURCE = 'E'
AND A11.TRANSACTION_TYPE_SENT IN ('ADR', 'ADT', 'CADR', 'CADT', 'CSR', 'DDA', 'PSA', 'TNS', 'CTNV', 'LXR', 'PCSR')
and A11.TEST_ACCOUNT_IND = 'N'
AND A11.ORDER_ORIGIN = 'P'
AND A11.TIME_OUT_INDICATOR = 'Y'
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');

6020 for CLECs denominator

SELECT COUNT(A11.RESPONSE_TIME)DENOM1086020
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12
WHERE
A11.STATE_CODE = A12.STATE_CODE

---

[73] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)
[74] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 6)
[75] Information Response C-044 (Page 46)

```
AND (A12.GROUP_NAME IN ('MD', 'DC', 'VA', 'WV', 'DE', 'PN')
AND A11.INTERFACE_SOURCE = 'E'
AND A11.TRANSACTION_TYPE_SENT IN ('ADR', 'ADT', 'CADR', 'CADT', 'CSR', 'DDA', 'PSA', 'TNS', 'CTNV',
'LXR', 'PCSR')
AND A11.TEST_ACCOUNT_IND = 'N'
AND A11.ORDER_ORIGIN = 'P'
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');
```

6030 for CLECs numerator

```
SELECT COUNT(A11.RESPONSE_TIME)NUM1086030
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND (A12.GROUP_NAME IN ('DC', 'MD', 'VA', 'WV', 'DE', 'PN')
AND A11.INTERFACE_SOURCE = 'C'
AND A11.TRANSACTION_TYPE_SENT IN ('ADR', 'ADT', 'CADR', 'CADT', 'CSR', 'DDA', 'PSA', 'TNS', 'CTNV',
'LXR', 'PCSR')
AND A11.TEST_ACCOUNT_IND = 'N'
AND A11.ORDER_ORIGIN = 'P'
AND A11.TIME_OUT_INDICATOR = 'Y'
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');
```

6030 for CLECs denominator

```
SELECT COUNT(A11.RESPONSE_TIME)DENOM1086030
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND (A12.GROUP_NAME IN ('MD', 'DC', 'VA', 'WV', 'DE', 'PN')
AND A11.INTERFACE_SOURCE = 'C'
AND A11.TRANSACTION_TYPE_SENT IN ('ADR', 'ADT', 'CADR', 'CADT', 'CSR', 'DDA', 'PSA', 'TNS', 'CTNV',
'LXR', 'PCSR')
AND A11.TEST_ACCOUNT_IND = 'N'
AND A11.ORDER_ORIGIN = 'P'
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');
```

6050 for CLECs numerator

```
SELECT COUNT(A11.RESPONSE_TIME)NUM1086050
FROM TB_PRE_ORDER_FACT A11,
```

TB_GEOGRAPHY_ST_GRP_DIMENSION A12
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND (A12.GROUP_NAME IN ('DC', 'MD', 'VA', 'WV', 'DE', 'PN')
AND A11.INTERFACE_SOURCE = 'W'
AND A11.TRANSACTION_TYPE_SENT IN ('ADR', 'ADT', 'CADR', 'CADT', 'CSR', 'DDA', 'PSA', 'TNS', 'CTNV', 'LXR', 'PCSR')
and A11.TEST_ACCOUNT_IND = 'N'
AND A11.ORDER_ORIGIN = 'P'
AND A11.TIME_OUT_INDICATOR = 'Y'
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');

6050 for CLECs denominator

SELECT COUNT(A11.RESPONSE_TIME)DENOM1086050
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND (A12.GROUP_NAME IN ('DC', 'MD', 'VA', 'WV', 'DE', 'PN')
AND A11.INTERFACE_SOURCE = 'W'
AND A11.TRANSACTION_TYPE_SENT IN ('ADR', 'ADT', 'CADR', 'CADT', 'CSR', 'DDA', 'PSA', 'TNS', 'CTNV', 'LXR', 'PCSR')
and A11.TEST_ACCOUNT_IND = 'N'
AND A11.ORDER_ORIGIN = 'P'
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');

Report Dimension

CLEC Aggregate: Pennsylvania[76]

Performance Standard

Not greater than 0.33 percent.[77]

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[76] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 6)
[77] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)

PO-1-09: AVERAGE RESPONSE TIME (PARSED CUSTOMER SERVICE RECORD)

Definition

This sub-metric measures records with the transaction type that indicates they are parsed customer service records. Basic customer service record (CSR) information is reported for retail for this sub-metric, as there is no parsed CSR for retail. In addition, parsed CSR does not go through the Web GUI interface; therefore, sub-metric PO-1-09 does not report Web GUI results.[78]

Formula

- **CLEC sub-metrics**: Sum of the response times for each transaction divided by the number of transactions. [79]
- **Retail sub-metrics**: Sum of the response times for each transaction divided by the number of simulated transactions for the transaction type.[80]

DCI Derived Metric Statement

6020 for CLECs

SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME) ratio1096020
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND (A11.STATE_CODE = A12.STATE_CODE
AND A12.GROUP_NAME IN ('MD', 'DC', 'VA', 'WV', 'DE', 'PN')
AND A11.INTERFACE_SOURCE = 'E'
AND A11.TEST_ACCOUNT_IND = 'N'
AND A11.ORDER_ORIGIN = 'P'
AND A11.TIME_OUT_INDICATOR = 'N'
AND A11.TRANSACTION_TYPE_SENT = 'PCSR'
AND A11.RETURNED_TRANSACTION_CODE IN ('PCSA')
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');

---

[78] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 6)
[79] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)
[80] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)

6020 for Verizon

```
SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME) VZratio1096020
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12,
TB_TRANSCTION_TYPE_CHILD_LKP A13
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND A11.RETURNED_TRANSACTION_CODE = A13.TRANSACTION_TYPE_CHILD
AND (A11.STATE_CODE = A12.STATE_CODE
AND A12.GROUP_NAME IN ('MD', 'DC', 'VA', 'WV', 'DE', 'PN')
AND A11.INTERFACE_SOURCE = 'N'
AND A11.ORDER_ORIGIN = 'N'
AND A11.TIME_OUT_INDICATOR = 'N'
AND A13.TRANSACTION_TYPE_HEADER = 'CSR_B'
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');
```

6030 for CLECs

```
SELECT SUM(A11.RESPONSE_TIME)CSRWHOLESALE,
COUNT(A11.RESPONSE_TIME)PREORDERRECC,
SUM(A11.RESPONSE_TIME)/COUNT(A11.RESPONSE_TIME) ratio1096030
FROM TB_PRE_ORDER_FACT A11,
TB_GEOGRAPHY_ST_GRP_DIMENSION A12
WHERE
A11.STATE_CODE = A12.STATE_CODE
AND (A12.GROUP_NAME IN ('DC', 'MD', 'VA', 'WV', 'DE', 'PN')
AND A11.STATE_CODE = A12.STATE_CODE
AND A11.INTERFACE_SOURCE = 'C'
AND A11.TEST_ACCOUNT_IND = 'N'
AND A11.ORDER_ORIGIN = 'P'
AND A11.TIME_OUT_INDICATOR = 'N'
AND A11.TRANSACTION_TYPE_SENT = 'PCSR'
AND A11.RETURNED_TRANSACTION_CODE IN ('PCSA')
AND A11.DCI_UPLOAD_ID = 'JM')
GROUP BY TO_CHAR(A11.OUTBOUND_DATE,'YYYYMM');
```

6030 for Verizon

Same as 6020

Report Dimension

CLEC Aggregate and CLEC Specific: Pennsylvania[81] (DCI did not evaluate CLEC specific results.)

Performance Standard

Parity with retail plus not more than 10 seconds.[82]

PO-2: OSS INTERFACE AVAILABILITY

Definition

This metric measures OSS interface availability, which is a measurement of the time during which electronic OSS interfaces are actually available as a percentage of scheduled availability. Verizon PA service representatives and CLEC service representatives obtain pre-ordering information from the same underlying OSS. Thus, if a particular OSS is down, it is equally unavailable to both Verizon PA employees and CLEC employees. Any difference in availability, therefore, is caused by unavailability of the OSS interface.[83]

Scheduled availability is as follows:

- **Prime time:** 6:00AM to 12:00AM EST Monday through Saturday, excluding major holidays.
- **Non-prime time:** 12:01AM to 5:59AM EST Monday through Saturday, and all day Sundays and holidays.

The number of downtime hours is noted in the C2C reports under the Observations column heading. Major holidays include: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day.[84]

Sub-metrics

- **PO-2-01**: Not in use at Verizon PA.
- **PO-2-02**: OSS interface availability (prime time)
- **PO-2-03**: OSS interface availability (non prime time)

Although included in Verizon PA's NMP, only PO-2-02 was included in Verizon PA's PAP for the period April 2003 to June 2003.[85]

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[81] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 6)
[82] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 5)
[83] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 8)
[84] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 8)
[85] Information Response PM-004.8 (Incentive Plan Reports)

Report Dimension

CLEC Aggregate: Each OSS interface serving Pennsylvania (pre-ordering EDI, pre-ordering web GUI, maintenance web GUI, and maintenance electronic bonding). (Note that an OSS interface may not be specific to Pennsylvania; it may handle CLEC transactions for other states as well.)[86] Separate measurements are performed for each of the following: pre-ordering/ordering EDI, pre-ordering/ordering/maintenance web GUI, CORBA, and maintenance electronic bonding. Each availability interface is measured separately. The EnView process will be expanded/updated to monitor and report on future OSS processes.[87]

Metric Creation

Verizon PA calculates the PO-2 OSS availability metric by combining CLEC reported outages, which are received via the Wholesale Customer Care Center (WCCC), with EnView reported outages. Verizon PA measures CLEC reported outages, based on actual reported time frames, as well as any outages captured by EnView (and not reported by CLECs). The WCCC receives OSS availability trouble reports from CLECs, and logs each trouble in to a tracking system. Verizon PA reviews data from the tracking system each week to determine which troubles were interface outages, and thus included in the PO-2 calculation. This data is supplemented with outages captured by EnView to calculate the final metric results.[88]

According to Verizon PA's documentation, EnView is used as an alarm for system availability and supplements CLEC reported outages. If no CLEC reported an outage, but EnView detected an outage, the EnView outage is included as if the entire CLEC population experienced the outage. The mechanized OSS interface availability (for the EDI, CORBA, and Web GUI interfaces) is based on the transactions created by EnView Robots. The program determines whether the EnView transactions were successful or unsuccessful, or if no transactions were issued. Transactions are processed by transaction type separately for each interface type and OSS.

The hours of the day are divided into six-minute measurement periods. If the Verizon PA interface, in a six-minute measurement period, has at least one successful transaction for any pre-order transaction type, then that interface is considered available. Individual interface unavailability is calculated only when all its transactions are unsuccessful and at least one of the corresponding OSS transactions is successful. This indicates that the interface was not available while at least one OSS was available. In this case, the six-minute measurement period is counted as unavailable. If it is determined that no EnView transactions were issued, then the six minute measurement period is excluded from all calculations, because this is an indication of an EnView problem and not a specific Verizon PA interface problem. The EnView data is compared to the actual CLEC reported outages, and matched up according to the outage's reported time frame. If the EnView time frame matches the actual reported outage (from the WCCC) time-frame, the outage is included (once) in the metric based on the reported time-frame. If the comparison of the EnView results with the CLEC reported outages indicates that a time-frame is overlapping, then Verizon PA uses the earliest start time of the outage, and the latest end-time of the outage to calculate the metric result.

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[86] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 10)
[87] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 8)
[88] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 9)

Availability is calculated by dividing the total number of six-minute measurement periods in a 24-hour day (excluding unmeasured six-minute measurement periods) into the number of periods with no successful transactions for the day and subtracting this from 1 and multiplying by 100. For example, there are potentially 180 six-minute measurement periods in an 18-hour period. If two six-minute measurement periods lack successful transactions, then availability equals (1-(2/180)) x 100 = 98.89% availability.[89]

Exclusions

The following documented exclusions apply:[90]

- Troubles reported but not found in Verizon PA's systems.
- Troubles reported by a CLEC that were not reported to Verizon PA's designated trouble reporting center.
- Scheduled interface outages for major system releases where CLECs were provided with advanced notification of the downtime in compliance with Verizon PA Change Management Guidelines.

DCI Methodology

DCI calculated the results of the PO-2 metrics only for June. Initial documentation[91] from and discussions[92] with Verizon PA implied that the data mart was used in calculating the metric, but DCI were unable to find any table sent by Verizon PA that included the fields cited in the documentation of the metrics.[93]   Later, corrected documentation from Verizon PA had the information needed,[94] but Verizon PA then indicated that the metric was not in the NMP until June,[95] and so calculating the results before then using the data mart would not be possible.

PO-2-01: NOT IN USE AT VERIZON PA

This metric is not in use at Verizon PA.[96]

PO-2-02: OSS INTERFACE AVAILABILITY (PRIME TIME)

Definition

The OSS interface availability metric is a measurement of the time during which electronic OSS interface are actually available as a percentage of scheduled availability during prime time. Prime time is considered to be 6:00AM to 12:00AM EST Monday through Saturday, excluding major

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[89] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 9)
[90] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 8)
[91] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports*)
[92] Interview with Verizon Technical Staff, July 24, 2003
[93] Information Response C-042 (*Verizon NY C2C Guidelines* Page 63)
[94] Information Response C-044 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 77-84)
[95] Interview C-013
[96] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 10)

holidays (New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day).[97]

Formula

- **Numerator**: Total scheduled prime time in the month for all available processing complexes (number of days Monday through Saturday in the report month x scheduled prime-time hours per day x 60 minutes x the number of processing complexes) minus the total minutes of unscheduled outages during prime-time in the month for all available processing complexes.[98]
- **Denominator**: Total scheduled prime time in the month for all available processing complexes. The numerator divided by the denominator is multiplied by 100 to determine the percentage of availability.[99]

DCI Derived Metric Statement

6020 numerator

```
SELECT SUM(ACTUAL_MIN) PO2026020NUM, STATE
FROM TB_DM_ENVIEW_FACT
WHERE APPL_ID= 'EDI'
AND REPORT_TYPE = 'C2C'
AND STATE <> 'NJ'
AND PRIME_FL = 'Y'
AND DCI_UPLOAD_ID = 'JN'
GROUP BY STATE;
```

6020 denominator

```
SELECT SUM(BUCKET_INTERVAL) PO2026020DENOM, STATE
FROM TB_DM_ENVIEW_FACT
WHERE APPL_ID = 'EDI'
AND REPORT_TYPE = 'C2C'
AND STATE <> 'NJ'
AND PRIME_FL = 'Y'
AND DCI_UPLOAD_ID = 'JN'
GROUP BY STATE;
```

6030 numerator

```
SELECT SUM(ACTUAL_MIN) PO2026030NUM, STATE
FROM TB_DM_ENVIEW_FACT
WHERE APPL_ID= 'CORBA'
```

---

[97] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 8)
[98] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 10)
[99] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 10)

AND REPORT_TYPE = 'C2C'
AND STATE <> 'NJ'
AND PRIME_FL = 'Y'
AND DCI_UPLOAD_ID = 'JN'
GROUP BY STATE;

6030 denominator

SELECT SUM(BUCKET_INTERVAL) PO2026030DENOM, STATE
FROM TB_DM_ENVIEW_FACT
WHERE APPL_ID = 'CORBA'
AND REPORT_TYPE = 'C2C'
AND STATE <> 'NJ'
AND PRIME_FL = 'Y'
AND DCI_UPLOAD_ID = 'JN'
GROUP BY STATE;

6060 numerator

SELECT SUM(ACTUAL_MIN) PO2026060NUM, STATE
FROM TB_DM_ENVIEW_FACT
WHERE APPL_ID= 'EB'
AND REPORT_TYPE = 'C2C'
AND STATE <> 'NJ'
AND PRIME_FL = 'Y'
AND DCI_UPLOAD_ID = 'JN'
GROUP BY STATE;

6060 denominator

SELECT SUM(BUCKET_INTERVAL) PO2026060DENOM, STATE
FROM TB_DM_ENVIEW_FACT
WHERE APPL_ID = 'EB'
AND REPORT_TYPE = 'C2C'
AND STATE <> 'NJ'
AND PRIME_FL = 'Y'
AND DCI_UPLOAD_ID = 'JN'
GROUP BY STATE;

6080 numerator

SELECT SUM(ACTUAL_MIN) PO2026080NUM, STATE
FROM TB_DM_ENVIEW_FACT
WHERE APPL_ID= 'WEB'
AND REPORT_TYPE = 'C2C'
AND STATE <> 'NJ'

AND PRIME_FL = 'Y'
AND DCI_UPLOAD_ID = 'JN'
GROUP BY STATE;

6080 denominator

SELECT SUM(BUCKET_INTERVAL) PO2026080DENOM, STATE
FROM TB_DM_ENVIEW_FACT
WHERE APPL_ID = 'WEB'
AND REPORT_TYPE = 'C2C'
AND STATE <> 'NJ'
AND PRIME_FL = 'Y'
AND DCI_UPLOAD_ID = 'JN'
GROUP BY STATE;

Performance Standard

Greater than or equal to 99.5 percent.[100]

PO-2-03: OSS INTERFACE AVAILABILITY (NON PRIME TIME)

Definition

The OSS interface availability metric is a measurement of the time during which electronic OSS interfaces are actually available as a percentage of scheduled availability during non prime time. Non prime time is considered to be any time other than: 6:00AM to 12:00AM EST Monday through Saturday, plus major holidays (New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day).[101]

Formula

- **Numerator**: Total number of scheduled non-prime-time hours in the month for all available processing complexes minus the total number of unscheduled outage hours during non-prime-time hours in the month for all available processing complexes.

- **Denominator**: Total number of scheduled non-prime-time hours in the month for all available processing complexes. The numerator divided by the denominator is multiplied by 100 to determine the percentage of availability.[102]

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[100] Information Responses C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 8) and C-044 (*Verizon PA C2C Guidelines* Page 55)
[101] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 8)
[102] Information Response C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 10)

<u>DCI Derived Metric Statement</u>

6020 numerator

```
SELECT SUM(ACTUAL_MIN) PO2026020NUM, STATE
FROM TB_DM_ENVIEW_FACT
WHERE APPL_ID= 'EDI'
AND REPORT_TYPE = 'C2C'
AND STATE <> 'NJ'
AND PRIME_FL = 'N'
AND DCI_UPLOAD_ID = 'JN'
GROUP BY STATE;
```

6020 denominator

```
SELECT SUM(BUCKET_INTERVAL) PO2026020DENOM, STATE
FROM TB_DM_ENVIEW_FACT
WHERE APPL_ID = 'EDI'
AND REPORT_TYPE = 'C2C'
AND STATE <> 'NJ'
AND PRIME_FL = 'N'
AND DCI_UPLOAD_ID = 'JN'
GROUP BY STATE;
```

6030 numerator

```
SELECT SUM(ACTUAL_MIN) PO2026030NUM, STATE
FROM TB_DM_ENVIEW_FACT
WHERE APPL_ID= 'CORBA'
AND REPORT_TYPE = 'C2C'
AND STATE <> 'NJ'
AND PRIME_FL = 'N'
AND DCI_UPLOAD_ID = 'JN'
GROUP BY STATE;
```

6030 denominator

```
SELECT SUM(BUCKET_INTERVAL) PO2026030DENOM, STATE
FROM TB_DM_ENVIEW_FACT
WHERE APPL_ID = 'CORBA'
AND REPORT_TYPE = 'C2C'
AND STATE <> 'NJ'
AND PRIME_FL = 'N'
AND DCI_UPLOAD_ID = 'JN'
GROUP BY STATE;
```

6060 numerator

```
SELECT SUM(ACTUAL_MIN) PO2026060NUM, STATE
FROM TB_DM_ENVIEW_FACT
WHERE APPL_ID= 'EB'
AND REPORT_TYPE = 'C2C'
AND STATE <> 'NJ'
AND PRIME_FL = 'N'
AND DCI_UPLOAD_ID = 'JN'
GROUP BY STATE;
```

6060 denominator

```
SELECT SUM(BUCKET_INTERVAL) PO2026060DENOM, STATE
FROM TB_DM_ENVIEW_FACT
WHERE APPL_ID = 'EB'
AND REPORT_TYPE = 'C2C'
AND STATE <> 'NJ'
AND PRIME_FL = 'N'
AND DCI_UPLOAD_ID = 'JN'
GROUP BY STATE;
```

6080 numerator

```
SELECT SUM(ACTUAL_MIN) PO2026080NUM, STATE
FROM TB_DM_ENVIEW_FACT
WHERE APPL_ID= 'WEB'
AND REPORT_TYPE = 'C2C'
AND STATE <> 'NJ'
AND PRIME_FL = 'N'
AND DCI_UPLOAD_ID = 'JN'
GROUP BY STATE;
```

6080 denominator

```
SELECT SUM(BUCKET_INTERVAL) PO2026080DENOM, STATE
FROM TB_DM_ENVIEW_FACT
WHERE APPL_ID = 'WEB'
AND REPORT_TYPE = 'C2C'
AND STATE <> 'NJ'
AND PRIME_FL = 'N'
AND DCI_UPLOAD_ID = 'JN'
GROUP BY STATE;
```

Performance Standard

No standard exists.[103]

PO-3: CONTACT CENTER AVAILABILITY

Definition

PO-3 measures the availability of the Verizon PA contact centers that support wholesale ordering, provisioning, maintenance and billing functions. These centers generally handle the fallout created from system entry into the various Verizon PA gateway systems that support each of these four domains.

Sub-Metrics

PO-3 has two sub-metrics:

- **PO-3-02**: measures the percent of calls answered within 30 seconds by Verizon PA's Ordering Center. The numerator consists of the number of calls into the ordering center that are answered within 30 seconds from the time the call enters Verizon PA's Automatic Call Distributor (ACD) until it is answered by a Verizon PA representative. The denominator for PO-3-02 consists of the total number of calls answered plus 15% of abandoned calls and 10% of busy calls to the Ordering and Repair Centers respectively.

 Note: sub-metrics PO-3-01 and PO-3-03 are not applicable for Pennsylvania.

- **PO-3-04**: measures the percent of calls answered within 30 seconds by Verizon PA's Repair Center. The numerator consists of the number of calls into the repair center that are answered within 30 seconds from the time the call enters the ACD until it is answered by a Verizon PA representative. The denominator for PO-3-04 consists of the total number of calls answered plus 15% of abandoned calls and 10% of busy calls to the Ordering and Repair Centers respectively.

Exclusions

The Exclusions section of the Pennsylvania C2C only contains one exclusion for the PO-3 measure calculation. All calls directed to and answered by dedicated representatives are not included in the measure, however, when calls are directed to a CLEC's dedicated representative that is not available, the CLEC has two options. The CLEC can either leave the dedicated representative a voicemail or press 0 and be transferred to a pool of representatives. The calls where the CLEC chooses to press 0 and speak to the next available representative are included in the PO-3 calculation. In this instance, the time begins when the CLEC presses 0.

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[103] Information Responses C-042 (*PA Carrier-to-Carrier Guidelines Performance Standards and Reports* Page 8) and C-044 (*Verizon PA C2C Guidelines* Page 59)

The Performance Standard Section of the document also contains the hours of operation of the ordering center, which in essence, is an added exclusion. Hours outside of regular business are not included in the measure. This section refers to a website to access for various centers schedule of operations but when DCI attempted to access the website, only an error message was obtained. This is an important exclusion because certain holidays are only recognized in Pennsylvania and Delaware, therefore the ordering center is actually available during those days receiving calls from other states but this data is excluded from the Pennsylvania results.

Performance Standard

Both PO-3-02 and PO-3-04 are a benchmark standard of 80% of calls to be answered within the 30 second interval.

DCI Derived Metric Statement

Both sub measures were evaluated by comparing a requested sample of data extracted from the ACD reports to the spreadsheets produced by the metric team as a source file for NMP updates. The next step was to verify that the source data was updated to the NMP accurately through the GUI interface. Both comparisons will determine the % error between the update process and the audit calculations.

Report Dimension

The metric evaluation took an April sampling of data required to populate the NMP. The evaluation compared the informational data supplied from the data request to the fields used for the calculations. The Review then re-calculated the measurement results for the sampled time frame. Should deficiencies have been detected in any of the evaluations, increasing the sample size until a determination can be made related to the efficiency of the calculation process will perform a further study.

A data request[104] was submitted to Verizon PA requesting the following data for the evaluation:

1. Center Name and location for Verizon PA's Ordering and Repair Centers supporting CLECs operating in the state of Pennsylvania.
2. Operating hours for these centers and the Verizon PA holidays recognized in Pennsylvania.
3. Type of ACD used in each center.
4. A list of reports produced by the ACD used by either the ordering and repair center's management group or the metrics group along with any associated documentation.
5. A copy of the April daily call answer report and the daily queue performance report, preferably in Word or Excel format.

As a result of this data request[105] DCI learned that Verizon PA's National Market Center (NMC) located in Silver Springs, Maryland, is responsible for all ordering activity for the state of Pennsylvania. The hours of operation for the NMC are Monday through Friday, 8:00 AM eastern

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[104] DR-B007 requesting NMC and RCMC Information
[105] Response to DR B007

time until 6:00 PM eastern time. The Regional CLEC Maintenance Center (RCMC) handles all wholesale repair calls. There are three different centers responsible for repair activities for Pennsylvania. The locations of these three centers along with their areas of responsibility are as follows:

- Richmond VA RCMC – POTS
- Bridgewater, NJ RCMC – Wholesale DSL
- East Brunswick, NJ. RCMC - Line sharing

The RCMC locations operate 24 hours a day, 7 days a week and there are no recognized holidays. The RCMC is available 365 days a year. Both centers use a Pinacle ACD.

There are four reports produced by the ACD for the NMC. These four reports are:

- Daily Queue Performance Report
- Daily Call Answer Report
- Daily Incoming Call Report
- ACD Summary Report

Verizon PA did not provide an April ACD report for the RCMC. An additional data request[106] was sent and the Verizon PA response provided the following reports:

- Daily Call Answer Report
- Daily Incoming Call Report

Call busy information was originally omitted from the RCMC reports but was requested via email for request B-057.

Performance Results

The C2C reported results for the month of April are as follows:

- **PO-3-02:** Ordering % answered within 30 secs: 79.76% (below standard of 80%)
- **PO-3-04:** Repair % answered within 30 secs: 80.73% (meets 80% standard)

Evaluation Process

PO-3-02 Results: The results of the evaluation confirmed that Verizon PA's April aggregate results as reported in the C2C published documentation for measure PO-3-02 are accurate. This was confirmed through the following processes:

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[106] Reference Data Request B-057

1. Source data origination for the NMP was identified on the monthly ACD summary report. The source of the information on the summary report was identified on the daily incoming call report and the daily calls answered report for each business day during the April time frame.

2. The data verification validated that each column on the summary report was accurate. The source of the data for each column is:

Table A-3

Summary Report Column Description	Summary Report Column Data Source
# Calls Offered	Daily Incoming call report
# Calls Answered	Daily Incoming call report
# Calls Abandoned	Daily Incoming call report
# Busy Calls	Daily Incoming call report
# Calls answered <=30 Seconds	Daily Call Answered Report

The Review calculation used for the NMC (PO-3-02) was:

Denominator-10787 (#CLS ANS)+0(10% of Busy CLS)+85.05(15% Abandoned CLS)=10875.05
Numerator- (Total Offered Calls answered in <=30 seconds)=8680
Calculation = 79.84% Rounded to the Hundredth
Verizon PA reported = 79.76%

Due to the variance, ER-B001 was submitted. Verizon PA explained that Good Friday was excluded from the tally because Good Friday is a recognized company holiday in Pennsylvania and Delaware. Omitting the data for April 18, 2003 reduced the denominator to 10610.55 and the numerator to 8463, which matched Verizon PA's 79.76% as reported in the C2C. Because there was no documentation in the C2C on exclusions for company holidays, DR-B063 was submitted to clarify why call statistics existed for Pennsylvania on that day. Verizon PA responded with a reference to the ordering data sent for OR measure processing. After review of the referenced data, it was determined that the calls logged to the Pennsylvania NMC originated from states not recognizing the holiday. The calls were not included in the calculation due to the exclusion so the documentation omission in the C2C forwarded to the documentation team and they issued ER-A005 for corrective actions.

PO-3-04 Results: The results of the evaluation confirmed that Verizon PA's April aggregate results are suspect as reported in the C2C published documentation for measure PO-3-04. The Review used the following processes:

3. Source data origination for the NMP was identified on the monthly ACD reports. The source of the information on the reports was identified on the daily incoming call report and the daily calls answered report for each business day in the April time frame.

4. The data verification validated that each column on the summary report was accurate. The source of the data for each column is:

Table A-4

Summary Report Column Description	Summary Report Column Data Source
# Calls Offered	Daily Incoming call report
# Calls Answered	Daily Incoming call report
# Calls Abandoned	Daily Incoming call report
# Busy Calls	Not Provided on Either Report
# calls answered <=30 Seconds	Daily Call Answered Report

The DCI Review calculation used for the RCMC (PO-3-04) was:
Denominator: 111292(#CLS ANS)+0(10% of Busy CLS)+324.9(15% Abandoned CLS)=111616.9

Numerator: (Total Offered Calls answered in less than 30 seconds)=90766

Calculation: = 81.32% Rounded to the Hundredth

Verizon PA reported: = 80.73%

The variance can be explained by the omission of the busy calls. A clarifying data request was sent to Verizon PA on September 8, 2003.

PO-4: TIMELINESS OF CHANGE MANAGEMENT NOTICE

Definition

PO-4 measures the percent of Change Management notices and associated documentation distributed to the CLECs prior to the implementation of the change request. In addition, two of the sub-metrics are concerned with measuring the number of day's notification or change confirmation to the CLECs is delayed.

Sub-metrics

There are three sub measures within PO-4:

- **PO-4-01:** calculates the numerator as the total number of notifications sent within the required time frames. The total number of notifications sent during the reporting period calculates the denominator.
- **PO-4-02:** calculates the cumulative delay days for those notifications sent one to seven days late of the required time frame.
- **PO-4-03:** calculates the cumulative delay days for those notifications sent eight or more days late of the required time frame.

The description of the PO-4-02 and PO-4-03 sub-metric appear to be in contradiction with how the result is calculated.   For example, according to the title, PO-4-02 is how many change

management notices are delayed one to seven days yet the calculation seems to be how many total delay days there were for those notices delayed one to seven days. PO-4-03, according to its title is how many notifications sent during the reporting period were sent eight or more days later than what is required. Yet, the C2C shows that the calculation for PO-4-03 is the total number of days there were for those notifications sent eight or more days late from the required time interval. DCI requested clarification on whether these two sub-metrics measure how many notifications fall within the number of days that they are considered late or if they measure the total number of delayed days falling within the one to seven day category and greater than eight day category.

Exclusions

There are no exclusions for this measure.

DCI Derived Metric Statement

All sub measure evaluations used a sampling of data and a comparison of the data to the source files used for the NMP update. The evaluation process utilized the following steps:

- Obtain the originating data from the Verizon PA legacy systems. The information will include change request numbers, name, type, severity level, release dates, implementation date, notification date and region.
- Compare the originating data to the calculations made by the metric team prior to the NMP update.
- Compare the calculations to the data contained in NMP.

Based on the finding from the analysis, calculate the measures based on the sampled data and verify the updates represent the performance reported by Verizon PA. Should variations be detected, calculate the effect on the reported measures and determine if further analysis is required.

Report Dimension

DCI obtained a list of Verizon PA systems or processes that qualify for the PO-4 measure. The next step was to compare any changes implemented in the first half of 2003 to the system list and validate qualifying implementations. From the list of changes, DCI matched the CLEC notifications to the list of upgrades and answered the following questions:

- Did the list of changes qualify as one of the types described under the PO-4 measure?
- Did the information provided by Verizon PA match the experience of the CLEC providers operating in PA?
- Does the sampled data match the information stored in NMP?
- Did DCI's calculations derived from using the validated data match the results contained in the C2C measure reports produced by Verizon PA?
- Is the internal system change notification documentation used by Verizon PA employees accurate and complete?

Once the list was verified, DCI forwarded the list to selected CLEC participants to validate the date/time quotes reported in Verizon PA's data. In addition to the notification verification, DCI requested internal documentation used by Verizon PA that describes how Verizon PA and CLECs work together to implement changes to OSS interfaces, associated business rules and applicable business.

In response to a data request, Verizon PA responded with the following supporting information :

The interface processes and systems qualifying under PO-4 are:

- EDI-Electronic Data Interchange
- CORBA-Common Object Request Broker Architecture
- LSI-Local Service Interface
- ReTAS-Repair Trouble Administration System
- CSG-Carrier Services Gateway
- BOS/BDT-Billing Output Specification/Billing Data Tape
- DUF-Daily Usage File
- WPTS-Wholesale Provisioning Tracking System
- Provider Notification Report
- Notifier Status
- Directory Proof Report

Management notices were provided for changes occurring in the first half of the year including change descriptions and implementation dates.

Notifications to CLECs were provided in PDF files.

Notification Guidelines provided are as follows:

Notification timelines are documented in the OSS Interface Change Management Process.

Type 1: Notification and confirmation timelines for Type 1 are determined on an individual case basis.

Type 2: Timelines for Type 2 Change Requests are, in general, determined based on applicable law/regulatory rules. If timelines are not specified by the regulatory action and business rules are impacted, reasonable efforts will be made to follow, for Type 2 Change Requests, the same notification intervals for Type 4 and Type 5 Change Requests. Verizon PA will use reasonable efforts to provide at least 45 days notification prior to implementation of Type 2 Change Requests that do not impact business rules.

Type 3: Type 3 timelines are based upon mutual agreement in conjunction with the rollout of national guidelines subject to any overriding regulatory obligations. Where practical, Verizon PA will supply a high level overview of how Verizon PA intends to implement major changes in the new industry guideline 180 days in advance of implementation.   Subject to regulatory

requirements, implementation notification will be no less than the timeline used for Type 4 and Type 5 Change requests.

Type 4 and Type 5: Generally, notification of the scheduled implementation of Type 4 and Type 5 changes will follow the schedule below:

- At least 73 days prior to implementation; draft business rules are published
- At least 66 days prior to implementation; draft technical specifications are published
- CLECs have 15 business days from publication of documents to provide comments
- At least 45 days prior to implementation; change confirmation occurs through the publication of final business rules, technical specifications and error message documentation.

From the metric breakdown requested, Verizon PA sent the following, which is also included in the Performance Standards section of the C2C:

Table A-5

Timeliness Standards:		
Change Type	**Change Notification**: (Interval between notification and implementation)	**Change Confirmation**: (Final Documentation Availability before implementation[107])
Type 5 – CLEC originated	≥ 73 calendar days for business rules, ≥ 66 calendar days for technical specifications	>= 45 calendar days
Type 4 – Verizon originated	≥ 73 calendar days for business rules, ≥ 66 calendar days for technical specifications	>= 45 calendar days
Type 3 – Industry Standard	≥ 73 calendar days for business rules, ≥ 66 calendar days for technical specifications	>= 45 calendar days
Type 2 – Regulatory	Time periods established in Regulatory Order. If no time periods set, default to above time period.	Time periods established in Regulatory Order. If no time periods set, change notification and change confirmation is negotiated on an individual case basis through the Change Management Process.
Type 1 – Emergency Maintenance	Notification before implementation	N/A

Upon review of the above, DCI questions the standard used for the Type 2 – Regulatory change. The statement concerning the Change Notification interval is in contradiction with what the interval is shown to be under Change Confirmation. The statement under the Change Notification column states that the interval shall be what is required by the regulatory order and if there is no requirement contained within the order than the interval shall be at least 73 calendar days for business rules and at least 66 days for technical specifications. However, under the Change

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[107] Type one (1) change confirmation is not applicable.

Confirmation column, Verizon PA states that if no time period is established by the Order, then both the change notification and change confirmation interval is negotiated on an individual case basis through the Change Management Process.

Performance Standard

Table A-6 PO-4 - Timeliness of Change Management Notice

Sub-Metric	PO-4 Manual Loop Qualification	Standard	Reported Results
PO-4-01-6660	% Notices Sent on Time - Industry Standard, Verizon Orig. & CLEC Orig.	95%	100.00
PO-4-01-6671	% Notices Sent on Time - Emergency Maint. & Regulatory	95%	100.00
PO-4-02-6660	Change Mgmt. Notice - Delay 1-7 Days - Ind. Std., Verizon Orig, & CLEC Orig.	No Standard	NA
PO-4-02-6671	Change Mgmt. Notice - Delay 1-7 Days - Emergency Maint. & Regulatory	No Standard	NA
PO-4-03-6660	Change Mgmt. Notice - Delay 8+ Days - Ind. Std., Verizon Orig. & CLEC Orig.	No delayed notices & documentation over 8 cal days	NA
PO-4-03-6671	Change Mgmt. Notice - Delay 8+ Days - Emergency Maint. & Regulatory	No delayed notices & documentation over 8 cal days	NA

Evaluation Process

The DCI Review process used a sampling of the changes and notifications for the months of April, May and June, 2003 that was provided by Verizon PA in response to the data request[108]. DCI coordinated with participating CLECs to validate the reported results for this same time frame. The following table displays the information extracted for the month of April.

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[108] Reference data request B008

Table A-7

Type	CR#	Change Description	System(s) Effected	CLEC Notification Date	Implementation Date
1	2909	Modifications were made to the pre-order EDI guide versions 5.4 and 6.0 to ensure consistency with the current system.	EDI	4/15/03	4/15/03
1	2910	Modifications were made to the pre-order EDI versions 5.4 and 6.0 to ensure consistency with the current system. Field EXTCTEFFDT added comment "Date should be sent in ccyymmdd format".	EDI	4/15/03	4/15/03
1	2911	Order Business Rules Modification in response to TT#618693 - SANO Field on EU Form	LSI	4/21/2003	4/21/2003
1	2912	Add a new TOS value of "ResidentialAdditionalLine" in "enum" TOS1_t for due date availability transaction.	CORBA	4/21/03	5/5/03 Not received by a CLEC
1	2913	This fix corrects a problem where a manual quarry is sent, the additional detail is not being sent with the transaction quarry to the CLEC	N/A Ordering only	4/21/03	4/22/03 Not received by a CLEC
1	2915	TT# 613899 addresses changes in the "as is" and "full migration" processing.	LSI	4/24/03	4/24/03
1	2916	This CR corrects a discrepancy between text messages returned in the gateway system and the documentation for manual queries.	LSI	4/24/03	4/24/03
1	2919	Error code 8201-State Invalid or missing was generated in error pertaining to GTE accounts for Virginia	LSI,EDI	4/25/03	4/25/03
1	2920	An incorrect query is generated with Resale and Platform requests for outside moves on a account with a blocking option	LSI,EDI	4/25/03 CLEC Notice states 4/30/03	4/25/03 CLEC Notice states 4/30/03
1	2924	Changed the EDI LSOG-6 guide V-6.1.1 page 53 and page 359 to make the document consistent with the gateway.	EDI	5/23/03	5/27/03
1	2925	Changed the EDI LSOG-6 guide V-6.1.1 page 99 removing the comment :Non Supported"	EDI	5/23/03	6/22/03
1	2926	Changed the EDI LSOG-5 guide V-5.5.1 page 102 removing the comment :Non Supported"	EDI	5/23/03	6/22/03
1	2928	From the testing of the June release, the billing account structure was modified to change one of the usage notes under EATN descriptions.	LSI-E,LSI-W	6/11/03	6/23/03
1	2930	The documentation supporting the SPEC field on the LSR was modified for clarification adding a space between IOC and the value.	LSI-E,LSI-W	6/18/03	6/23/03
1	2931	Changes the supplement type to include the SECNCI, multiple facilities, EXP field required on desired due dates or an expedited date.	LSI-E,LSI-W	6/18/03	6/23/03
1	2933	Corrects the error generated when a UNE-P for Centrex and the LNUM=2,3,4,5 or 6	WEB,GUI,EDI	6/26/03	6/26/03

PO-5: AVERAGE NOTIFICATION OF INTERFACE OUTAGE

Definition

This metric measures the average amount of time that elapses between Verizon PA identification of a Verizon PA interface outage and Verizon PA notification to CLECs that an outage exists. Notification is sent via electronic mail when a Verizon PA system outage occurs that prevents the CLECs from transactions performing transactions for pre-ordering, ordering, or maintenance through any of the production interfaces and the outage affects more than one CLEC.[109] This differs slightly from the System Design Document, which mentions only pre-ordering transactions.[110]   (Notification of network outages, which are different from interface outages, is covered by network performance metrics.[111])

PO-5-01, on a combined basis, reports on LSI, CORBA, and EDI for pre-ordering interfaces, LSI and EDI for ordering interfaces, and LSI and electronic bonding for maintenance interfaces.[112]

Sub-metrics

There is only one metric (PO-5-01) for PO-5. Although included in Verizon PA's Network Metrics Platform (NMP), it was not included in Verizon PA's Performance Assurance Plan (PAP) for the period April 2003 to June 2003.[113]

Formula

(Sum of date/time of outage notification to CLECs minus date/time the interface outage was identified by Verizon PA) divided by: (total number of interface outages for which notice was given)[114]

DCI Derived Metric Statement

DCI requested all source data and interface trouble tickets for April-June 2003. Only one bulletin was provided.[115] It was unnecessary to use Structured Query Language (SQL) statements to perform the metric calculation, as Verizon PA reported only 1 item related to this metric during the April-June 2003 time frame. The formula in the prior paragraph was used and calculations done manually. The date/time of outage notification (bulletin) was 6/5/03 10:10 AM EST and the date/time of the interface outage was identified was 6/5/03 09:52 AM EST, for a difference of 18 minutes, which is two minutes less than the 20-minute standard.[116] Using Verizon PA's definitions of start and stop time, DCI obtained the same results reported by Verizon PA.[117]

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[109] Information Response C-042 (*Verizon PA C2C Guidelines* Page 16 and *System Design Document* Page 5)
[110] Information Response C-043 (*System Design Document* Page 5)
[111] Information Response C-043 (*Verizon PA C2C Guidelines* Page 16)
[112] Interview C-011
[113] Information Response C-042 (*Verizon PA C2C Guidelines* Page 16) and April/May/June 2003 PAPs
[114] Information Response C-042 (*Verizon PA C2C Guidelines* Page 16 and *System Design Document* Page 7)
[115] Information Response C-048
[116] Information Response C-048
[117] Information Response 3.6 and DCI Consultant's Analysis

Report Dimension

CLEC Aggregate: **Verizon East** (CT, MA, ME, NH, NY, RI, VT, VA, MD, DC, WV, NJ, PA, DE)[118]

Exclusions

According to Verizon PA, no exclusions exist.[119]

Performance Standard

Not more than 20 minutes[120]

Metric Creation

The Wholesale Customer Care Center (WCCC) for Verizon PA sends interface outage notices when outages are brought to the attention of WCCC staff. If outages are not brought to their attention, then notices will not be sent out and the outage will not be included in the PO-5 calculation. Both CLEC representatives and/or Verizon PA personnel may bring outages to WCCC's attention. Also Verizon PA's EnView system may detect a problem that is brought to the attention of WCCC staff. Regardless of the source, WCCC staff first prepares a trouble ticket. WCCC staff then determines if the interface is supposed to be up. If it is supposed to be down, then WCCC staff does not consider it an outage but advises whoever initially notified WCCC of the situation. If it is supposed to be up, then WCCC staff initiates an investigation via a cross-functional conference call to discuss the outage and confirm the outage. It is the time of confirmation that Verizon PA uses to begin measuring the interval for PO-5 reporting purposes. (Thus, neither the time the outage is initially identified, the time that WCCC staff is notified about the outage, nor the time the trouble ticket is opened about the outage determine Verizon PA's start time.)

When the WCCC prepares an outage notice, the notice includes an estimated notification time, which is used as the end time, not the time when the notice was actually distributed. WCCC staff sends these notices via electronic mail and manually enter the interface outage notice information (including the trouble ticket number, the start time, and the end time) into the NMP system using a GUI. (The reason given by Verizon PA for use of estimated, not actual, time revolves around a maximum of 250 names in Lotus Notes for sending email messages. Right now, multiple email messages must be used for notifying CLECs; therefore, the estimated notification time is used so all email messages have the same end time provided within the bulletin sent via email message. Verizon PA is looking at using group names so that actual time (via a date/time stamp) can be used.) Once information is entered into the NMP system, then arithmetic calculations to determine PO-5 results can be performed.[121]

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[118] Information Response C-042 (*Verizon PA C2C Guidelines* Page 16 and *System Design Document* Page 7)
[119] Information Response C-042 (*Verizon PA C2C Guidelines* Page 16)
[120] Information Response C-042 (*Verizon PA C2C Guidelines* Page 16 and *System Design Document* Page 7)
[121] June 19, 2003 Pre-Order Domain Workshop and Interview C-011

According to Verizon PA, all bulletins are included in PO-5 results regardless of duration; however, short duration outages may be over before confirmation occurs so they are not included in PO-5 results. Verizon PA does not know how many of these short duration outages occur.[122] The diagram in Table A-8 illustrates that graphical user interface (GUI), not OSS inputs, serve as inputs to the PreOrder domain.[123]

Table A-8 – PO-5 Average Notification of Interface Outage Data Input

Domain Interfaces
Version 0.2
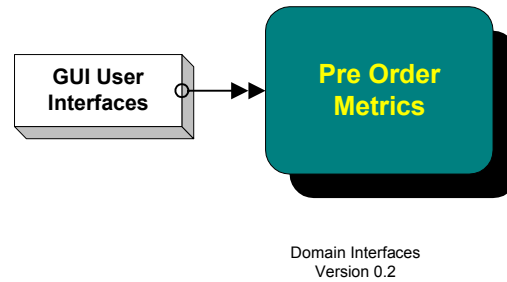
The diagram in Table A-9 illustrates that these GUI inputs enter the data flow sequence at the staging area and follow the indicated sequence until the data mart, where the metrics are created.[124]

Table A-9 – PO-5 Average Notification of Interface Outage Data Flow Sequence
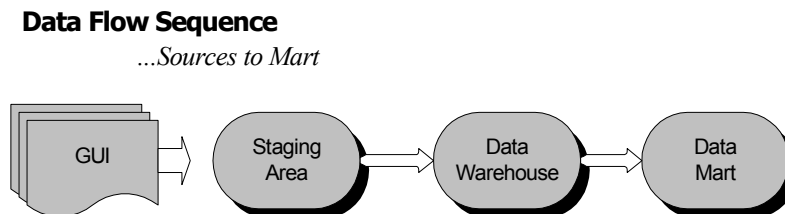
If two or more interfaces are experiencing outages at the same time, Verizon PA lists all affected interfaces on one notice, and reflects that single notice in PO-5, as previously discussed.[125]

PO-6: SOFTWARE VALIDATION

Definition

This metric addresses software validation for regular (non-emergency)/major software releases. Verizon PA typically installs these software releases three times per year (usually in February, June, and October).   It tests each release's functionally by executing a test deck of transactions to validate that the software functionality works as designed. Each transaction in the test deck is assigned a weight factor, which is based on weights that have been assigned to the metrics in the

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[122] Interview C-011
[123] Information Response C-042 (*System Design Document* Page 5)
[124] Information Response C-042 (*System Design Document* Page 6)
[125] Interview C-011

PAP. Within this metric, weight factors are allocated among transactions types (e.g. pre-order, resale-order, UNE-order, platform-order), and then equally distributed across specific transactions within type. Initial array-of-weights for transaction types (by subcategory) in a test deck are included in the C2C Guidelines Appendix O (may be adjusted as part of the annual review process). If test transactions are added to the test deck, the distribution of weights between transaction types is retained, then equally re-distributed across specific transactions within type.[126]

Sub-metrics

There is only one metric (PO-6-01) for PO-6. Although included in Verizon PA's NMP, it was not included in Verizon PA's PAP for the period April 2003 to June 2003.[127]

Formula

(Sum of weights of failed transactions) divided by (sum of weights of all transactions in the test deck)[128]

DCI Derived Metric Statement

DCI requested all software validation test decks and associated results for June 2003. LSOG5 and LSOG6 test decks were provided.[129] It was unnecessary to use SQL statements to perform the metric calculation, as Verizon PA reported no failed transactions related to this metric for June 2003. (April and May 2003 reports were N/A or not applicable as not non-emergency/major software releases occurred.) Using Verizon PA's definitions of software validation, DCI obtained the same results reported by Verizon PA.[130]

Report Dimension

CLEC Aggregate: Verizon PA/Delaware (PADE)[131]

Exclusions

According to Verizon PA, no exclusions exist.[132]

Performance Standard

Less than or equal to 5%[133]

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[126] Information Response C-042 (*Verizon PA C2C Guidelines* Page 17) and Interview C-011
[127] Information Response C-042 (*Verizon PA C2C Guidelines* Page 17) and April/May/June 2003 PAPs
[128] Information Response C-042 (*Verizon PA C2C Guidelines* Page 17 and *System Design Document* Page 4)
[129] Information Response C-049
[130] Information Response C-49 and DCI Consultant's Analysis
[131] Information Response C-042 (*Verizon PA C2C Guidelines* Page 17 and *System Design Document* Page 5)
[132] Information Response C-042 (*Verizon PA C2C Guidelines* Page 17 and *System Design Document* Page 5)
[133] Information Response C-042 (*Verizon PA C2C Guidelines* Page 17 and *System Design Document* Page 5)

Metric Creation

Verizon PA uses the same procedures for all Verizon PA East states; however, different test decks depending on the metrics in effect.[134]   Verizon PA's policy is to execute the test deck at the start and completion of quality assurance (QA) for each release, which usually occurs approximately four weeks before release (typically the 3rd week in a month).   These test deck runs are not included in PO-6 calculations. [135]

Then, within one business day, following a non-emergency software release to production as communicated through change management, Verizon PA begins to execute the test deck in production using training mode.   Upon test completion, Verizon PA reports the number of test deck transactions that were rejected or otherwise failed during test execution.   (A transaction is considered failed if the requested cannot be submitted or processed, or results in incorrect or improperly formatted data.)   Each failed transaction (for a test deck run in production mode) is multiplied by the transaction's weight factor.[136]

For those months that Verizon PA executes the test deck, the observations column on the C2C report is populated with the combined total of failed transactions for the two most current Local Service Order Guide (LSOG) versions.   For other months, the C2C report is populated with the notation R3 to indicate that the test deck is executed three times per year.[137]   The diagram in Table A-10 illustrates that graphical user interface (GUI), not OSS inputs, serve as inputs to the PreOrder domain.[138]

Table A-10 – PO-6 Software Validation: Data Input
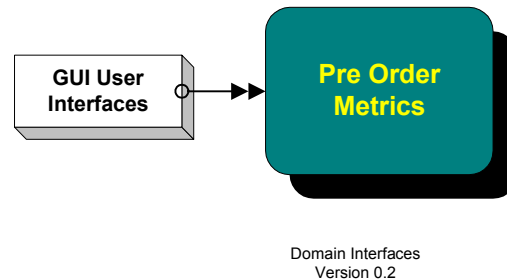
The diagram in Table A-11 illustrate that these GUI inputs enter the data flow sequence at the staging area and follow the indicated sequence until the data mart, where the metrics are created.[139]

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[134] Interview C-011
[135] Information Response C-042 (*Verizon PA C2C Guidelines* Page 17) and Interview C-011
[136] Information Response C-042 (*Verizon PA C2C Guidelines* Page 17)
[137] Information Response C-042 (*Verizon PA C2C Guidelines* Page 17) and Interview C-011
[138] Information Response C-042 (*System Design Document* Page 4)
[139] Information Response C-042 (*System Design Document* Page 5)

Table A-11 – PO-6 Software Validation: Data Flow Sequence

Data Flow Sequence

...Sources to Mart
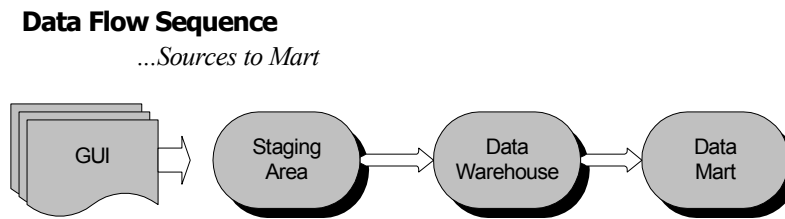
PO-7: SOFTWARE PROBLEM RESOLUTION TIMELINESS

Definition

This metric addresses software problem resolution timeliness. Verizon PA installs software releases three times per year (usually in February, June, and October) as previously discussed in our PO-6 discussion. After each major software release affecting CLECs, Verizon PA tracks the number of rejected pre-order and order transactions reported to WCCC, those rejected transactions resulting from the test deck execution, and the timeframe to resolve each problem. For this metric, rejected transactions caused by Verizon PA code or documentation errors or omissions that result in Type 1 changes are production referrals.[140] Specifically (though not completely clear from the C2C Guidelines documentation) it means the terminology "production referrals" for PO-7 sub-metrics specifically must include software problems involving all of the following:[141]

- Reported to WCCC within 30 days
- Linked to test deck (non-emergency/major software release)
- Rejected order or pre-order transactions
- Cause or issue Verizon PA errors or omissions
- Lead to Type 1 (fix) changes

For those months that Verizon PA executes the test deck, the observations column on the C2C report is populated with data based on PO-7 calculations. For other months, the C2C report is populated with the notation R3 to indicate that the test deck is executed three times per year.[142]

Sub-metrics

- **PO-7-01:** % Software problem resolution timeliness
- **PO-7-02:** Delay hours – software resolution – change – transactions failed, no workaround
- **PO-7-03:** Delay hours – software resolution – change – transactions failed, with workaround

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[140] Information Response C-042 (*Verizon PA C2C Guidelines* Page 17-18)
[141] Interview C-011
[142] Information Response C-042 (*Verizon PA C2C Guidelines* Page 18)

- **PO-7-04:** Delay hours – failed/rejected test deck transactions – transactions failed, no workaround

- Although included in Verizon PA's NMP, none of these sub-metrics are include in Verizon PA's PAP for the period April 2003 to June 2003.[143]

Formulas

- **PO-7-01:** is defined as the ratio of production referrals resolved within target response intervals to the total number of production referrals, during the 30 calendar days following a major CLEC-affecting software release.[144]

- **PO-7-02:** is defined as the number of cumulative delay hours (beyond 48 hours standard) for identified software resolution changes associated with pre-order failures with no workaround.[145]

- **PO-7-03:** is defined as the number of cumulative delay days (beyond 10-day standard) for identified software resolution changes associated with order rejects with a workaround.[146]

- **PO-7-04:** is defined as the number of cumulative delay hours (beyond 48 hours standard) for software resolution changes associated with order rejects with no workaround for test deck transactions.[147]

DCI Derived Metric Statement

Verizon PA did not report any figures for the PO-7 metrics in its reports; therefore, DCI did not verify Verizon PA's calculations. The 30 days following the February 2003 software release would have been over before the April-June 2003 Review time period. Likewise, the June 2003 software release occurred on June 22, 2003 – leaving only eight additional days before the end of the Review time period. Apparently no software problems were reported in this latter June 2003 time period, so DCI were unable to verify Verizon PA calculations for this metric.[148]

The PO-7 definition states that a failed transaction must have been "caused by Verizon code or documentation errors or omissions in non-emergency software releases." Verizon PA takes this phrase very literally. For example, in a Section 271 review involving Verizon NJ, one of the failed production referrals from October 2002 did match a test deck scenario, but the transaction failed because of a problem with a Verizon PA table, rather than with Verizon PA's actual code or documentation. Thus, Verizon PA excluded this transaction from PO-7. With only a few days in June 2003 when failed transactions would be included in PO-7 metric calculations, it is difficult for DCI to determine if similar items are not included in metric calculations.

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[143] Information Response C-042 (*Verizon PA C2C Guidelines* Pages 18-19)
[144] Information Response C-042 (*Verizon PA C2C Guidelines* Page 19 and *System Design Document* Page 6)
[145] Information Response C-042 (*Verizon PA C2C Guidelines* Page 19 and *System Design Document* Page 6)
[146] Information Response C-042 (*Verizon PA C2C Guidelines* Page 19 and *System Design Document* Page 6)
[147] Information Response C-042 (*Verizon PA C2C Guidelines* Page 19 and *System Design Document* Page 6)
[148] Information Response 3.6 and DCI Consultant's Analysis

Report Dimension

PO-7-01, PO-7-02, and PO-7-03 – CLEC Aggregate: Verizon East (CT, MA, ME, NH, NY, RI, VT, VA, MD, DC, WV, NJ, PA, DE)[149]

PO-7-04 – CLEC Aggregate: Pennsylvania/Delaware (combined data)[150]

Exclusions

Failed pre-order and order transactions reported to the WCCC after 6:00 p.m. Friday and before 9:00 a.m. Monday are treated as though they were received at 9:00 a.m. Monday.[151] According to Verizon PA, no other exclusions exist.[152]

Performance Standard

- **PO-7-01:** Less than or equal to 95%[153]
- **PO-7-02:** 48 hours[154]
- **PO-7-03:** 10 days[155]
- **PO-7-04:** 48 hours[156]

The data values populated on the C2C report for PO-7-02, PO-7-03, and PO-7-04 represent the number of hours (or days) beyond the standard.

Metric Creation

As previously discussed, only those software problems meeting the following criteria are input by WCCC staff into the NMP for calculation purposes.[157]

- Reported to WCCC within 30 days
- Linked to test deck (non-emergency/major software release)
- Rejected order or pre-order transactions
- Cause or issue Verizon PA errors or omissions
- Lead to Type 1 (fix) changes

The diagram in Table A-12 illustrates that GUI, not OSS inputs, serve as inputs to the PreOrder domain.[158]

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[149] Information Response C-041(*Verizon PA C2C Guidelines* Page 18 and *System Design Document* Page 6)

[150] Information Response C-041(*Verizon PA C2C Guidelines* Page 18 and *System Design Document* Page 6)

[151] Information Response C-042 (*Verizon PA C2C Guidelines* Page 18)

[152] Interview C-011

[153] Information Response C-041(*Verizon PA C2C Guidelines* Page 18 and *System Design Document* Page 6)

[154] Information Response C-041(*Verizon PA C2C Guidelines* Page 18 and *System Design Document* Page 6)

[155] Information Response C-041(*Verizon PA C2C Guidelines* Page 18 and *System Design Document* Page 6)

[156] Information Response C-041(*Verizon PA C2C Guidelines* Page 18 and *System Design Document* Page 6)

[157] Interview C-011

[158] Information Response C-042 (*System Design Document* Page 4)

Table A-12 – PO-7 Software Problem Resolution Timeliness: Data Input

Domain Interfaces
Version 0.2
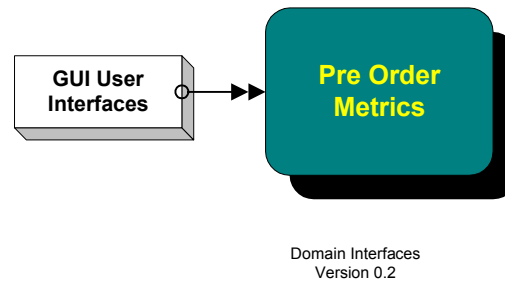
The diagram in Table A-13 illustrate that these GUI inputs enter the data flow sequence at the staging area and follow the indicated sequence until the data mart, where the metrics are created.[159]

Table A-13 – PO-7 Software Problem Resolution Timeliness: Data Flow Sequence

Data Flow Sequence
...Sources to Mart
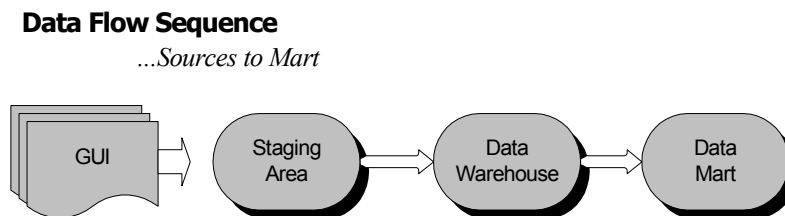
PO-8: MANUAL LOOP QUALIFICATION

Definition

The PO-8 metric measures the response time for the provisioning of loop qualification information required to provision more complex services, when such information is not available through an electronic database.

Sub-metrics

There are two sub measures within PO-8:

- **PO-8-01:** Percent on time manual loop qualification
- **PO-8-02:** Percent on time engineering record requests

    – This metric measures the percent of engineering records delivered within 72-hours from the receipt of the request.

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[159] Information Response C-042 (*System Design Document* Page 5)

Formula

- The numerator for PO-8-01 is determined by taking the sum of manual loop qualification requests where the requested information was received within 48 hours. The denominator is the total number of manual loop requests received during the report period.
- The numerator for PO-8-02 is determined by taking the sum of engineering record requests where the requested information was received within the 72-hour time frame. The denominator is the total number of engineering record requests received during the report period.

Exclusions

The exclusions for PO-8 are as follows:

- The time interval from 5:00PM on the business day immediately proceeding a major holiday to 8:00AM EST of the first business day following the holiday.
- Weekend time intervals from 5:00PM Friday to 8:00AM Monday EST
- Requests for digital designed loops that require loop conditioning
- Requests from a test CLEC identification code
- Verizon PA affiliate records are excluded from the CLEC aggregate

DCI Derived Metric Statement

All sub measure evaluations used a sampling of requests received and compared to the time and date stamp on the returned transmission. This was then compared to the sent/receive logs tracked by the engineering department. Once the comparison reveals accuracy within the data source, a comparison was made to the data updated in NMP.

Report Dimension

The Review process performed by DCI involved a comprehensive evaluation of Verizon PA technical documentation defining the process used by the National Market Center (NMC), Loop Qualification Center (LQC), and the Facilities Management Center (FMC) which process the loop qualification request. In addition to the documentation verification, samples of April 2003 verification requests were compared to the information found in the Data Mart logs. Note; a comparison of the data to actual CLEC requests was not performed due to a lack of CLEC provided information. The Verizon PA documentation Review process utilized the following Review criteria:

- Was the documentation detail complete for all types of requests?
- Did the documentation define a logical flow process?
- How does Verizon PA log and track the history of a request, including date and time stamps?
- Does Verizon PA utilize similar processes as compared to retail inquiries?

- Were any inconsistencies identified which could affect the validity of the information in the Data Mart and measure results?

The sample data Review process utilized the following Review evaluations:

- Did the data extracted from the hard copies received from Verizon PA on data request B-009 exist in the Data Mart processing files?
- Were there any additional data in the Data Mart files not provided in data request?
- Did the time and date stamps on the hard copies match the Data Mart information?
- Were the time intervals calculated properly given the documented start and completion times?
- Did the information from the data request and the Data Mart comparison support the reported measure statistics for the April time frame?

To facilitate the review, DCI issued a data request B-009 requesting:

- A copy of all requests received from CLECs for manual facility inquiries within the state of Pennsylvania for the month of April 2003. Include the date/time received and the date/time the notification was returned to the CLECs.
- Provide any internal system or employee training documentation developed for processing of the manual facility inquiries.
- Provide the site or sites designated to handle the Pennsylvania manual facility inquiries.

Verizon PA responded by providing the following:

- Thirty-eight manual loop qualification requests
- Loop Qualification Process Documentation for digital loops, document #RCO-99-1063
- The Loop Qualification Center is located in Hunt Valley, Maryland and handles the initial request. If records are not available to complete the request it is forwarded to the appropriate local engineering group, which are located throughout the state.

Performance Standard

Table A-14

Sub-Metric	PO-8 - Manual Loop Qualification	Standard	Reported Results
PO-8-01-2000	% On Time - Manual Loop Qualification	95% within 48 Hours	98.59
PO-8-02-2000	% On Time - Engineering Record Request	95% within 72 Hours	NA

DCI Evaluation Process – Documentation

Based on documentation received in the data request[160], the metric development process was defined as follows:

- The CLEC Loop Verification Request is received in the NMC via the ASR/LSR ordering gateways.

- The NMC enters the request into a system called "Request Net" which forwards the request to the Loop Qualification Center (LQC). At the time of entry, the NMC employee enters the inbound date/time stamp received from the ordering gateway. The outbound time/date stamp is then recorded by the entry system.

- Upon receipt of the request in the LQC, a date/time stamp is added to the record.

- Next, the LQC employee performs a series of verifications for the parameters of the requested loop:

  – Livewire – Loop Length
  – MLT – Loaded/Non-loaded
  – LFAC – Terminal Makeup

- If the results fit the parameters set for the specified request, the LQC employee forwards the request to the NMC via Request Net.

- Upon receipt of the request in the NMC, the employee forwards the findings to the CLEC via the ordering gateway.

- If the results do not fit the parameters set for the specified request, the request is forwarded to the FMC for resolution. At this point, the LQC is no longer in the loop for the request.

- The FMC will perform whatever it takes to clarify the loop makeup. Once complete, the FMC will forward the response back to the NMC for closure.

DCI Evaluation Process – Data Reconciliation

DCI received 38 examples of loop verification requests for the month of April. The information was extracted from the Request Net system. Table A-15 represents the data that were extracted from the source documentation:

The results of the reconciliation findings are:

> DCI was unable to determine if the data extracted from the hard copies received from Verizon PA on data request B-009 existed in the Data Mart processing files.

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[160] Reference Data Request B009

Table A-15 – Verizon PO-8 Data Sources

SR#	PON# Circuit ID	Request Type	CLEC Name	Date Issued	Desired Due Date	Committed Due Date	Date Closed	Time Closed	Loop Qualified Y/N	Life Cycle Time
962490-001	NG797228CH	2W-ADSL-R		04/08/03	04/21/03	04/21/03	04/09/03	9:19 AM	Y	16.51
962273-001	3.ARDU.302141..PE	2W-ADSL-C ZBT		04/08/03	04/16/03	04/21/03	04/09/03	2:53 PM	Y	23.57
960902-001	2098079	UNB 2W ISDN		04/07/03	04/15/03	04/16/03	04/07/03	2:44 PM	Y	5.38
959462-001	2094572-HDSL	UNB 2W HDSL		04/03/03	04/14/03	04/14/03	04/03/03	2:53 PM	Y	1.08
957132-001	VJL4D3695DSL	UNB 2W HDSL		04/01/03	05/14/03	04/09/03	04/01/03	10:07 AM	Y	1.02
961877-001	NG794661CG	UNB 2W ADSL-R		04/08/03	04/18/03	04/17/03	04/08/03	4:26 PM	Y	6.10
961001-001	3.ARDU.302133..PE	UNB 2W ADSL-R ZBT		04/07/03	04/08/03	04/21/03	04/08/03	12:17 PM	Y	25.48
963317-001	2104225-HDSL	UNB 2W HDSL		04/09/03	05/02/03	04/22/03	04/10/03	8:57 AM	Y	17.05
974245-001	NG809833CG	UNB 2W ADSL-R		04/28/03	05/09/03	05/09/03	04/29/03	10:36 AM	N	19.13
974323-001	SO-0065624	UNB 2W ISDN		04/28/03	05/06/03	05/08/03	04/30/03	10:06 AM	Y	41.58
969261-001	2112145	UNB 2W ISDN		04/18/03	04/28/03	04/29/03	04/21/03	11:41 AM	Y	11.41
962940-001	AC12003443062	UNB 2W ISDN		04/09/03	04/18/03	04/17/03	04/09/03	1:58 PM	Y	1.47
963162-001	SO-0065415	UBL 2W ISDN		04/09/03	04/17/03	04/21/03	04/09/03	4:51 PM	Y	1.42
963770-001	7.AQDU.101021..PE	UBL 2W HDSL		04/10/03	04/14/03	04/22/03	04/10/03	4:51 PM	Y	4.29
966507-001	VJL419724ADSL	UBL 2W ADSL-R		04/15/03	04/21/03	04/25/03	04/15/03	4:51 AM	N	3.15
967192-001	4.ARDU.754329..PA	UBL 2W ADSL-R		04/16/03	04/24/03	04/25/03	04/16/03	9:25 AM	Y	0.34
967372-001	03DSL368121A	UBL 2W ADSL-R		04/16/03	04/25/03	04/25/03	04/16/03	11:35 AM	Y	0.32
967396-001	2093637	UBL 2W ADSL-R		04/16/03	04/24/03	04/28/03	04/17/03	8:25 AM	Y	21.08
970280-001	4.ARDU.301684..PE	UBL 2W ADSL-R		04/21/03	4/30/4/30	04/30/03	04/22/03	12:42 PM	Y	20.34
970538-001	VHR420984ADSL	UBL 2W ADSL-R		04/22/03	04/29/03	04/30/03	04/22/03	11:32 AM	Y	2.26
970706-001	4.ARDU.301685..PE	UBL 2W ADSL-R		04/22/03	04/29/03	05/01/03	04/22/03	3:33 PM	Y	3.51
971517-001	3.ARDU.302177..PE	UBL 2W ADSL-R ZBT		04/23/03	04/29/03	05/02/03	04/23/03	3:27 PM	Y	4.41
971537-001	3.ARDU.302178..PE	UBL 2W ADSL-R ZBT		04/23/03	04/29/03	05/06/03	04/24/03	3:50 PM	Y	28.27
972003-001	3.ARDU.302182..PE	UBL 2W ADSL-R ZBT		04/23/03	05/01/03	05/05/03	04/25/03	9:54 PM	Y	40.01
972676-001	3.ARDU.302184..PE	UBL 2W ADSL-R ZBT		04/24/03	05/01/03	05/13/03	04/28/03	11:02 AM	Y	43.26
972701-001	3.ADRU.302185..PE	UBL 2W ADSL-R ZBT		04/24/03	05/05/03	05/05/03	04/25/03	11:52 AM	N	20.04
973275-001	ACI2003445322	UBL 2W ISDN		04/25/03	05/06/03	05/06/03	04/28/03	8:10 AM	Y	19.29
973752-001	7.DYVU.713675..PA	UBL 2W ISDN		04/28/03	05/05/03	05/06/03	04/28/03	11:28 AM	Y	3.11
957623-001	3.ARDU.302123.PE	UBL 2W ADSL-R		04/01/03	04/09/03	04/10/03	04/01/03	3:45 PM	y	1.04
957091-001	AC12003440995	UBL 2W ISDN		04/01/03	04/10/03	04/10/03	04/01/03	9:34 AM	Y	0.54
958006-001	AC12003441065	UBL 2W ISDN		04/02/03	04/11/03	04/11/03	04/02/03	1:11 PM	Y	4.33
974886-001	VSLPHILTHY-HDSL1	UBL 2W HDSL		04/29/03	05/06/03	05/08/03	04/30/03	8:44 AM	N	19.18
975443-001	03DSL456793	UBL 2W ADSL-R		04/30/03	05/08/03	05/08/03	04/30/03	10:25 AM	Y	0.33
973522-001	2116524	UBL 2W ISDN		04/25/03	05/05/03	05/06/03	04/28/03	12:26 PM	Y	20.39

DCI could not match any of the field data extracted from the RequestNet screen shots with those of the fact table. The date and time stamps were compared for a close match and did vary by 3-8 seconds but confirmation of the data was questionable. DCI submitted a data request[161] to clarify the findings. Verizon PA responded with the explanation that data comparisons are difficult to perform. They stated that information collected for this measure came from a system called Wisdom, which extracts the timings from the gateway, and not RequestNet. This explains the variance in the time factors but prevents a full reconciliation of the measure source data.

Were there any additional data in the Data Mart files not provided in data request?

No. It was not clear how to relate the information as stated previously but the information in the fact table was sufficient to calculate the measure.

The time and date stamps on the hard copies did match the Data Mart information? No data items from either list could be reconciled.

Time intervals calculated properly matched the documented start and completion times? This analysis was based on the data mart fact tables. The 38 examples provided on the data request all either met or exceeded performance standards.

Information from the data request and the Data Mart comparison did not support the reported measure statistics for the April time frame? The examples provided showed a 100% accuracy where the fact table provided a 98.59% result.

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[161] Reference Data Request B061

B – FINDINGS

PO-1 FINDINGS

1. The Raw Data Verizon PA Provided For Reviewing Purposes Were Inaccurate And Incomplete.

DCI encountered many difficulties in evaluating data. Verizon PA did not send all information required to replicate the database used to calculate the metrics results accurately.

- The first transmission of some of the data to DCI was done in a format that prevented the data's import to a database. DCI spent considerable time diagnosing these issues.

- DCI had a great deal of difficulty in providing structures for lookup tables in the database. This meant that DCI was unable to set up most lookup tables' structure in the database until very late in the process, and the difficulties lessened the transparency of the processes Verizon PA uses. Several additional requests for data were necessary to complete DCI's work.

2. Verizon PA's Documentation Of Its Metrics And Associated Processes Is Inaccurate And Incomplete.

Verizon PA provided DCI with documentation of its guidelines and methods for use in reviewing data. However, there were pieces missing from many documents, and despite sending several updated versions of its documentation, DCI never received a version that was determined to be completely correct.

Several examples include:

- The code that Verizon PA used to generate PO-1-x-6050 reports (the reports for the web interface) were not documented in the April/May CMA; pages that detail the code used to generate those reports are blank in Verizon PA's documentation.[162]

- The code given in the PA April/May CMA for PO-1-07-6030 for CLECs was inaccurate; it excluded all Pennsylvania data.[163] The June version of the algorithms corrected this error.[164]

- No valid SQL documentation was provided for PO-2 metrics in the April/May CMA. The SQL given was invalid SQL in that it did not contain a FROM clause (i.e. it did not specify which tables the data were drawn from or how they were joined).[165] In addition, the June CMA showed that even the fields which were selected according to the April/May CMA were incorrect.[166]

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[162] Information Response C-044
[163] Information Response C-044 (Page 42)
[164] Information Response C-044 (Page 62)
[165] Information Response C-044 (Pages 55-63)
[166] Information Response C-042 (Page 55-63, Information Response C-044 (Pages 77-84))

- Documented acceptable values for database fields are not accurate. For example, for the field TRANSACTION_TYPE_HEADER in the table TB_TRANSCTION_TYPE_ CHILD_LKP (used in calculating Verizon PA performance), Verizon PA lists eight acceptable values and explanations of those values.[167] However, there were 15 additional values (ADV_B, ADV_K, CSR_B, CSR_K, DDA_B, DDA_K, LXA_B, LXA_K, PCSR_B, PSR_B, PSR_K, REJ_B, REJ_K, TNS_B and TNS_K) linked to the data used to calculate the metrics, and at least some of them must be used to replicate Verizon PA's reported results.[168] Verizon PA employees said that the list of acceptable values provided to DCI had been taken from the CMAs themselves, which were incorrect, and so the list of acceptable values provided also had been incorrect.[169]

**Table A-16 – Acceptable Values for TB_TRANSCTION_TYPE_CHILD_LKP.
TRANSACTION_TYPE_HEADER Field**

Value	Explanation
ADV	Address validation
CSR	Customer service record
DDA	Due data availability
LXA	Mechanized loop qualification
PCSR	Parsed CSR
PSR	Produce and service availability
REJ	Rejected query
TNS	Telephone number availability and reservation

- The April/May code for the PO-1 metrics specified the use of a field that does not exist (REPORT_PERIOD) in the table used to calculate the PO-1 metrics.[170] The June version[171] still contained references to the field throughout.

- Some results that could not be replicated using the April/May version of the algorithms still could not be replicated using the supposedly corrected June version of the algorithms.[172]

- Exclusions (such as test transactions, holidays, and Verizon PA affiliate transactions) are not always properly included in documentation.[173]

DCI believes that the documentation inaccuracies likely would cause difficulties for Verizon PA employees who must maintain and update the system(s) used to calculate the metrics, which increases the possibility for errors in the process. In addition, it drastically reduces the transparency of the system.

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[167] Information Response C-051 (Questions on metrics methodology)
[168] DCI Analysis
[169] Interview C-013
[170] Information Responses C-042 and C-044
[171] Information Response C-044
[172] DCI Analysis
[173] Information Responses C-042 and C-044

3. **Verizon PA's Methodology For Selecting Records Could Be Done In Ways That Are Less Complex And More Transparent.**

In general, data marts are designed so that few table joins need to be done to extract data, because such joins degrade the performance of queries, particularly on large data sets. However, Verizon PA does use joins for some queries where it does not appear to be necessary to do so. Examples include:

- In all PO-1 metrics, Verizon PA is joining on a dimension table in order to select records that belong in the geographic area for the report. However, there is a STATE_CODE field in the main table that could be used for that purpose.[174]

- In all PO-1 metrics for retail data, Verizon PA is joining on a dimension table in order to select records of a particular transaction type for Verizon PA data. For CLEC data, it does not do so; instead, that data uses a TRANSACTION_TYPE_SENT field in the main table. That field could be used for Verizon PA data as well, thus making the selection of records simpler.[175]

- The information in the data mart table provided by Verizon PA as the source for the PO-2 metrics is very simple; most of the logic in calculating the metric results apparently takes place during the data acquisition process. DCI requested the scripts and stored procedures that populate the fields it understood to be relevant to the query, [176] but the information was not provided. Because of the lack of availability of the information, replicating or reviewing this metric is difficult at best. For example, the calculation of the number to put into the ACTUAL_MIN and BUCKET_INTERVAL fields is vital to the metric, but is not clearly documented in a way that allows the results to be verified. In addition, the Verizon PA SQL for the query selects data based on a REPORT_TYPE field value of "C2C," which begs the question of what other report data is in the table and how the calculations of the vital fields might be different for that data.

4. **Verizon PA's Processes For Placing Data Into The Data Mart May Be Incorrect.**

- In the April data sent by Verizon PA, there were 25 transactions with an order origin of "P" (which indicates a CLEC) and a TRANSACTION_TYPE_SENT of "TRA." Because this transaction type was not included in any PO-1 metric, Verizon PA was asked to provide an explanation of the code and a justification for not including it in metrics. Verizon PA gave the following response: "The TRANSACTION_TYPE_SENT of TRA was used during March 2003, in lieu of DDA, due to an issue with the source in a previous data month. The TRANSACTION_TYPE_SENT of 'TRA' is no longer used."[177] Verizon PA employees investigated to see why the code incorrectly occurred in the

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[174] Information Response C-044
[175] Information Response C-044
[176] Information Request C-051
[177] Information Response C-051 (Questions on metrics methodology)

audited April data; their findings indicated that there was an error in the scripts that populate the data mart that was corrected April 2, but the records it had placed in the data mart already in April were not corrected. This meant that some records that should have been marked "DDA" were marked "TRA" instead, and so were not included, as they should have been, in the reported metrics results.[178] Because of this, the reported results for PO-1-02-6030 change slightly; the count of records changed from 439 to 463, and the average response time changed from 1.36 to 1.38. The remaining anomalous record did not affect any results because it would have fallen under PO-1-07, which uses Verizon PA-generated data rather than actual CLEC data to measure results.[179]

- There may be issues with the population of CLEC ID fields in the database.

    – In the April, May and June data sent by Verizon PA, there were 36 non-test CLEC items with a CLEC_ID of "amvc", and 50 with a CLEC_ID of "AMVC."[180] DCI's presumption is that these identifications indicate the same CLEC, however, because the Oracle database technology is case-sensitive, information in CLEC-specific reports might not find all the correct data, depending on how the queries are written.

    – In some tables, CLEC IDs are three characters, in others, four. It seems logical to expect that the ID for a particular CLEC would be consistent throughout the system, and this fact may indicate that they are not. Also, a few CLEC IDs are numeric, and a few alphanumeric, while most are all letters.[181]

    – In some tables, there are values that appear questionable, for the CLEC ID. It appears that these records are not generating errors in the data mart population process as would be expected, since the records do wind up in the data mart.[182] The tables in which these values occurred, and the frequency of the values, are shown in Table A-17.

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[178] Interview C-013
[179] DCI Analysis
[180] DCI Analysis
[181] DCI Analysis
[182] DCI Analysis

Table A-17 – Questionable CLEC ID Values (April, May and June data)

Table	CLEC ID	Number Records
TB_DM_GE_FACT		9
TB_DM_MNR_LINE_COUNT_FACT		3
TB_DM_MNR_LINE_COUNT_FACT		9
TB_DM_MNR_LINE_COUNT_FACT		73
TB_DM_MNR_LINE_COUNT_FACT		60
TB_DM_MNR_LINE_COUNT_FACT		4
TB_DM_MNR_LINE_COUNT_FACT		3
TB_DM_MNR_TRBL_FACT		77
TB_DM_MNR_TRBL_FACT_SPL		1,984
TB_DM_MNR_TRBL_FACT_SPL		86
TB_DM_OR_ACK_FILING_MART		2,440
TB_PRV_DM_SVC_ORD_FACT		21
TB_PRV_DM_SVC_ORD_FACT		1560
TB_PRV_DM_SVC_ORD_FACT		3
TB_PRV_DM_SVC_ORD_FACT		3
TB_PRV_DM_SVC_ORD_FACT		27
TB_PRV_DM_SVC_ORD_FACT		3
TB_PRV_DM_SVC_ORD_FACT		1
TB_PRV_DM_SVC_ORD_FACT		3
TB_PRV_DM_SVC_ORD_FACT		3
TB_PRV_DM_SVC_ORD_FACT		102
TB_PRV_DM_SVC_ORD_FACT		3
TB_PRV_DM_SVC_ORD_FACT		3
TB_PRV_DM_SVC_ORD_FACT		3
TB_PRV_DM_SVC_ORD_FACT		3
TB_PRV_DM_SVC_ORD_FACT		3
TB_PRV_DM_SVC_ORD_FACT		3
TB_PRV_DM_SVC_ORD_FACT		6
TB_PRV_DM_SVC_ORD_FACT		3
TB_PRV_DM_SVC_ORD_FACT		3
TB_PRV_DM_SVC_ORD_FACT		3
TB_PRV_DM_SVC_ORD_FACT		66
TB_PRV_DM_SVC_ORD_FACT		1

- A high number of errors – as high as almost 48 percent – appears to be occurring in Verizon PA's processes for communication with CLEC systems. According to Verizon PA's documentation, a returned transaction code value of "ERR" or "PAD"

indicates a rejected query.[183] A rejected query is one that cannot be processed successfully due to incomplete or invalid information submitted by the sender, which results in an error message back to the sender.[184] The data in Table A-18 includes only June CLEC data (order origin = P) with a time-out indicator of No and a test-account indicator of No. While this does not indicate a problem with the NMP or metric results per se, it seems to indicate that the processes used to communicate data from CLECs to Verizon PA could be improved.

Table A-18 – Error Rates in June Data

Source	Transaction Type	ERR	PAD	Total Errors	Total Successful	Total Transactions	% Errors
CORBA	ADR	648	3,770	4,418	4,845	9,263	47.70
EDI	ADR	146	173	319	1,631	1,950	16.36
WEB	ADR	1,013	1,631	2,644	5,834	8,478	31.19
EDI	ADT	659	20,654	21,313	40,283	61,596	34.60
WEB	ADT	869	1,234	2,103	2,735	4,838	43.47
CORBA	CADR	35	0	35	469	504	6.94
EDI	CADR	82	0	82	962	1,044	7.85
WEB	CADR	1,264	0	1,264	9,586	10,850	11.65
EDI	CADT	8	0	8	245	253	3.16
WEB	CADT	264	0	264	773	1,037	25.46
CORBA	CSR	8,888	0	8,888	15,709	24,597	36.13
EDI	CSR	7,696	0	7,696	10,908	18,604	41.37
WEB	CSR	20,221	0	20,221	39,390	59,611	33.92
CORBA	CTNV	2	0	2	55	57	3.51
WEB	CTNV	16	0	16	2,749	2,765	0.58
CORBA	DDA	4	0	4	1,055	1,059	0.38
EDI	DDA	1	0	1	244	245	0.41
WEB	DDA	189	0	189	2,085	2,274	8.31
CORBA	LXR	0	0	0	74	74	0.00
EDI	LXR	36	0	36	427	463	7.78
WEB	LXR	1,339	0	1,339	6,523	7,862	17.03
CORBA	PCSR	4,620	0	4,620	9,311	13,931	33.16
EDI	PCSR	10,887	0	10,887	77,930	88,817	12.26
EDI	PSA	0	0	0	3	3	0.00
WEB	PSA	7	0	7	176	183	3.83
CORBA	TNS	41	84	125	1,039	1,164	10.74
EDI	TNS	43	121	164	297	461	35.57
WEB	TNS	243	301	544	1,049	1,593	34.15

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[183] Information Response C-051.1 (Questions on metrics methodology)
[184] Information Response C-044 (Page 4)

5. **Verizon PA is Not Consistent In Its Methodology For Measuring Metrics Data, Although Some April/May Inconsistencies Were Corrected In The June CMA.**

Accepted coding practices dictate that when very similar tasks are performed in a system, they be performed in consistent ways.   Performing a task in inconsistent ways can yield inconsistent results. Verizon PA's methods for calculating metrics often are not consistent. Examples include:

- Pre-ordering metrics often use joins to select data for reports, while other domains tend to avoid them. Verizon PA employees indicated surprise at this fact and said they did not know why pre-ordering metrics were structured differently.[185]

- Verizon PA PO-1 queries do not specify a value for the field TEST_ACCOUNT_IND, while CLEC queries specify that it be "N". Although it resulted in no discrepancies in the data Reviewed by DCI, should the code used to populate the data mart change, the queries as written could result in the improper inclusion of records of test transactions in the parity data.   The ultimate effect could be to allow a looser standard by which to measure response time to CLEC transactions.[186]

- In the documentation of Verizon's New York report methodology, the PO-1-x-6050 (web interface) report queries filter records by region differently than the non-web-interface queries.   (Because the Pennsylvania documentation for May did not contain any information on the web interface code, whether this was done in Pennsylvania could not be verified.)[187]   Although no discrepancies were found to be caused by this inconsistency within the data set given to DCI, it raises the potential that records from one geographic area could be included in non-web report queries, while records from a different geographic area could be included in web report queries. Verizon PA was asked to justify this different method; their response was that these filters do not affect the metric calculations and are done because of other reporting requirements.[188]   However, it should be noted that the filters would not affect the metric calculations only so long as the data in the lookup table are done in such a way as to allow correct selection of records and only so long as the reports continue to include data with all (but grouped) geography. (Filters do affect metric calculations in that they decide which records are included in the calculations.) In the June version of the guidelines, Verizon PA corrected this issue.[189]

- In general, for all PO-1 metrics for retail data, Verizon PA is joining on a dimension table to select records of a particular transaction type for Verizon PA data. For CLEC data, it does not do so. Instead, those queries use a TRANSACTION_TYPE_SENT field in the main table. Because different fields in different tables are used in selecting data from the same table, this could lead to inconsistencies if the algorithms that populate the respective fields are not equivalent. DCI asked to see the code used in populating the following

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[185] Information Response C-044, interview with Verizon Technical Staff, July 24, 2003
[186] Information Response C-044
[187] Information Response C-042
[188] Information Response C-051 (Questions on metrics methodology)
[189] Information Response C-044

relevant fields to see whether the population of the fields in the two tables would be consistent, but it was not provided.[190]

- TB_PRE_ORDER_FACT.TRANSACTION_TYPE_SENT
- TB_PRE_ORDER_FACT.RETURNED_TRANSACTION_CODE
- TB_transction_type_child_lkp.transaction_type_child
- TB_transction_type_child_lkp.transaction_type_header

• In PO-1-06-6050, the lookup table TB_TRANSCTION_TYPE_CHILD_LKP is used in the calculation for the denominator, but not the numerator. (Because the documentation of PO-1-x-6050 queries was not provided with the Pennsylvania document, this information was taken from the New York guidelines.)[191] This issue was fixed in the June Pennsylvania guidelines.[192]

• The PO-1-07 sub-metric in the April/May guidelines selected records for inclusion differently than the other PO-1 sub-metrics in that it required that the state code be among the following: CT, MA, NH, NY, RI, VT, DC, MD, NJ. Other metrics selected records whose group name was NOT among the following: DC, MD, VA, WV, DE. An examination of the data in TBL_GEOGRAPHY_STATE_GRP_DIMENSION and the way the tables are joined in the query indicates that most metrics documented in the Pennsylvania guidelines would include data with a state code of "PA" or "PN". However, PO-1-07 excludes all records that were sent to DCI. DCI asked Verizon PA why PO-1-07's CLEC queries specified that the state code be in a given list, while Verizon PA queries specified that the state code be outside of a given list. Verizon PA said that the differences are the result of design preferences,[193] however, in the June update of the guidelines, this issue had been corrected.[194]

• In the April/May version of the C2C Guidelines, there were a number of issues with PO-1-07 that made the metric inconsistent both with itself and other PO-1 sub-metrics.[195]

- The calculations of parity for PO-1-07 excluded records the way other PO-1 CLEC queries do.
- The for-CLEC calculations for some (not all) of the PO-1-07 sub-metrics did a join on a lookup table the way the SQL is written for the parity data; no other sub-metric did so.
- PO-1-07-6020 selected records differently than the rest of this sub-metrics' queries (it used the company code to exclude records in the calculation of CLEC data). Although one Verizon PA response to this issue stated that the use of the company code was correct and justified under the guidelines,[196] another response indicated

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[190] Information Response C-044
[191] Information Response C-042 (Pages 43-44)
[192] Information Response C-044 (Page 55-57)
[193] Telephone interview with Verizon Technical Staff, Aug. 21, 2003
[194] Information Response C-044 (Pages 59-66)
[195] Information Response C-044 (Pages 39-43), Information Response C-045 (Verizon BTR table data upload)
[196] Information Response C-051 (Questions on metrics methodology)

that the company code actually is not used in the production system.[197] (According to the June guidelines, the company code is not used.[198])

- In the June version of the CMA, there also are consistency issues with PO-1-07.

    – The for-CLEC code for PO-1-07-6050 joins only two tables; the other PO-1-07 for-CLEC sub-metrics join three.[199]
    – The calculations of parity do not join the tables the way all other PO-1 parity calculations do (using three tables); instead, they join only two.[200]

- The April/May CMA indicated that the transaction type header used to select retail records for PO-1-09 (Parsed CSR transactions), was "PCSR"[201], but that code yielded no results. The value that enabled DCI to replicate Verizon PA's results was "CSR_B", which is the same code used for CSR transactions.[202] A review of the SQL reveals that Verizon PA is using the same data to establish the parity for parsed CSR transactions as for other CSR transactions.[203]

6. The Code Verizon PA Uses To Gather Information For Its Reports Does Not Always Follow Standard Industry Coding Practice.

There are widely accepted design and coding standards for applications such as Verizon PA's that examine large databases to extract business data. At times, Verizon PA violates these practices.

- For PO-1 metrics, although columns such as RESPONSE_TIME can contain nulls according to the schema, they are not accounted for in the SQL used to generate the reports. [204] In general, not accounting for null values in a database can lead to unexpected results; good coding practice is to write queries that do not allow this.
- Many PO-1 metrics for May specified which records to include by indicating that the value of a field should not be in a particular list of values in a lookup table.[205] This is risky coding practice, because if more values are added to the lookup table and the records are not properly grouped, additional records could be improperly included in queries. At a minimum, it could require numerous reports to be examined and updated when and if the values in the lookup table change.

7. The Code Verizon PA Provided To DCI Could Not Have Been That Used To Generate Published Results In Some Cases.

DCI duplicated Verizon PA's database to the extent possible with the information given by Verizon PA and performed the same SQL queries against the database as Verizon PA specified in

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[197] Interview C-013
[198] Information Response C-044 (Page 59)
[199] Information Response C-044 (Pages 59-65)
[200] Information Response C-044 (Pages 60-66)
[201] Information Response C-042 (Page 51-54)
[202] Information Response C-044
[203] DCI Analysis
[204] Information Response C-044
[205] Information Response C-044

its documentation. Doing so should have yielded the same results as Verizon PA reported, but in many cases, it did not.

- An examination of the data in TBL_GEOGRAPHY_STATE_GRP_DIMENSION and the way the tables are joined in the query indicates that most metrics documented in the Pennsylvania guidelines would include data with a state code of "PA" or "PN". However, PO-1-07 as documented in the May guidelines excluded all records that were sent to DCI. No data were found by the documented queries because they limit records to those with a state code in the following: CT, MA, NH, NY, RI, VT, DC, MD, NJ. Analysis revealed that when the exclusions on PO-1-07-6020 were done consistently with other PO-1 sub-metrics, DCI's results were still not equal to that of Verizon PA's reported results (see Table A-19).[206]   Verizon PA later indicated that the documentation for this query was incorrect in that it specified an incorrect transaction code.[207]   When DCI used the June guidelines, the results matched those of Verizon PA. [208]

Table A-19 – Comparison of Metric PO-1-07-6020 Results, May Guidelines

	VZ Results	DCI Results with Company Name Exclusion	DCI Results, without Company Name Exclusion
Time	2.96 seconds	2.613 seconds	2.630 seconds
Number records	4,801	9,332	10,029

- Many of the parity results for the April and May months could not be replicated using the May guidelines. For example, no data were found in the April result set that fit the query documented for either metric under PO-1-09 using the May guidelines. Verizon PA later indicated that the documentation for most of the parity queries was incorrect in that it specified incorrect transaction codes.[209]   When the analysis was re-run using the June guidelines, which contained the correct codes, most of the results were replicated.[210]

8. Verizon PA's Methods For Calculating Parity Data Require Closer Examination.

For pre-ordering: [211]

- An INTERFACE_SOURCE of "N" indicates OSS transactions (retail)
- An ORDER_ORIGIN of "N" indicates EnView data; an ORDER_ORIGIN of "P" indicates production data.)
- An ORDER_ORIGIN value of "N" and an INTERFACE_SOURCE other than "N" indicate the transactions generated by the EnView system to measure rejected CLEC transactions' response times

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[206] DCI Analysis
[207] Interview C-013
[208] Information Responses C-044 (Pages 39-43) and C-042 (Pages 45-52)
[209] Interview C-013
[210] DCI Analysis
[211] Information Response C-042 (PO-1 Fact Table Documentation Page 1)

The numbers of records found for April data appear to support this (see Table A-20)[212]. Note that all Verizon PA records (those with an INTERFACE_SOURCE of "N") originate in the EnView system.

Table A-20 – April Pre-Ordering Records by Source and Origin

INTERFACE_SOURCE	ORDER_ORIGIN	Count
C	N	1,271
C	P	85,551
E	N	9,217
E	P	244,386
N (retail)	**N**	**55,780**
W	N	4,091
W	P	165,888

An examination of April data shows a significantly longer average response time for retail data than for CLEC data, as shown in Table A-21.[213]

Table A-21 – April Pre-Ordering Response Times by Source and Origin

INTERFACE_SOURCE	ORDER_ORIGIN	Count	Average Response Time (Seconds)
C	N	1,271	.8044
C	P	85,551	1.7744
E	N	9,217	2.9680
E	P	244,386	3.6511
N (retail)	**N**	**55,780**	**4.3272**
W	N	4,091	3.6154
W	P	165,888	2.2235

This could be, at least in part, the result of measuring the transactions differently. Table A-22 shows how the beginning and end of each transaction is measured.[214]

Table A-22 – Measurement of Transaction Response Times

Transaction	Start	End
Retail (parity) Simulated	When the request is sent by EnView to the OSS system	When the EnView system receives the response from the OSS system
CLEC	Receipt at the interface between the CLEC and the underlying OSS	Response sent from the interface between the CLEC and the underlying OSS

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[212] DCI Analysis
[213] DCI Analysis
[214] Telephone interview with Verizon Technical Staff, Aug. 21, 2003

Note that the start and end of a transaction for parity data is measured differently than that for a CLEC transaction. An analysis of the process indicates that the expected outcome of Verizon PA's methods would be that response times should be longer for CLECs than for Verizon PA.[215] However, this is not the case, as shown in Table A-19.

Verizon PA was asked to justify the differences in measurement and gave the following response:[216]

> "At one time both CLEC and Verizon transactions were captured in EnView with the same start and stop points. CLECs requested that CLEC response time be actual response time. When Verizon had the capability to report actual CLEC transactions, the collaborative opted to collect the Wholesale data using actual CLEC transactions. Verizon does not have the CLEC timestamps for 'sent' and 'receive' for measuring actual transactions. Verizon does not have the capability to measure response times for actual retail preorder transactions. The different preorder transactions are processed by a number of different OSS applications, built using different technologies, and they were not built to measure response time. Using EnView simulated transactions gives us the ability to measure response times on these different systems in a uniform manner."

PO-1 & PO-2 FINDINGS

1. Verizon PA's Published Metric Results Could Not Be Duplicated In Many Cases.

DCI performed its metric analysis several times with several versions of the Carrier Metric Algorithms[217] provided by Version.

Table A-23 lists the results found using the May version of the algorithms. This analysis was performed for all months for which Verizon PA provided data. Calculated PO-1 metric results did not match Verizon PA's published results; in many cases these discrepancies were large.[218]

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[215] DCI Analysis
[216] Information Response C-051 (Questions on metrics methodology)
[217] Information Response C-042
[218] DCI Analysis

Table A-23 – Pre-Ordering Result Discrepancies, May Guidelines

Sub-metric		VZ (Parity)	CLEC
1-01	6020	M, J	Match
1-01	6030	M, J	Match
1-01	6050	M, J	Match
1-02	6020	A	Match
1-02	6030	A	Match
1-02	6050	A	Match
1-03	6020	A, M, J	Match
1-03	6030	A, M, J	Match
1-03	6050	A, M, J	Match
1-04	6020	A, M, J	Match
1-04	6030	A, M, J	Match
1-04	6050	A, M, J	Match
1-05	6020	A*, M*, J*	Match
1-05	6030	A*, M*, J*	Match
1-05	6050	A*, M*, J*	Match
1-06	6020	A, J	Match
1-06	6030	A, J	Match
1-06	6050	A, J	Match
1-07	6020	A, M	A*, M*, J*
1-07	6030	A, M	A*, M*, J*
1-07	6050	A, M	A*, M*, J*
1-08	6020	Not applicable	Match
1-08	6030	Not applicable	Match
1-08	6050	Not applicable	Match
1-09	6020	M, J	A*, M*, J*
1-09	6030	M, J	A*, M*, J*
2-02	6020	Not applicable	Insufficient information
2-02	6030	Not applicable	Insufficient information
2-02	6060	Not applicable	Insufficient information
2-02	6080	Not applicable	Insufficient information
2-03	6020	Not applicable	Insufficient information
2-03	6030	Not applicable	Insufficient information
2-03	6060	Not applicable	Insufficient information
2-03	6080	Not applicable	Insufficient information

Asterisks indicate large discrepancies.
A = April, M = May, J = June

After these calculations had been done, DCI asked for samples of actual production code in use by Verizon PA to try to find the source of the discrepancies. Verizon PA provided code that they used to replicate the reported results for PO-1-03-6020 for retail results for June. However, Verizon PA indicated that the code was not actual production code; it was executed in a test environment where there is no access to the tables used by the metrics, and so the code had to be altered from the production version. [219] DCI discovered that this method used in the test environment (which did not join tables) replicated Verizon PA's reported results, but the method used in the production environment (which did join tables) did not. Verizon PA was able to match Verizon PA's reported results by using an undocumented value for the field TB_TRANSCTION_TYPE_CHILD_LKP. TRANSACTION_TYPE_HEADER to filter data.[220]

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[219] Interview Request C-012
[220] DCI Analysis

The code used to replicate Verizon PA's results was "ADV_B".[221]   Additionally, Verizon PA employees indicated they were not themselves able to replicate reported results for PO-1-07 and PO-1-09.[222]

Verizon PA then provided DCI with a June version of the CMA.[223]   DCI performed the calculations for the June data month again using the updated algorithms and obtained the results shown in Table A-24.[224]

Table A-24 – Pre-Ordering Results Discrepancies, June Guidelines

Sub-metric		VZ (Parity)	CLEC
1-01	6020	Match	Match
1-01	6030	Match	Match
1-01	6050	Match	Match
1-02	6020	Match	Match
1-02	6030	Match	Match
1-02	6050	Match	Match
1-03	6020	Match	Match
1-03	6030	Match	Match
1-03	6050	Match	Match
1-04	6020	Match	Match
1-04	6030	Match	Match
1-04	6050	Match	Match
1-05	6020	Discrepancy[1]	Match
1-05	6030	Discrepancy[1]	Match
1-05	6050	Discrepancy[1]	Match
1-06	6020	Match	Match
1-06	6030	Match	Match
1-06	6050	Match	Match
1-07	6020	Match	Match
1-07	6030	Match	Match
1-07	6050	Match	Match
1-08	6020	Not applicable	Match
1-08	6030	Not applicable	Match
1-08	6050	Not applicable	Match
1-09	6020	Match	Match
1-09	6030	Match	Match
2-02	6020	Not applicable	Discrepancy[2]
2-02	6030	Not applicable	Match
2-02	6060	Not applicable	Discrepancy
2-02	6080	Not applicable	Discrepancy
2-03	6020	Not applicable	Discrepancy
2-03	6030	Not applicable	Match
2-03	6060	Not applicable	Match
2-03	6080	Not applicable	Discrepancy

[1] Large discrepancies; affects whether Verizon met the metric standard.
[2] DCI's findings indicate that Verizon performance fell below C2C metric standard; results reported by Verizon indicate standard was met.

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[221] Information Response C-051 (Questions on metrics methodology)
[222] Telephone interview with Verizon Technical Staff, Aug. 21, 2003
[223] Information Response C-044
[224] DCI Consultant's Analysis

PO-2 FINDINGS

2.   Verizon PA May Be Improperly Excluding Data From Some Metrics, And Improperly Including Data In Others.

Two factors are involved in choosing what data to include in a metrics report: 1) the business rules that govern what is allowed and not allowed to be included in the query and 2) writing code that implements the business rules, that is selecting the correct records from its database with which to perform calculations. DCI has uncovered possible issues with both factors. Examples include:

- Verizon PA data sent to DCI for the PO-2 metrics include two values for the state code: "PA" and "DE". No data with a state code of "PN" were in the data sent to DCI. The results reported to the PA PUC for the PO-2 metrics are those for the data with a state code of "DE", which seems nonsensical even considering Verizon PA's system of designating states (see third bullet item and Table A-25). If the results with a state code of "PA" were used, Verizon PA would not have met the standard for metric PO-2-02-6020. It did not meet the standard for PO-2-02-6080 with either result set, but was further below the standard with the "PA" result set than with the "DE" result set. This discrepancy is shown in Table A-25. It should be noted that the code for this metric is very simple; the data acquisition process and the population of the data mart in this case has more to do with the metric results than the SQL query specified in the guidelines.[225] DCI requested the scripts and stored procedures that populate the fields it understood to be relevant to the query, [226] but the information was not provided, and so could not be reviewed.

Table A-24 – DE Data vs. PA Data for PO-2 Metrics

Metric	DE data	PA data	Standard
PO-2-02-6020	99.91	99.375	> 99.5 %
PO-2-02-6030	100.00	100	> 99.5 %
PO-2-02-6060	99.64	99.512	> 99.5 %
PO-2-02-6080	99.39	98.725	> 99.5 %
PO-2-03-6020	99.85	100	None
PO-2-03-6030	100.00	100	None
PO-2-03-6060	100.00	100	None
PO-2-03-6080	99.70	99.844	None

- Verizon PA was asked whether it excludes unmeasured 6-minute periods in the denominator of the PO-2 queries (including them would increase the amount of total scheduled time, thus making the percentage of outage time smaller and the percentage of up time larger). Verizon PA provided the following response: "The PO-2 denominator is the total number of scheduled hours in the month for all available complexes. NP (Not

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[225] DCI Analysis
[226] Information Request C-051

Polled) buckets represent that EnView did not execute a PA transaction or did not have enough information during the 6-minute period where NP appears on the spreadsheet. EnView data is supplemental to the WCCC reports for the PO-2 metrics. In those cases where NP appears, Verizon PA uses only the WCCC outage reports to indicate if a trouble was reported and takes its measurement from the WCCC. If no trouble was reported, then the 6-minute bucket is considered to be available. Therefore, NP buckets are not excluded."[227] Note, however, that the guidelines state that if no EnView data is issued during a six-minute period, that period should be excluded. [228] No justification was provided for the methodology.

- Verizon PA has used two different state codes to indicate Pennsylvania data ("PA" and "PN").[229] In the data sent by Verizon PA for the table used for the PO-1 metrics, analysis showed that only the PN code appeared.[230] Verizon PA employees stated that there is no data in the table used for the calculations with a state code of "PA," that either "PA" or "PN" is used exclusively and that the reason for seeing both codes in the guidelines is that there is a period of overlap between the versions of the guidelines. [231] While this is plausible, it could not be independently verified. DCI requested a list of valid values for the field TB_PRE_ORDER_FACT.STATE_CODE, and the list indicated that "PA" is still considered a valid value for this field.[232] The link between state code and group name is established by the table TB_GEOGRAPHY_ST_GRP_ DIMENSION. These data are shown in Table A-25 on the following page.[233] It is extremely likely that confusion could be generated by Verizon PA's system of linking state codes to seemingly unrelated states and using state codes to indicate guideline versions. At best, it drastically reduces the transparency of the system, and at worst, it has the potential to result in incorrect code populating the data mart.

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[227] Information Response C-051 (Questions on metrics methodology)
[228] Information Response C-042 (Page 9)
[229] Interview with Verizon Technical Staff, July 24, 2003
[230] Information Responses C-011 (Verizon DataMart data upload) and C-044 (Pages 39, 42)
[231] Telephone interview with Verizon Technical Staff, Aug. 21, 2003
[232] Information Response C-051 (Questions on metrics methodology)
[233] Information Response C-045 (Verizon BTR table data upload)

Table A-25 – Data from TB_GEOGRAPHY_ST_GRP_DIMENSION

GROUP_NAME	STATE_CODE	STATE_VALUE
CT	CT	CT
DC	DC	VA
DE	DE	PA
MA	MA	MA
MD	MD	VA
ME	ME	MA
NH	NH	MA
NJ	NJ	NJ
NY	NY	NY
RI	RI	MA
VA	VA	VA
VT	VT	MA
WV	WV	VA
PA/DE	PA	PA
PA/DE	DE	PA
VG	VG	VA
PN	PN	PN

- Verizon PA filters the data for its PO-1-07 metric using values in the RETURNED_TRANSACTION_CODE field that appear to allow the inclusion of Virginia data. The values used are "OSS_REJCSR_REJCSR_PA" and "OSS_ REJCSR_ REJCSR_VA".[234]

- In the table used for PO-1 metrics, a "Y" value in the TEST_ACCOUNT_IND field indicates a test CLEC, a "V" indicates Verizon PA affiliates, and an "N" indicates an actual CLEC. In the metrics, the CLEC queries are limited to data with a TEST_ACCOUNT_IND = "N". This excludes Verizon PA affiliate data. While this exclusion was allowed under the New York guidelines, it is not listed as an exclusion in the Pennsylvania guidelines.[235] (Verizon PA employees said that the Pennsylvania guidelines were in error and should have specified the exclusion.[236]) Table A-26[237] shows that the average response times for Verizon PA affiliates is higher than for non-affiliates, and so excluding them improves the response times considerably. While Verizon PA notes that this exclusion is proper and is standard practice elsewhere,[238] DCI questions whether such an exclusion should be granted.

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[234] Information Response C-044 (Pages 59-65)

[235] Information Responses C-042 (Page 3) and C-042

[236] Telephone interview with Verizon Technical Staff, Aug. 21, 2003

[237] DCI Analysis

[238] Interview C-013

Table A-26 – April Pre-Ordering Response Times by Source and Test Account Indicator

INTERFACE_SOURCE	TEST_ACCOUNT_IND	Average Response Time (seconds)
C	N	1.6670
E	N	3.2419
W	N	2.4750
C	V	1.7813
E	V	8.2339
W	V	1.6011
C	Y	2.0375
E	Y	3.9846
N	Y	4.3272
W	Y	1.9904

PO-3 FINDINGS

1. The Source Data For The Calculation Of Sub-Measure PO-3-02 Is Valid.

The reports used in the Review process were obtained from the ACD and the documentation supports the data found on the reports. The Review calculations matched the results from Verizon PA's C2C reports. There are no recommendations for this part of the Review.

2. The C2C Guidelines Are Incomplete On The Exclusion Portion Of The Document.

As discussed above, Verizon PA excludes company holidays from the metric calculation. DCI agrees with this rationale, but the C2C Guidelines do not reflect this exclusion.

3. Data Supplied To DCI For PO-3-04 Was Incomplete.

Even though the source data is derived from the same system as that of PO-3-02, and the calculation formula are the same for both measures, the omission of busy calls is suspect for causing the minor variance between the Review calculations and the C2C report.

PO-4 FINDINGS

1. The DCI Review Found No Evidence That Verizon PA Notifications Were Delivered Outside The Scope Of The C2C Guidelines.

The DCI Review found no evidence during the data evaluation that Verizon PA notifications were delivered outside the scope of the C2C guidelines. This was the result of the extensive data verification process identified above. The Review process was substantiated by the participating CLECs who reported no such incidence.

PO-5 FINDINGS

1. Use Of "Outages For Which Notice Was Given" In PO-5 Formula Gives Verizon PA Substantial Flexibility Over The Outages It Includes In The Measure, As Exclusions Are Not Fully Documented.

Verizon PA only includes in PO-5 those outages that are brought to the attention of WCCC and then subsequently issued bulletins to CLECs. Some types of outages that are not included are: (a) either no one (person or system) brings them to the attention of WCCC staff, (b) outages are of such a short duration that they are over before confirmation occurs (no confirmation occurs nor bulletin sent to CLECs), or (c) "outage" occurs when interface is supposed to be down (no investigation performed and CLECs advised). Verizon PA believes that excluding them from PO-5 formula is appropriate, because the purpose of PO-5 metric is to measure notification time. Verizon PA was unable to provide estimated figures for these situations.[239]

While it may be reasonable to exclude planned outages and short duration outages from PO-5 calculations, they are not discussed in the C2C Guidelines documentation.[240]

2. Verizon PA's Calculation Of Average Notification Time In PO-5 Is Dependent On Flexible Start And End Times.

The "start" time for any particular notification occurs during the conference call to confirm the outage. Verizon PA has some control over what it deems the "start" time. For the June 2003 interface outage, the trouble ticket was opened on June 5, 2003 at 9:02 AM, but the issue was not identified (outage confirmed) until 9:52 AM.[241]

Prior to September 1, 2003 (including three-month Review period), the "end" time for any particular notification was based on an estimated notification time, as Verizon PA's Lotus Notes program was not set up with group names so as to date/time stamp email messages. Therefore, Verizon PA had some control over what it deemed the "end" time. For the June 2003 interface outage, the estimated notification time for this bulletin was 10:10 AM.[242] Starting on September 1, 2003, Verizon PA began using actual email notification time when Lotus Notes was set up with group names.

Few outages result in PO-5 metric calculations and Verizon PA does not typically "fail" the standard;[243] but that is understandable given the latitude that Verizon PA has had in calculating notification times.

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[239] Interview C-011
[240] Information Response C-042
[241] Information Response C-048 and Interview C-011
[242] Information Response C-048 and Interview C-011
[243] Interview C-011

PO-6 FINDINGS

1. **Verizon PA Excludes Minor And Emergency Software Releases From Its PO-6 Calculations Without Mentioning These Exclusions In The C2C Guidelines Documentation.**

Neither non-emergency/minor nor emergency software releases are included in PO-6 calculations. Typically <u>each</u> month of the year (possibly including February, June, and October when major software releases also occur) Verizon PA performs minor software releases. Verizon PA uses "major" to denote CLEC impacting and "minor" to denote not CLEC impacting maintenance changes. Examples of "minor" include changes to internal operating systems or communications between interfaces. Examples of "major" include incorporation of new CLEC transactions or significant changes to metric calculations that affect the GUI interface.[244]

Regardless of when emergency software releases occur they are not included in PO-6 calculations. Verizon PA believes that it doesn't make sense to include emergency software releases in calculations.[245]

In both cases Verizon PA believes these are not "undocumented" exclusions, as Verizon and the CLECs agree on these test decks – and they are not used for emergency or minor software releases.[246] In Verizon NJ, however, they do at least mention emergency software releases as exclusions though not non-emergency/minor releases.[247] However, for clarity purposes, DCI believes that both type of software releases should be specifically mentioned as exclusions in Verizon PA documentation.

PO-7 FINDINGS

1. **The Definition And Formulas For The PO-7 Metric And Its Sub-Metrics Are Not Clearly Defined By Verizon PA Documentation, Thereby Giving Verizon PA Considerable Latitude In Performing Metric Calculations.**

As with many Verizon PA metrics, documentation is not comprehensive or clearly written. For example:[248]

- Though mentioned in the C2C Guidelines documentation, the System Design Document for PO-7 metrics does not clearly show that they involve the 30 calendar days following a major CLEC impacting software release.

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[244] Interview C-011
[245] Interview C-011
[246] Interview C-011
[247] Recent Verizon NJ Report by Outside Consultant
[248] Information Response C-041 and Interview C-011

- Only through discussions with Verizon PA representatives were DCI able to discover that <u>only</u> those software problems falling into this category are input manually by WCCC staff into the NMP (via a GUI input screen) for calculation purposes.[249]

- PO-7 exclusions, specifically emergency and non-emergency minor software releases, are employed, though not mentioned in C2C Guidelines documentation. Verizon PA representatives believe these types of software releases are not exclusions, but are outside the scope of PO-7 metric calculations. It would be clearer to the reader if this information was discussed in the PO-7 description.

- The terminology "production referrals" for PO-7 sub-metrics is not fully defined in Verizon PA documentation as trouble tickets, though subsequently a definition was provided by Verizon PA representatives in meetings.

- The types of transactions are not explicitly stated in the PO-7 description within the C2C Guidelines documentation, but requires a reader to either (a) look in Appendix O based on reading the PO-6 description or (b) review the test decks used to determine if Web GUI, EDI, or CORBA transactions are included.

- A literal interpretation of "rejected transactions caused by Verizon PA code or documentation errors or omissions" may cause some rejected transactions not to be included in metric calculations. Verizon PA believes their interpretation is in accordance with C2C Guidelines documentation; however, the typical reader would find it difficult to understand what is or is not included.

- According to Verizon PA representatives, PO-7-03 includes a workaround within 48 hours, in addition to providing the permanent fix within 10 days, but it is not clearly documented in C2C Guidelines documentation. Verizon PA representatives indicate that it is implied in the definition; otherwise, PO-7-02 applies.

- Differences in PO-7-02 and PO-7-04 calculations are difficult to understand from definitions. It appears that PO-7-02 deals with pre-order failures while PO-7-04 deals with order rejects. Although both are supposed to involve test deck transactions only (according to Verizon PA representatives), only PO-7-04 specifically says "test deck transactions" in its definition.

Involved parties (PA PUC, Verizon PA, CLECs) could determine if the PO-7 definitions are appropriate, then Verizon PA could modify its documentation to fully describe what is really supposed to be happening in metric calculations.

PO-8 FINDINGS

1. <u>The guidelines do not adequately document the usage and definition of the "stop clock".</u>

The DCI Review overall findings show that Verizon PA's processes are sufficient to provide a manual facility response back to the requesting CLECs within the benchmarks negotiated in the measure. Based on the information received in the data request[250], Verizon PA tracks the progress

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using a historical time/date/location/employee stamp through to completion. DCI also observed that the requests were submitted for actual service installation with a requested due date past the 48 hour time frame. Verizon PA supplied confirmations for each request view within the 48-hour window. The associated documentation[251] was up to date and clearly defined the process flow for completion of a loop qualification. In the documentation, DCI saw numerous references to additional internal job aids available to Verizon PA's staff. DCI concludes that Verizon PA has an acceptable process to meet the measure requirements and the evidence obtained from the data request[252] supports this conclusion.

In addition to reviewing the process, DCI attempted to perform a data reconciliation with the data received from the data request[253] and the fact table used for calculations. DCI was unable to match any of the data fields captured in RequestNet to the fields captured by Wisdom.

The PO-8 documentation is lacking in that the C2C fails to clarify what major holidays are omitted from the time intervals used to calculate the measure and how manual requests for loop qualifications when the information already exists through an electronic database is handled in calculating the PO-8 results.

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[251] Reference Doc#RCO-99-1063 ISO 723-07 Revised 6/27/03
[252] Reference Data Request B009
[253] Reference DR B009

D – RECOMMENDATIONS

PO-3 RECOMMENDATIONS

1. Complete The Exclusion Portion Of The C2C Guidelines (Refers to Finding 2, PO-3).

The exclusion of company holiday call processing as used by Verizon PA in the metric creations should be added to the C2C guidelines.

2. Verify PO-3-04 Data (Refer to Finding 3, PO-3).

The additional information (busy call) should be supplied and verified as the source of the variance. Verizon PA should provide supporting detail for calculations both with and without busy calls for PO-3-04.

PO-4 RECOMMENDATIONS

1. Review The Titles, Formulae, And Change Notification Performance Standards Of Sub-Metrics PO-4-02 and PO-4-03 (Refer to Finding No. 2, PO-4).

The title of the PO-4-02 and PO-4-03 sub-metrics and the formulae in which they are to be calculated should be revised to support rather than contradict one another. In addition, the performance standard for the change notification associated with the regulatory type change should be revised to clarify whether it is negotiated on an individual case basis or defaults to the interval required for Type 3, 4 & 5 changes when not specified within the Regulatory Order itself.

PO-8 RECOMMENDATIONS

1. Verizon PA Needs To Coordinate The Field Identifiers For RequestNet And Include Them Into The Source Data For The NMP (Refer to No. 1, PO-8).

Based on the information observed in the FACT Table, Verizon PA needs to coordinate the field identifiers for RequestNet and include them into the source data for the NMP. The fields needed for future reconciliation are:

1. CLEC Name
2. CCNA
3. PON numbers
4. RequestNet SR#s
5. Request type
6. City/State

These data fields combined with the sent/received data/time stamps taken from the gateway by Wisdom will allow future auditors sufficient information to complete the audit in a timely fashion.

Verizon PA should develop and document detailed methods and procedures for the calculation and reporting of all the PO-8 sub-metrics. Such business rules should be posted to a website accessible by CLECs, the PA PUC and auditors for general information and replication purposes.

Note: Additional recommendations for Pre-Ordering metrics are located in Chapter IV – Measurement Calculations and Chapter V – Measurement Calculation Results. In some instances they are subsumed within broader recommendations.

APPENDIX B – ORDERING METRICS

APPENDIX B – ORDERING METRICS

A – INTRODUCTION

This Appendix provides detailed information expanding on, and in support of data, findings and recommendations presented in Chapters IV – Measurement Calculations, and V – Measurement Calculation Results.

OVERVIEW

In its performance metrics on the Ordering (OR) Domain, Verizon PA PA measures and reports its performance on:

- Timeliness of:

  - Order Confirmations (OR-1)
  - Rejects (OR-2)
  - Completion Notifications (OR-4)
  - Acknowledgements (OR-8)
  - Resolution of Purchase Order Number (PON) Notifier Exceptions (OR-10)

- Percent of Orders which are

  - Rejected (OR-3)
  - Flow-Through (OR-5)
  - Completed Accurately (OR-6)

- Completeness of

  - Supplying Confirmation or Reject to every order within 3 business days (OR-7)
  - Supplying an Acknowledgement to every Electronic Data Interchange (EDI) order on the day it is received (OR-9)

DATA MART TABLES

The Ordering metrics results are calculated from the data contained in the following 8 data mart tables:

- TB_ORD_FACT (LSRs: OR-1, OR-2, OR-3-01, OR-4, OR-7)

- TB_OR_DM_PROD_FACT (ASRs: OR-1, OR-2, OR-3-01)
- TB_OR_DM_TRUNK_FACT (Trunks: OR-1, OR-2)
- TB_OR_DM_ACK_FACT (Acknowledgements: OR-8, OR-9)
- TB_OR_PON_EXCEPTION_ORDER_FACT (OR-10)
- TB_DM_OR_FLOWTHRU_FACT (OR-5)
- TB_DM_OR_ACCURACY_FILING_MART (OR-6)
- TB_DM_OR_RESEND_FILING_MART (OR-3-02)

Of these, only the first four were received in response to DCI's original data requests. Data and documentation covering PON resolution exceptions (OR-10), Flowthru (OR-5), Order Accuracy (OR-6), and Resubmissions not Rejected as duplicative (OR-3-02) were not received until late in the review, so DCI's review of these metrics is more limited.

LOCAL SERVICE REQUEST (LSR) ORDERING DATA MART

Competitive Local Exchange Carrier (CLEC) orders for Resale Plain Old Telephone Service (POTS) and limited Specials, Unbundled Network Element (UNE) Platform and UNE Loops are ordered via LSRs and stored in the LSR Ordering Data Mart (TB_ORD_FACT).

Global Exclusions

Orders having a value other than "@" in the PARTS_EXCL_IND field are globally excluded from all Carrier-To-Carrier C2C metrics results, as are Verizon PA test orders (TEST_ACC_IND="Z") and Verizon PA affiliate and Verizon PA Advanced Data Incorporate/Digital Service Network Operations (VADI/DSNO) orders (TEST_ACC_IND="R").

Table B-1 lists the frequency of orders globally excluded from all LSR-based ordering results:

Table B-1

	April	May	June
Total LSRs	175875 (100.00%)	167143 (100.00%)	175955 (100.00%)
PARTS product	173 (0.10%)	830 (0.50%)	1334 (0.76%)
Test Accounts	255 (0.14%)	22 (0.01%)	444 (0.25%)
VADI / DSNO	33224 (18.89%)	38196 (22.85%)	39462 (22.43%)

All orders excluded as "PARTS product" were also excluded as Verizon PA Test Account or Affiliate / VADI / DSNO.

Product Disaggregations

Verizon PA determines product disaggregations for its ordering metrics by using the fields ORDER_TYPE and SVC_ORDER_CLASS_ID. ORDER_TYPE classifies based on mode-of-entry, and SVC_ORDER_CLASS_ID classifies based on product groupings. The LSR ordering breakdown for these two fields (after excluding Affiliate / VADI / DSNO and Test accounts) is indicated in the following tables:

Table B-2

Order_type	April	May	June
All CLEC LSRs	142396 (100.00%)	128925 (100.00%)	136049 (100.00%)
'1' (Resale)	6849 (4.81%)	6675 (5.18%)	6277 (4.61%)
'2' (UNE)	33763 (23.71%)	33635 (26.09%)	32459 (23.86%)
'3' (Platform)	101784 (71.48%)	88615 (68.73%)	97313 (71.53%)

Table B-3

Svc_order_class_id	April	May	June
All CLEC LSRs	142396 (100.00%)	128925 (100.00%)	136049 (100.00%)
'0' POTS/Prequal Complex	140913 (98.96%)	127463 (98.87%)	134447 (99.18%)
'1' LSR Specials	60 (0.04%)	66 (0.05%)	70 (0.05%)
'3' 2-wire Digital	205 (0.14%)	235 (0.18%)	267 (0.20%)
'4' 2-wire xDSL	420 (0.29%)	373 (0.29%)	357 (0.26%)
'5' LineShare / Split	248 (0.17%)	340 (0.26%)	419 (0.31%)
' ' Uncategorized	550 (0.39%)	448 (0.35%)	489 (0.36%)

Classification into the performance measurement product disaggregation codes is accomplished by combining the ORDER_TYPE and SVC_ORDER_CLASS_ID categorizations as indicated in the following table:

Table B-4

Product Code	Description	Order _Type	Svc_order _Class_id
2000	All Resale	1	
2100	Resale POTS / PreQual Complex	1	0
2200	Resale Specials	1	1,6,7,8
2210	Resale Specials – DS0	1	6
2211	Resale Specials – DS1	1	7
2213	Resale Specials – DS3	1	8
2214	Resale Specials – Other	1	1
2320	Resale POTS / PreQual Complex	1	0
2341	Resale 2wire Digital	1	3
3000	All UNE	2,3	
3143	UNE POTS Platform	3	0
3200	UNE Specials	2,3*	1,6,7,8
3210	UNE Specials – DS0	2	6
3211	UNE Specials – DS1	2	7
3213	UNE Specials – DS3	2	8
3214	UNE Specials – Other	2,3*	1
3331	UNE Loop / PreQual Complex / LNP	2	0
3340	UNE LineSharing / LineSplitting	2	5
3341	UNE 2wire Digital	2,3*	3
3342	UNE 2wire xDSL	2	4

DCI notes that the records without a SVC_ORDER_CLASS_ID value (550 in April, 448 in May, and 489 in June), will be de facto excluded from all product-disaggregated Ordering Metrics results. In its follow-up questions on DR D-015, DCI has asked Verizon PA to investigate these further. No response was received during the review.

In its response to DR D-022, Verizon PA indicated that all Resale Specials and some UNE Specials are ordered via LSRs, specifically DS0s and limited DS1s. However, since there are no SVC_ORDER_CLASS_ID values of '6', '7', or '8' in the three months of LSR data, it appears that these are not being properly identified to be included in the metrics results. DCI found NC_CODE and SECNCI_CODE values on several LSR ordering records which clearly identify the orders as DS1, yet the SVC_ORDER_CLASS_ID in these cases had values of "0", "1", or no value at all, causing these orders to be incorrectly excluded from the -2211 and -3211 ordering metric result disaggregations and incorrectly included in the -2214, -3214, and -3331 disaggregations, with a few not reported at all. DCI considers it extremely likely that the same issue occurs with DS0s ordered via LSRs, although DCI is unable to definitively identify these as DS0s and quantify how many DS0 orders are affected.

∗ DCI queried the inclusion of Platform orders in most UNE non-POTS product disaggregations. In response to DR D-015, Verizon indicated that there is a product called Platform ISDN which can be included either under UNE Specials – Other or UNE 2wire Digital. In follow-up questions to DR D-015, DCI has asked Verizon to further investigate many records which are not clearly Platform ISDN but are also identified as Rebundled UNEs.

AUTOMATED SERVICE REQUEST (ASR) ORDERING DATA MART

CLEC orders for Specials are ordered via ASRs and stored in the ASR Ordering Data Mart (TB_OR_DM_PROD_FACT).

Global Exclusions

Orders having a value other than "BA" in the FBA_FGTE_IND field are globally excluded from all C2C metrics results, as are records whose EVENT_DT is outside the reporting month.

The following table lists the frequency of orders globally excluded from all ASR-based ordering results in the data feed provided by Verizon PA to DCI:

Table B-5

	April	May	June
Total ASRs	1993	1904	1733
Event outside reporting month	0	0	0
FBA_FGTE_IND other than "BA"	0	0	0

Product Disaggregations

Verizon PA determines ASR product disaggregations by using the PROD_TYP field:

Table B-6

Prod_Typ	April	May	June
All ASRs	1993 (100.00%)	1904 (100.00%)	1733 (100.00%)
DS0	3 (0.15%)	0 (0.00%)	2 (0.12%)
DS1	1874 (94.03%)	1811 (95.12%)	1589 (91.69%)
DS3	113 (5.67%)	86 (4.62%)	139 (8.02%)
OTH	3 (0.15%)	7 (0.37%)	3 (0.17%)

Classification into the performance measurement product disaggregation codes is accomplished by using the PROD_TYP categorizations as indicated in the following table:

Table B-7

Product Code	Description	PROD_TYP
3000	All UNE	
3200	UNE Specials	
3210	UNE Specials – DS0	DS0
3211	UNE Specials – DS1	DS1
3213	UNE Specials – DS3	DS3
3214	UNE Specials – Other	OTH

In response to DR D-022, Verizon PA indicated that all Specials requiring ASRs to order are included in the results as UNE Specials, not Resale Specials, (regardless of tariff).

TRUNKS ORDERING DATA MART

CLEC orders for Trunks are ordered via ASRs and stored in the Trunk Ordering Data Mart (TB_OR_DM_TRUNK_FACT).

Global Exclusions

Orders having a value other than "BA" in the FBA_FGTE_IND field are globally excluded from all C2C metrics results, as are records whose REP_TYP is other than "C2C" and whose SERV_TYP is other than "T". In the trunk ordering data feeds provided by Verizon PA to DCI, all records were "BA" in the FBA_FGTE_IND field and "C2C" in the REP_TYP field.

The following table lists the frequency of trunk orders globally excluded because of Trunk Service Type (SERV_TYP) other than "T" (CLEC) from all ASR-based trunk ordering results in the data feed provided by Verizon PA to DCI:

Table B-8

	April	May	June
Total Trunk ASRs	1136 (100.00%)	1041 (100.00%)	687 (100.00%)
IEC (excluded)	550 (48.42%)	558 (53.60%)	214 (31.15%)
Reciprocal (excluded)	402 (35.39%)	379 (36.41%)	290 (42.21%)
Wireless (excluded)	0 (0.00%)	0 (0.00%)	0 (0.00%)
CLEC (included)	184 (16.20%)	104 (9.99%)	183 (26.64%)

Product Disaggregations

Trunk ASRs are disaggregated by whether they are Augments involving <= 192 Forecasted Trunks or more than 192 Forecasted Trunks, Unforecasted, Non-Augments and Projects. Verizon PA determines this disaggregation using the ASR product

disaggregations by using the ASR_QTY, PRJ_NUM, FCAST_IND, and CMPLX_TYP fields:

Table B-9

Product Code	Asr_qty, prj_num, fcast_ind	April	May	June
5000	All CLEC Trunk ASRs	184 (100.00%)	104 (100.00%)	183 (100.00%)
5020	ASR_QTY <= 192 and PRJ_NUM=" " and FCAST_IND="Y" and CMPLX_TYP="A"	33 (17.93%)	8 (7.69%)	40 (21.86%)
5030	ASR_QTY > 192 or PRJ_NUM <> " " or FCAST_IND <> "Y" or CMPLX_TYP <> "A"	151 (82.07%)	96 (92.31%)	143 (78.14%)

LSR ACKNOWLEDGEMENT DATA MART

Acknowledgements of CLEC EDI-submitted LSR orders are stored in the LSR Acknowledgement Data Mart (TB_OR_DM_ACK_FACT).

Global Exclusions

Orders whose acknowledgement date is not within the reporting month are globally excluded from all C2C metrics results.

In the three months of Acknowledgements data feeds provided to DCI, all records had their acknowledgement date within the reporting month.

Product Disaggregations

Verizon PA disaggregates its ordering acknowledgement metrics by using the ORDER_TYPE field, which classifies based on mode-of-entry.

Table B-10

Product Code	Order_type	April	May	June
	All CLEC LSR Acknowledgements	88638	80190	89692
2000	'1' (Resale)	2014	1851	2048
3000	'2' or '3' (UNE)	86624	78339	87644

B – SPECIFIC ORDERING METRICS

OR-1: ORDER CONFIRMATION TIMELINESS

Definition

This metric measures the amount of time between receipt of a valid order request and distribution of a Confirmation. For Resale and UNE orders, the measurement is of elapsed time, whereas for Trunks the measurement is in business days.

Orders submitted via LSRs

From the LSR Ordering Data Mart, among the orders which are not globally excluded and meet the criteria for a reportable sub-metric and product disaggregation, those orders whose CONF_DATE was within the reporting month are selected as eligible for consideration in OR-1, and will be counted in the denominator. If their confirmation was provided within the appropriate time interval (ONTIME_CONF_NOTIF="Y") then they will also contribute to the numerator.

Sub-metrics

The PROCESS_FLOW_CATEGORY field indicates how the order flowed through Verizon PA's ordering systems and is therefore used to determine which sub-metric it will be considered for, as illustrated in the following table:

Table B-11

OR-1 Submetric	Order Rcvd Electronically?	Flow-through	Facility Check Required?	PROCESS _FLOW_ CATEGORY	April	May	June
OR-1-02	Y	Y		1	95208	78816	85524
OR-1-04	Y	N	N	3	9285	9039	10070
OR-1-06	Y	N	Y	5	1113	1151	1132
OR-1-08	N	N	N	2	0	0	0
OR-1-10	N	N	Y	4	0	0	0

Verizon PA additionally excludes records from the non-flowthrough submetrics whose TEST_ACC_IND field has the following values:

"B":   exclude from Both C2C and FCC Merger reporting
"C":   exclude from C2C reports only
"F":   exclude from FCC Merger reports only

For several CLECs, Verizon PA flags for exclusion those PONs matching certain patterns indicated in the TEST_ACCT_IND_LKP BTR table. While during the audit period there

were no orders whose PONs met the criteria for TEST_ACC_IND="C", about 5% of non-flow-through order confirmations were excluded via TEST_ACCT_IND="B", as indicated in the following table:

Table B-12

TEST_ACC_IND="B"	April	May	June
Not excluded from OR-1-02	487	419	544
Excluded from OR-1-04	357	466	475
Excluded from OR-1-06	82	79	64

DCI has submitted DR D-024 requesting the business reasons for these additional exclusions and their justification from the C2C Guidelines, if any. Verizon PA has responded indicating that these PONs are part of Special Projects.

Orders submitted via ASRs

From the ASR Ordering Data Mart, among the orders which are not globally excluded and meet the criteria for a reportable sub-metric and product disaggregation, those ordering records whose EVENT_TYPE is "F" (confirmation), and whose ACTV_TYP is "N" (New), "C" (Change), or "D" (Disconnect), are selected as eligible for consideration in OR-1, and will be counted in the denominator. If the time until their confirmation, as measured by the FOC_INTV field, was provided within the appropriate time interval for the submetric, then they will also contribute to the numerator.

Sub-metrics

The SRC_TYP field indicates whether the order was received mechanically ("M"), or manually ("L"), and the FACL_IND indicates whether a Facility Check is required. These two fields determine under which sub-metric an ASR will be reported, as indicated in the following table, which also lists the time limit and number of ASR confirmations:

Table B-13

OR-1 Submetric	SRC _TYP	Facility Check Required?	Time Limit	April	May	June
OR-1-04	M	N	48 hrs	191	127	213
OR-1-06	M	Y	72 hrs	397	462	374
OR-1-08	L	N	72 hrs	9	2	0
OR-1-10	L	Y	96 hrs	0	1	0

DCI notes that the substantial volume of ASR Specials not requiring facility checks indicated in the above table are not included in the C2C reports for OR-1-04 and OR-1-08. This is presumably because in the C2C Guidelines these disaggregations are not listed under these submetrics. DCI tentatively considers this a misinterpretation on the

part of the Guideline development team of the following note in the Performance Standard section for OR-1:

- Orders with no facility check: 48 hours. Note: The 48 hour standard does **not** apply to UNE Specials (UNE DS0 EELs >= 6 lines, UNE DS1 and above) received via ASR.

DCI understands the above note to imply a 72 hour standard for UNE ASR nonDS0 Specials (as is the standard for those requiring a facility check), and not that these should be excluded from C2C reporting.   DCI has issued DR D-025 requesting further explanation for the absence of (other than DS0) UNE ASR Specials in the C2C Reports. Verizon PA's initial response is that DS1 and DS3 always need a facility check. DCI has issued a followup question to DR D-025, indicating the substantial presence of DS1 and DS3 orders with FACL_IND="N". Verizon PA's response indicates that these DS1 and DS3 orders don't need a facility check because they are Disconnect orders.

Orders for Trunks

From the Trunk Ordering Data Mart, among the orders which are not globally excluded and meet the criteria for a reportable sub-metric and product disaggregation, those ordering records

- whose Response Type Requested is not "No Response Requested" (RTR doesn't start with "N"),
- whose EVENT_TYPE is "F" (Confirmation),
- whose EVENT_INCL_IND is "Y" ,
- whose ACTV_TYP is "N" (New), "C" (Change), or "D" (Disconnect),
- and which are either Completed Orders (ORD_STAT="C"), or Cancelled Orders (ORD_STAT="K") with a non-null time interval measurement (EVENT_INTV not null for OR-1-12, DLR_OBJ_DT not null for OR-1-13),

are selected as eligible for consideration in OR-1, and will be counted in the denominator.

If their Confirmation (for OR-1-12) or Design Layout Record (for OR-1-13) was provided on time (OR-1-12: EVENT_INTV <= 10 days for electronically received orders; EVENT_INTV <= 11 days for faxed or mailed orders;   OR-1-13: DLR_ACTUAL_DT <= DLR_OBJ_DT), then they will also contribute to the numerator.

Sub-metrics

The above description, combined with the trunk product disaggregation section described earlier, completely documents the metric calculations for OR-1-12. For OR-1-13, Disconnects (ACTV_TYP="D") and orders with FOC-only responses requested (RTR doesn't start with "F") are additionally excluded.

DCI Recalculation Process

DCI developed a SAS[1] macro to calculate metric results based on a clear specification of the metrics definitions. DCI then implemented the information described in the pages immediately above into three SAS macro invocations, one for LSRs, one for ASRs, and one for Trunk orders. DCI then pooled these results to obtain its metric numerators, denominators, and results. DCI also automatically extracted Verizon PA's C2C report results to obtain Verizon PA's calculated numerators[2], denominators, and results. DCI's recalculation program then combines and compares DCI's results and Verizon PA's C2C reported results in an Excel spreadsheet.

DCI presents below the three SAS macro invocations which are completely sufficient to calculate all the OR-1 results:

The first of these calculates all OR-1 metric result contributions from the LSR Ordering Data Mart:

```
%pm_or( tbl=or_dm_gen, yearmm=&report_month, metric=OR-1
      , glblcond=parts_excl_ind eq '@' and put(datepart(conf_date),yymmn6.) eq "&report_month"
      , submetrics=02 04 06 10, sbpm_typ=count count count count
      , eligvars=OR_1_02_elig OR_1_04_elig OR_1_06_elig OR_1_10_elig
      , valuvars=conf_ontime conf_ontime conf_ontime conf_ontime
      , eligcond= process_flow_category in('1') and not(test_acc_ind in('R','Z'))
                 :process_flow_category in('3') and not(test_acc_ind in('R','Z','B','C'))
                 :process_flow_category in('5') and not(test_acc_ind in('R','Z','B','C'))
                 :process_flow_category in('4') and not(test_acc_ind in('R','Z','B','C'))
      , valucond= ontime_conf_notif eq 'Y'
                 :ontime_conf_notif eq 'Y'
                 :ontime_conf_notif eq 'Y'
                 :ontime_conf_notif eq 'Y'
      , sm_catgs=  2320:3143:3331
                 |2100:2210:2211:2213:2214:2341:3143:3331:3340:3341:3342
                 |2210:2211:2213:2214:2320:2341:3143:3210:3211:3213:3214:3331:3340:3341:3342
                 |3210:3211:3213:3214
      , sm_conds=  order_type eq '1' and svc_order_class_id eq '0'
                 :order_type eq '3' and svc_order_class_id eq '0'
                 :order_type in('2') and svc_order_class_id eq '0'
                 | order_type eq '1' and svc_order_class_id eq '0'
                 :order_type eq '1' and svc_order_class_id eq '6'
                 :order_type eq '1' and svc_order_class_id eq '7'
                 :order_type eq '1' and svc_order_class_id eq '8'
                 :order_type eq '1' and svc_order_class_id eq '1'
                 :order_type eq '1' and svc_order_class_id eq '3'
                 :order_type eq '3' and svc_order_class_id eq '0'
                 :order_type in('2') and svc_order_class_id eq '0'
                 :order_type in('2') and svc_order_class_id eq '5'
                 :order_type in('2','3') and svc_order_class_id eq '3'
                 :order_type in('2') and svc_order_class_id eq '4'
                 | order_type eq '1' and svc_order_class_id eq '6'
                 :order_type eq '1' and svc_order_class_id eq '7'
                 :order_type eq '1' and svc_order_class_id eq '8'
                 :order_type eq '1' and svc_order_class_id eq '1'
                 :order_type eq '1' and svc_order_class_id eq '0'
                 :order_type eq '1' and svc_order_class_id eq '3'
                 :order_type eq '3' and svc_order_class_id eq '0'
                 :order_type in('2') and svc_order_class_id eq '6'
                 :order_type in('2') and svc_order_class_id eq '7'
```

---

[1] Original Definition was Statistical Analysis System, but the term has since migrated to a noun with no specific meaning.

[2] Verizon does not provide numerators on the C2C reports. DCI back-calculated what Verizon's numerators would have been based on Verizon's reported C2C results and denominators. DCI analysis determined that Verizon truncates all its results and standard deviations at 5 decimal places, (before dividing by 100% to obtain percentage results), rather than rounding them. DCI therefore added .000005 to Verizon's non-percentage results and .0005 to Verizon's percentage results before multiplying them by the denominator, then rounded the product to the nearest integer to obtain DCI's estimate of the numerator Verizon used in its calculations. This procedure is guaranteed to obtain the exact numerator used by Verizon when the denominator is 10,000 or less. When the denominator is over 10,000, this procedure will provide the best possible approximation available given the C2C reports, but may be slightly different from the actual numerator used by Verizon.

```
                        :order_type in('2') and svc_order_class_id eq '8'
                        :order_type in('2','3') and svc_order_class_id eq '1'
                        :order_type in('2') and svc_order_class_id eq '0'
                        :order_type in('2') and svc_order_class_id eq '5'
                        :order_type in('2','3') and svc_order_class_id eq '3'
                        :order_type in('2') and svc_order_class_id eq '4'
                        | order_type in('2') and svc_order_class_id eq '6'
                        :order_type in('2') and svc_order_class_id eq '7'
                        :order_type in('2') and svc_order_class_id eq '8'
                        :order_type in('2','3') and svc_order_class_id eq '1'
              )
```

The second SAS macro invocation calculates all OR-1 metric results from the ASR
Ordering Data Mart:

```
%pm_or( tbl=or_dm_asr_spc, yearmm=&report_month, metric=OR-1
      , glblcond=put(datepart(EVENT_DT),yymmn6.) eq "&report_month" and event_typ eq 'F'
                    and actv_typ in('N','C','D') and fba_fgte_ind eq 'BA'
      , submetrics=04 06 08 10, sbpm_typ=count count count count
      , eligvars=OR_1_04_elig OR_1_06_elig OR_1_08_ELIG OR_1_10_elig
      , valuvars=conf_ontime conf_ontime conf_ontime conf_ontime
      , eligcond= facl_ind eq 'N' and src_typ eq 'M'
                  :facl_ind eq 'Y' and src_typ eq 'M'
                  :facl_ind eq 'N' and src_typ eq 'L'
                  :facl_ind eq 'Y' and src_typ eq 'L'
      , valucond=foc_intv le 48*60:foc_intv le 72*60:foc_intv le 72*60:foc_intv le 96*60
      , sm_catgs= 3210
                  |3210:3211:3213:3214
                  |3210
                  |3210:3211:3213:3214
      , sm_conds=  prod_typ eq 'DS0'
                  | prod_typ eq 'DS0'
                  :prod_typ eq 'DS1'
                  :prod_typ eq 'DS3'
                  :prod_typ eq 'OTH'
                  | prod_typ eq 'DS0'
                  | prod_typ eq 'DS0'
                  :prod_typ eq 'DS1'
                  :prod_typ eq 'DS3'
                  :prod_typ eq 'OTH'
              )
```

The third SAS macro invocation calculates all OR-1 metric results from the Trunks
Ordering Data Mart:

```
%pm_or( tbl=or_dm_trunk, yearmm=&report_month, metric=OR-1
      , glblcond=rep_typ eq 'C2C' and serv_typ eq 'T' and fba_fgte_ind eq 'BA'
      , submetrics=12 13, sbpm_typ=count count
      , eligvars=OR_1_12_elig OR_1_13_elig
      , eligcond= event_incl_ind eq 'Y' and actv_typ in('N','C','D')
                  and (ord_stat eq 'C' or ord_stat eq 'K' and event_intv ne .)
                  and substr(rtr,1,1) ne 'N' and event_type eq 'F'
                  :event_incl_ind eq 'Y' and actv_typ in('N','C')
                  and (ord_stat eq 'C' or ord_stat eq 'K' and dlr_obj_dt ne .)
                  and not(substr(rtr,1,1) in('N','F')) and event_type eq 'F'
      , valuvars= OR_1_12_valu OR_1_13_valu
      , valuexpr= event_intv le (10+(src_typ eq 'L')):
      , valucond= _:dlr_actual_dt le dlr_obj_dt
      , keepvars= cmplx_typ
      , sm_catgs= 5020:5030|5020
      , sm_conds=  asr_qty le 192 and prj_num eq ' ' and fcast_ind eq 'Y' and cmplx_typ eq 'A'
                  :asr_qty gt 192  or prj_num ne ' '  or fcast_ind ne 'Y' or  cmplx_typ ne 'A'
                  |1
              )
```

DCI Recalculation Results

Table B-14 provides the results of DCI's OR-1 metric results recalculation and compares
Verizon PA's C2C reported results with DCI's results for the month of April 2003:

Table B-14

Performance Metric	DCI numer	DCI denom	DCI result	VZ C2C numer	VZ C2C denom	VZ C2C result	Num Diff	Denom Diff	Result Diff
OR-1-02-2320	3011	3019	99.74%	3010	3018	99.73%	-1	-1	0.00%
OR-1-02-3143	72951	73525	99.22%	72938	73512	99.22%	-13	-13	0.00%
OR-1-02-3331	18152	18244	99.50%	18150	18240	99.51%	-2	-4	0.01%
OR-1-04-2100	837	869	96.32%	837	869	96.32%	0	0	0.00%
OR-1-04-2210									
OR-1-04-2211									
OR-1-04-2213									
OR-1-04-2214	5	5	100.00%	5	5	100.00%	0	0	0.00%
OR-1-04-2341	34	34	100.00%	34	34	100.00%	0	0	0.00%
OR-1-04-3143	5234	5304	98.68%	5234	5304	98.68%	0	0	0.00%
OR-1-04-3210									
OR-1-04-3331	2522	2575	97.94%	2522	2575	97.94%	0	0	0.00%
OR-1-04-3340	40	40	100.00%	40	40	100.00%	0	0	0.00%
OR-1-04-3341	19	19	100.00%	19	19	100.00%	0	0	0.00%
OR-1-04-3342	73	76	96.05%	73	76	96.05%	0	0	0.00%
OR-1-06-2210									
OR-1-06-2211									
OR-1-06-2213									
OR-1-06-2214	3	3	100.00%	3	3	100.00%	0	0	0.00%
OR-1-06-2320	105	110	95.45%	105	110	95.45%	0	0	0.00%
OR-1-06-2341	4	4	100.00%	4	4	100.00%	0	0	0.00%
OR-1-06-3143	391	391	100.00%	391	391	100.00%	0	0	0.00%
OR-1-06-3210									
OR-1-06-3211	369	372	99.19%	365	370	98.65%	-4	-2	-0.54%
OR-1-06-3213	14	14	100.00%	14	14	100.00%	0	0	0.00%
OR-1-06-3214	2	2	100.00%	2	2	100.00%	0	0	0.00%
OR-1-06-3331	520	521	99.81%	520	521	99.81%	0	0	0.00%
OR-1-06-3340									
OR-1-06-3341									
OR-1-06-3342									
OR-1-08-3210									
OR-1-10-3210									
OR-1-10-3211									
OR-1-10-3213									
OR-1-10-3214									
OR-1-12-5020	31	31	100.00%	31	31	100.00%	0	0	0.00%
OR-1-12-5030	127	127	100.00%	127	127	100.00%	0	0	0.00%
OR-1-13-5020	37	37	100.00%	37	37	100.00%	0	0	0.00%

Table B-15 provides the results of DCI's OR-1 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of May 2003:

Table B-15

Performance Metric	DCI numer	DCI denom	DCI result	VZ C2C numer	VZ C2C denom	VZ C2C result	Num Diff	Denom Diff	Result Diff
OR-1-02-2320	2732	2775	98.45%	2732	2775	98.45%	0	0	0.00%
OR-1-02-3143	56979	57548	99.01%	56979	57548	99.01%	0	0	0.00%
OR-1-02-3331	17848	18030	98.99%	17848	18030	98.99%	0	0	0.00%
OR-1-04-2100	706	723	97.65%	706	723	97.65%	0	0	0.00%
OR-1-04-2210									
OR-1-04-2211									
OR-1-04-2213									
OR-1-04-2214	14	15	93.33%	14	15	93.33%	0	0	0.00%
OR-1-04-2341	26	26	100.00%	26	26	100.00%	0	0	0.00%
OR-1-04-3143	4794	4945	96.95%	4794	4945	96.95%	0	0	0.00%
OR-1-04-3210									
OR-1-04-3331	2659	2731	97.36%	2659	2731	97.36%	0	0	0.00%
OR-1-04-3340	46	46	100.00%	46	46	100.00%	0	0	0.00%
OR-1-04-3341	22	22	100.00%	22	22	100.00%	0	0	0.00%
OR-1-04-3342	60	61	98.36%	60	61	98.36%	0	0	0.00%
OR-1-06-2210									
OR-1-06-2211									
OR-1-06-2213									
OR-1-06-2214	1	1	100.00%	1	1	100.00%	0	0	0.00%
OR-1-06-2320	95	95	100.00%	95	95	100.00%	0	0	0.00%
OR-1-06-2341	9	9	100.00%	9	9	100.00%	0	0	0.00%
OR-1-06-3143	393	404	97.28%	393	404	97.28%	0	0	0.00%
OR-1-06-3210									
OR-1-06-3211	448	450	99.56%	444	447	99.33%	-4	-3	-0.23%
OR-1-06-3213	10	10	100.00%	10	10	100.00%	0	0	0.00%
OR-1-06-3214	5	7	71.43%	5	7	71.43%	0	0	0.00%
OR-1-06-3331	550	553	99.46%	550	553	99.46%	0	0	0.00%
OR-1-06-3340									
OR-1-06-3341	3	3	100.00%	3	3	100.00%	0	0	0.00%
OR-1-06-3342									
OR-1-08-3210									
OR-1-10-3210									
OR-1-10-3211	1	1	100.00%	1	1	100.00%	0	0	0.00%
OR-1-10-3213									
OR-1-10-3214									
OR-1-12-5020	8	8	100.00%	8	8	100.00%	0	0	0.00%
OR-1-12-5030	79	79	100.00%	79	79	100.00%	0	0	0.00%
OR-1-13-5020	23	23	100.00%	23	23	100.00%	0	0	0.00%

Table B-16 provides the results of DCI's OR-1 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of June 2003:

Table B-16

Performance Metric	DCI numer	DCI denom	DCI result	VZ C2C numer	VZ C2C denom	VZ C2C result	Num Diff	Denom Diff	Result Diff
OR-1-02-2320	2574	2577	99.88%	2574	2577	99.88%	0	0	0.00%
OR-1-02-3143	63640	65025	97.87%	63639	65023	97.87%	-1	-2	0.00%
OR-1-02-3331	17234	17433	98.86%	17234	17433	98.86%	0	0	0.00%
OR-1-04-2100	799	816	97.92%	799	816	97.92%	0	0	0.00%
OR-1-04-2210									
OR-1-04-2211									
OR-1-04-2213									
OR-1-04-2214	10	10	100.00%	10	10	100.00%	0	0	0.00%
OR-1-04-2341	8	8	100.00%	8	8	100.00%	0	0	0.00%
OR-1-04-3143	5341	5479	97.48%	5341	5479	97.48%	0	0	0.00%
OR-1-04-3210									
OR-1-04-3331	3063	3095	98.97%	3063	3095	98.97%	0	0	0.00%
OR-1-04-3340	78	79	98.73%	78	79	98.73%	0	0	0.00%
OR-1-04-3341	26	26	100.00%	26	26	100.00%	0	0	0.00%
OR-1-04-3342	66	67	98.51%	66	67	98.51%	0	0	0.00%
OR-1-06-2210									
OR-1-06-2211									
OR-1-06-2213									
OR-1-06-2214	2	2	100.00%	2	2	100.00%	0	0	0.00%
OR-1-06-2320	96	96	100.00%	96	96	100.00%	0	0	0.00%
OR-1-06-2341	3	3	100.00%	3	3	100.00%	0	0	0.00%
OR-1-06-3143	405	408	99.26%	404	407	99.26%	-1	-1	0.00%
OR-1-06-3210	1	1	100.00%	1	1	100.00%	0	0	0.00%
OR-1-06-3211	331	333	99.40%	330	333	99.10%	-1	0	-0.30%
OR-1-06-3213	6	6	100.00%	6	6	100.00%	0	0	0.00%
OR-1-06-3214	1	5	20.00%	1	5	20.00%	0	0	0.00%
OR-1-06-3331	551	553	99.64%	550	552	99.64%	-1	-1	0.00%
OR-1-06-3340									
OR-1-06-3341	1	1	100.00%	1	1	100.00%	0	0	0.00%
OR-1-06-3342									
OR-1-08-3210									
OR-1-10-3210									
OR-1-10-3211									
OR-1-10-3213									
OR-1-10-3214									
OR-1-12-5020	22	22	100.00%	22	22	100.00%	0	0	0.00%
OR-1-12-5030	121	121	100.00%	121	121	100.00%	0	0	0.00%
OR-1-13-5020	52	52	100.00%	52	52	100.00%	0	0	0.00%

OR-2: REJECT TIMELINESS

Definition

This metric measures the percentage of rejected orders whose rejection took place within the agreed-upon timeframe.

Orders Submitted Via LSRs

From the LSR Ordering Data Mart, among the orders which are not globally excluded and meet the criteria for a reportable sub-metric and product disaggregation, those orders

whose RJCT_DATE was within the reporting month are selected as eligible for consideration in OR-2, and will be counted in the denominator. If their reject was provided within the appropriate time interval (RJCT_ONTIME="Y") then they will also contribute to the numerator.

Sub-Metrics

The PROCESS_FLOW_CATEGORY field indicates how the order flowed through Verizon PA's ordering systems and is therefore used to determine which sub-metric it will be considered for, as illustrated in Table B-17:

Table B-17

OR-2 Submetric	Order Rcvd Electronically?	Flow-through	Facility Check Required?	PROCESS _FLOW_ CATEGORY	April	May	June
OR-2-02	Y	Y		1	16264	17937	17824
OR-2-04	Y	N	N	3	2905	3896	5303
OR-2-06	Y	N	Y	5	357	496	376
OR-2-08	N	N	N	2	0	0	0
OR-2-10	N	N	Y	4	0	0	0

Verizon PA additionally excludes records from the non-flowthrough submetrics whose TEST_ACC_IND field has the following values:

"B": exclude from Both C2C and FCC Merger reporting
"C": exclude from C2C reports only
"F": exclude from FCC Merger reports only

For several CLECs, Verizon PA flags for exclusion those PONs matching certain patterns indicated in the TEST_ACCT_IND_LKP BTR table. While during the audit period there were no orders whose PONs met the criteria for TEST_ACC_IND="C", about 5-10% of non-flow-through order rejections were excluded via TEST_ACCT_IND="B", as indicated in Table B-18:

Table B-18

TEST_ACC_IND="B"	April	May	June
Not excluded from OR-2-02	152	155	157
Excluded from OR-2-04	341	317	232
Excluded from OR-2-06	31	40	15

DCI has submitted DR D-024 requesting the business reasons for these additional exclusions and their justification from the C2C Guidelines, if any. Verizon PA has responded that these PONs are excluded as part of Special Projects.

Orders Submitted Via ASRs

From the ASR Ordering Data Mart, among the orders which are not globally excluded and meet the criteria for a reportable sub-metric and product disaggregation, those ordering records whose EVENT_TYPE is "O" (reject), whose REJ_INC_IND is "Y" (first rejection of the order), and whose ACTV_TYP is "N" (New), "C" (Change), or "D" (Disconnect), are selected as eligible for consideration in OR-2, and will be counted in the denominator. If the time until their reject, as measured by the ORD_REJ_INTV field, was provided within the appropriate time interval for the submetric, then they will also contribute to the numerator.

Sub-Metrics

The SRC_TYP field indicates whether the order was received mechanically ("M"), or manually ("L"), and the FACL_IND indicates whether a Facility Check is required. These two fields determine under which sub-metric an ASR will be reported, as indicated in the following table, which also lists the time limit and number of ASR rejects:

Table B-19

OR-2 Submetric	SRC _TYP	Facility Check Required?	Time Limit	April	May	June
OR-2-04	M	N	48 hrs	25	17	11
OR-2-06	M	Y	72 hrs	208	239	116
OR-2-08	L	N	72 hrs	0	0	0
OR-2-10	L	Y	96 hrs	0	0	0

Orders For Trunks

From the Trunk Ordering Data Mart, among the orders which are not globally excluded and meet the criteria for a reportable sub-metric and product disaggregation, those ordering records

- whose EVENT_TYPE is "O" (Reject),
- whose EVENT_INCL_IND is "Y" ,
- whose ACTV_TYP is "N" (New), "C" (Change), or "D" (Disconnect),
- and which are Completed Orders (ORD_STAT="C") with a non-null time interval measurement (EVENT_INTV not null),

are selected as eligible for consideration in OR-2, and will be counted in the denominator. If their Reject was provided on time (EVENT_INTV <= 10 days for electronically received orders; EVENT_INTV <= 11 days for faxed or mailed orders), then they will also contribute to the numerator.

Sub-Metrics

The above description, combined with the trunk product disaggregation section described earlier, completely documents the metric calculations for OR-2-12.

DCI Recalculation Macro Invocations

As described in the DCI Recalculation Process section under OR-1, DCI implemented the information described above into 3 SAS macro invocations, one for LSRs, one for ASRs, and one for Trunk orders, as presented below:

The first of these calculates all OR-2 metric result contributions from the LSR Ordering Data Mart:

```
%pm_or(     tbl=or_dm_gen
        , yearmm=&report_month
        , metric=OR-2
        ,    glblcond=parts_excl_ind   eq   '@'   and   put(datepart(rjct_date),yymmn6.)   eq
"&report_month"
        , submetrics=02 04 06 08 10, sbpm_typ=count count count count count
        , eligvars=OR_2_02_elig OR_2_04_elig OR_2_06_elig OR_2_08_elig OR_2_10_elig
        , valuvars=rjct_ontime rjct_ontime rjct_ontime rjct_ontime rjct_ontime
        , eligcond=  process_flow_category in('1') and not(test_acc_ind in('R','Z'))
                                  :process_flow_category   in('3')   and   not(test_acc_ind
in('R','Z','B','C'))
                                  :process_flow_category   in('5')   and   not(test_acc_ind
in('R','Z','B','C'))
                                  :process_flow_category   in('2')   and   not(test_acc_ind
in('R','Z','B','C'))
                                  :process_flow_category   in('4')   and   not(test_acc_ind
in('R','Z','B','C'))
        , valucond=  ontime_rjct_notif eq 'Y'
            :ontime_rjct_notif eq 'Y'
            :ontime_rjct_notif eq 'Y'
            :ontime_rjct_notif eq 'Y'
            :ontime_rjct_notif eq 'Y'
        , sm_catgs=  2320:3143:3331
                              |2200:2320:2341:3143:3200:3331:3340:3341:3342
                              |2200:2320:2341:3143:3200:3331:3340:3341:3342
                              |3200
                              |3200
        , sm_conds=   order_type eq '1' and svc_order_class_id eq '0'
            :order_type eq '3' and svc_order_class_id eq '0'
            :order_type in('2') and svc_order_class_id eq '0'
                      |    order_type    eq    '1'    and    svc_order_class_id
in('1','6','7','8')
                      :order_type eq '1' and svc_order_class_id eq '0'
                      :order_type eq '1' and svc_order_class_id eq '3'
                      :order_type eq '3' and svc_order_class_id eq '0'
                      :order_type     in('2','3')     and     svc_order_class_id
in('1','6','7','8')
                      :order_type in('2') and svc_order_class_id eq '0'
                      :order_type in('2') and svc_order_class_id eq '5'
                      :order_type in('2','3') and svc_order_class_id eq '3'
                      :order_type in('2') and svc_order_class_id eq '4'
                      |    order_type    eq    '1'    and    svc_order_class_id
in('1','6','7','8')
                      :order_type eq '1' and svc_order_class_id eq '0'
                      :order_type eq '1' and svc_order_class_id eq '3'
                      :order_type eq '3' and svc_order_class_id eq '0'
                      :order_type     in('2','3')     and     svc_order_class_id
in('1','6','7','8')
                      :order_type in('2') and svc_order_class_id eq '0'
                      :order_type in('2') and svc_order_class_id eq '5'
                      :order_type in('2','3') and svc_order_class_id eq '3'
                      :order_type in('2') and svc_order_class_id eq '4'
                      |    order_type    in('2','3')    and    svc_order_class_id
in('1','6','7','8')
                      |    order_type    in('2','3')    and    svc_order_class_id
in('1','6','7','8')
                      )
```

The second SAS macro invocation calculates all OR-2 metric results from the ASR Ordering Data Mart:

```
%pm_or(    tbl=or_dm_asr_spc
       , yearmm=&report_month
       , metric=OR-2
             , glblcond=put(datepart(EVENT_DT),yymmn6.) eq "&report_month"
                  and event_typ eq 'O' and rej_inc_ind='Y'
                                    and  actv_typ  in('N','C','D')  and  fba_fgte_ind  eq
'BA'
             , submetrics=04 06 08 10, sbpm_typ=count count count count
             , eligvars=OR_2_04_elig OR_1_06_elig OR_1_08_ELIG OR_1_10_elig
       , valuvars=conf_ontime conf_ontime conf_ontime conf_ontime
             , eligcond= facl_ind eq 'N' and src_typ eq 'M'
                                   :facl_ind eq 'Y' and src_typ eq 'M'
                                   :facl_ind eq 'N' and src_typ eq 'L'
                                   :facl_ind eq 'Y' and src_typ eq 'L'
             , valucond=ord_rej_intv le 48*60
                :ord_rej_intv le 72*60
                :ord_rej_intv le 72*60
                :ord_rej_intv le 96*60
             , sm_catgs=3200
                              |3200
                              |3200
                              |3200
             , sm_conds= 1
                            | 1
                            | 1
                            | 1
             )
```

The third SAS macro invocation calculates all OR-2 metric results from the Trunks Ordering Data Mart:

```
%pm_or( tbl=or_dm_trunk, yearmm=&report_month, metric=OR-2
            , glblcond=rep_typ eq 'C2C' and serv_typ eq 'T' and fba_fgte_ind eq 'BA'
            , submetrics=12, sbpm_typ=count
            , eligvars=OR_2_12_elig
            , eligcond= event_incl_ind eq 'Y' and actv_typ in('N','C','D')
                                   and (ord_stat eq 'C')
                                   and event_type eq 'O'
                                   and event_intv ne .
            , valuvars= OR_2_12_valu
            , valuexpr= event_intv le (7+(src_typ eq 'L'))
            , valucond=_
            , sm_catgs= 5000
            , sm_conds= asr_qty le 192 and prj_num eq ' '
                   and fcast_ind eq 'Y' and cmplx_typ eq 'A'
            )
```

DCI Recalculation Results

Table B-20 provides the results of DCI's OR-2 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of April 2003:

Table B-20

Performance Metric	DCI numer	DCI denom	DCI Result	VZ C2C numer	VZ C2C denom	VZ C2C result	Num Diff	Denom Diff	Result Diff
OR-2-02-2320	974	974	100.00%	974	974	100.00%	0	0	0.00%
OR-2-02-3143	9045	9086	99.55%	9044	9085	99.55%	-1	-1	0.00%
OR-2-02-3331	6090	6140	99.19%	6088	6138	99.19%	-2	-2	0.00%
OR-2-04-2200	14	14	100.00%	14	14	100.00%	0	0	0.00%
OR-2-04-2320	429	437	98.17%	429	437	98.17%	0	0	0.00%
OR-2-04-2341	19	19	100.00%	19	19	100.00%	0	0	0.00%
OR-2-04-3143	1418	1433	98.95%	1417	1432	98.95%	-1	-1	0.00%
OR-2-04-3200	19	19	100.00%	19	19	100.00%	0	0	0.00%
OR-2-04-3331	576	590	97.63%	576	588	97.96%	0	-2	0.33%
OR-2-04-3340	10	10	100.00%	10	10	100.00%	0	0	0.00%
OR-2-04-3341	23	23	100.00%	23	23	100.00%	0	0	0.00%
OR-2-04-3342	34	34	100.00%	34	34	100.00%	0	0	0.00%
OR-2-06-2200									
OR-2-06-2320	45	45	100.00%	45	45	100.00%	0	0	0.00%
OR-2-06-2341									
OR-2-06-3143	134	134	100.00%	134	134	100.00%	0	0	0.00%
OR-2-06-3200	85	92	92.39%	85	92	92.39%	0	0	0.00%
OR-2-06-3331	144	145	99.31%	144	145	99.31%	0	0	0.00%
OR-2-06-3340									
OR-2-06-3341	2	2	100.00%	2	2	100.00%	0	0	0.00%
OR-2-06-3342									
OR-2-08-3200									
OR-2-10-3200									
OR-2-12-5000	1	1	100.00%	2	2	100.00%	1	1	0.00%

Table B-21 provides the results of DCI's OR-2 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of May 2003:

Table B-21

Performance Metric	DCI numer	DCI denom	DCI Result	VZ C2C numer	VZ C2C denom	VZ C2C result	Num Diff	Denom Diff	Result Diff
OR-2-02-2320	878	883	99.43%	878	883	99.43%	0	0	0.00%
OR-2-02-3143	10851	10998	98.66%	10851	10998	98.66%	0	0	0.00%
OR-2-02-3331	5826	6003	97.05%	5826	6003	97.05%	0	0	0.00%
OR-2-04-2200	17	17	100.00%	17	17	100.00%	0	0	0.00%
OR-2-04-2320	346	353	98.02%	346	353	98.02%	0	0	0.00%
OR-2-04-2341	24	24	100.00%	24	24	100.00%	0	0	0.00%
OR-2-04-3143	2435	2476	98.34%	2435	2476	98.34%	0	0	0.00%
OR-2-04-3200	14	14	100.00%	14	14	100.00%	0	0	0.00%
OR-2-04-3331	629	669	94.02%	629	669	94.02%	0	0	0.00%
OR-2-04-3340	8	8	100.00%	8	8	100.00%	0	0	0.00%
OR-2-04-3341	16	16	100.00%	16	16	100.00%	0	0	0.00%
OR-2-04-3342	13	13	100.00%	13	13	100.00%	0	0	0.00%
OR-2-06-2200	3	3	100.00%	3	3	100.00%	0	0	0.00%
OR-2-06-2320	69	69	100.00%	69	69	100.00%	0	0	0.00%
OR-2-06-2341	3	3	100.00%	3	3	100.00%	0	0	0.00%
OR-2-06-3143	183	183	100.00%	183	183	100.00%	0	0	0.00%
OR-2-06-3200	149	150	99.33%	149	150	99.33%	0	0	0.00%
OR-2-06-3331	189	189	100.00%	188	188	100.00%	-1	-1	0.00%
OR-2-06-3340									
OR-2-06-3341	7	7	100.00%	7	7	100.00%	0	0	0.00%
OR-2-06-3342									
OR-2-08-3200									
OR-2-10-3200									
OR-2-12-5000				5	6	83.33%			

Table B-22 provides the results of DCI's OR-2 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of June 2003:

Table B-22

Performance Metric	DCI numer	DCI denom	DCI result	VZ C2C numer	VZ C2C denom	VZ C2C result	Num Diff	Denom Diff	Result Diff
OR-2-02-2320	924	924	100.00%	924	924	100.00%	0	0	0.00%
OR-2-02-3143	10304	10354	99.52%	10304	10354	99.52%	0	0	0.00%
OR-2-02-3331	6442	6463	99.68%	6442	6463	99.68%	0	0	0.00%
OR-2-04-2200	8	8	100.00%	8	8	100.00%	0	0	0.00%
OR-2-04-2320	411	414	99.28%	410	413	99.27%	-1	-1	0.00%
OR-2-04-2341	26	26	100.00%	26	26	100.00%	0	0	0.00%
OR-2-04-3143	3919	3967	98.79%	3919	3967	98.79%	0	0	0.00%
OR-2-04-3200	15	16	93.75%	15	16	93.75%	0	0	0.00%
OR-2-04-3331	583	587	99.32%	583	587	99.32%	0	0	0.00%
OR-2-04-3340	6	6	100.00%	6	6	100.00%	0	0	0.00%
OR-2-04-3341	33	34	97.06%	33	34	97.06%	0	0	0.00%
OR-2-04-3342	14	14	100.00%	14	14	100.00%	0	0	0.00%
OR-2-06-2200	2	2	100.00%	2	2	100.00%	0	0	0.00%
OR-2-06-2320	61	61	100.00%	61	61	100.00%	0	0	0.00%
OR-2-06-2341	3	3	100.00%	3	3	100.00%	0	0	0.00%
OR-2-06-3143	147	149	98.66%	147	149	98.66%	0	0	0.00%
OR-2-06-3200	26	26	100.00%	26	26	100.00%	0	0	0.00%
OR-2-06-3331	144	145	99.31%	144	145	99.31%	0	0	0.00%
OR-2-06-3340									
OR-2-06-3341	0	1	0.00%	0	1	0.00%	0	0	0.00%
OR-2-06-3342									
OR-2-08-3200									
OR-2-10-3200									
OR-2-12-5000	9	9	100.00%	10	10	100.00%	1	1	0.00%

OR-3: PERCENT REJECTS

Definition

This metric measures the percent of orders received (including supplements and re-submissions) by Verizon PA that are rejected or queried. Orders are rejected due to omission or error of required order information. Orders that are queried are considered rejected.

The percent reject measure is reported against all submitted order transactions processed in the Verizon PA Ordering System (Request Manager (for LSRs), CAFÉ and EXACT (for ASRs)), not just those with associated Customer Record Information System (CRIS) completions.

Note: Edit Rejects (orders failing basic front-end edits) submitted via LSR are not placed in the PON Master File; therefore, they are not included in the calculation.

Orders submitted via LSRs

From the LSR Ordering Data Mart, among the orders which are not globally excluded and meet the criteria for a reportable sub-metric and product disaggregation, those orders

whose RECEIPT_DATE was within the reporting month are selected as eligible for consideration in OR-3, and will be counted in the denominator. Verizon PA counts such orders in the numerator if their RJCT_DATE is within the reporting month, even if their RECEIPT_DATE may have been in a prior month.

Sub-metrics

OR-3-02 is calculated from a different table, for which Verizon PA indicates no data are present because there were no EDI PONs resubmitted at Verizon PA's request (see ER D-020). The following discussion will focus solely on OR-3-01.

Verizon PA interprets the phrase "for specified product" in the Guidelines Numerator and Denominator sections as an exclusion of orders whose product is not categorized into the values of SVC_ORDER_CLASS_ID. Null values in this field affect 550 orders received in April, 448 in May, and 489 in June. No rejected orders throughout the three months had a null value in the SVC_ORDER_CLASS_ID field.

Orders submitted via ASRs

From the ASR Ordering Data Mart, among the orders which are not globally excluded and meet the criteria for a reportable sub-metric and product disaggregation, those ordering records whose EVENT_TYP is "N" (New Submission), or "S" (Resubmission) are counted in the denominator; those orders whose EVENT_TYP is "O" (Rejection) are counted in the numerator.

Sub-metrics

OR-3-02 is calculated from a different table, which Verizon PA indicates no data is present for because there were no EDI PONs resubmitted at Verizon PA's request (see ER D-020). The following discussion will focus solely on OR-3-01.

DCI Recalculation Macro Invocations

As described in the DCI Recalculation Process section under OR-1, DCI implemented the information described above in two SAS macro invocations, one for LSRs, and one for ASRs, as presented below:

The first of these calculates all OR-3 metric result contributions from the LSR Ordering Data Mart:

```
%pm_2tbl( tbl_num=or_dm_gen, yearmm=&report_month, metric=OR-3
             ,tbl_dnm=or_dm_gen
           , glblcond_num=parts_excl_ind eq '@'
                                   and not(test_acc_ind in('R','Z'))
           , glblcond_dnm=parts_excl_ind eq '@'
                                   and not(test_acc_ind in('R','Z'))
           , submetrics=01
           , sbpm_typ=Count
           , eligvars=OR_3_01_elig
           , eligcmpr=0
           , valucond=put(datepart(rjct_date),yymmn6.) eq "&report_month"
```

```
        , valuvars=reject
        , eligcond=put(datepart(receipt_date),yymmn6.) eq "&report_month"
        , sm_catgs= 2000:3000
        , sm_conds_dnm=order_type eq '1':order_type in('2','3')
        , sm_conds_num=order_type eq '1':order_type in('2','3')
        , sm_cmprs_dnm=0:0
        , sm_cmprs_num=0:0
    )
```

The second SAS macro invocation calculates all OR-3 metric results from the ASR Ordering Data Mart:

```
%pm_2tbl( tbl_num=or_dm_asr_spc, yearmm=&report_month, metric=OR-3
        ,tbl_dnm=or_dm_asr_spc
        , glblcond_num=put(datepart(EVENT_DT),yymmn6.) eq "&report_month"
                            and fba_fgte_ind eq 'BA'
        , glblcond_dnm=put(datepart(EVENT_DT),yymmn6.) eq "&report_month"
                            and fba_fgte_ind eq 'BA'
        , submetrics=01
        , sbpm_typ=Count
        , eligvars=OR_3_01_elig
        , valucond=event_typ eq 'O'
        , valuvars=reject
        , eligcond=event_typ in('N','S')
        , eligcmpr=0
        , sm_catgs= 3000
        , sm_conds_dnm=1
        , sm_conds_num=1
        , sm_cmprs_dnm=0
        , sm_cmprs_num=0
    )
```

DCI Recalculation Results

Table B-23 provides the results of DCI's OR-3-01 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of April 2003:

Table B-23

Performance Metric	DCI numer	DCI denom	DCI result	VZ C2C numer	VZ C2C denom	VZ C2C result	Num Diff	Denom Diff	Result Diff
OR-3-01-2000	1752	6179	28.35%	1752	6002	29.19%	0	-177	0.84%
OR-3-01-3000	18008	120683	14.92%	18004	120295	14.97%	-4	-388	0.05%

Table B-24 provides the results of DCI's OR-3-01 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of May 2003:

Table B-24

Performance Metric	DCI numer	DCI denom	DCI result	VZ C2C numer	VZ C2C denom	VZ C2C result	Num Diff	Denom Diff	Result Diff
OR-3-01-2000	1618	5724	28.27%	1618	5600	28.89%	0	-124	0.62%
OR-3-01-3000	20967	107106	19.58%	20966	106775	19.64%	-1	-331	0.06%

Table B-25 provides the results of DCI's OR-3-01 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of June 2003:

Table B-25

Performance Metric	DCI numer	DCI denom	DCI result	VZ C2C numer	VZ C2C denom	VZ C2C result	Num Diff	Denom Diff	Result Diff
OR-3-01-2000	1643	5704	28.80%	1643	5555	29.58%	0	-149	0.78%
OR-3-01-3000	21989	116116	18.94%	21978	115717	18.99%	-11	-399	0.05%

OR-4: TIMELINESS OF COMPLETION NOTIFICATION

Definition

This metric measures the timeliness of Provisioning Completion Notifications (PCNs) and Billing Completion Notifications (BCNs) in various ways. It applies to EDI-submitted LSRs only.

Orders submitted via LSRs

From the LSR Ordering Data Mart, among the orders which are not globally excluded and meet the criteria for a reportable sub-metric and product disaggregation, those records whose ORDER_ORIGIN="E" are electronically-received EDI orders. The C2C Guidelines define the Denominators of the OR-4 metrics in terms of the number of EDI LSRs whose last service order has been updated as *provisioning complete* during the reporting month. Verizon PA determines this by selecting those orders whose SOP_NOTIF_DATE is within the reporting month. Verizon PA also requires that the at least one of the RECEIPT_SOURCE_TYPE, CONF_SOURCE_TYPE, RJCT_SOURCE_TYPE, SOP_NOTIF_SOURCE_TYPE, and CRIS_NOTIF_SOURCE_TYPE fields have a value of 'E'. Ordering records meeting these criteria are included in Verizon PA's denominator calculation for those submetrics for which they are not specifically flagged as exclusions.

Sub-metrics

Among orders meeting the denominator criteria in the above paragraph:

- If the BCN is time-stamped in Request Manager (RM) within 3 business days of Service Order Processor (SOP) completion, (SOP_TO_CRIS_ONTIME_ IND3="Y") then the order is counted in the OR-4-09 numerator

- If no PCN or BCN is sent within two business days after provisioning completion, (ONTIME_SOP_COMPL="Y"), then the order is counted in the OR-4-11 numerator

- If the PCN is sent within one business day of the Work Force Administration (WFA) completion date in the SOP, (WORK_COMPL_TO_PCN_DAYS <= 1), then the order is counted in the OR-4-16 numerator

- If the BCN is sent within two business days after the PON's last service order has been updated in the SOP as having reached provisioning completion, (PROV_COMPL_TO_BCN_DAYS <= 2), then the order is counted in the OR-4-17 numerator

The C2C Guidelines also state the following additional sub-metric-specific exclusions:

- OR-4-09: When the order completion time in the billing system cannot be determined, the order is excluded from the measurements, and the percentage of orders so excluded is reported each month.
- OR-4-09: Complex Resale orders
- OR-4-11: Any product not designed to generate a PCN and a BCN

To implement these exclusions, Verizon PA flags the relevant ordering records by placing a "C" in the OR_4_09_EXCL_IND or OR_4_11_EXCL_IND field, and requiring these fields to have values other than "C" included in the calculation of the relevant sub-metric numerators and denominators.

The C2C performance standards for the OR-4 sub-metrics are

- OR-4-09: >= 95%
- OR-4-11: <= 0.25%
- OR-4-16: >= 95%
- OR-4-17: >= 95%

The results for these metrics are calculated without any product disaggregation, however the pooled result is reported in both Resale and UNE sections of the C2C report. So, for instance, although OR-4-11-2000 and OR-4-11-3000 would normally contain separate Resale and UNE results, respectively, both contain the same pooled value which includes all (non-excluded) Resale and UNE orders.

However, since there is also a OR-4-09 Performance Assurance Plan (PAP) Special Provision penalty payment which becomes applicable if OR-4-09 performance falls below 90% in either Resale or UNE, Verizon PA calculates and reports OR-4-09-2000 and OR-4-09-3000 as separate, disaggregated results, to facilitate determination of whether this PAP Special Provision has been triggered.

DCI Recalculation Macro Invocations

As described in the DCI Recalculation Process section under OR-1, DCI implemented the information described above into a single SAS macro invocations, covering LSRs, as presented below:

```
%pm_or( tbl=or_dm_gen, yearmm=&report_month, metric=OR-4
          , glblcond=order_origin eq 'E' and parts_excl_ind eq '@'
```

```
              and not(test_acc_ind in('R','Z'))
       , submetrics=09 11 16 17, sbpm_typ=count count count count
       , eligvars=OR_4_09_elig OR_4_11_elig OR_4_16_elig OR_4_17_elig
       , valuvars=sop2bil3 no_pcnbcn sopw2pcn1 pcn2bcn2
       , eligcond= put(datepart(sop_compl_date),yymmn6.) eq "&report_month"
            and or409_excl_ind ne 'C'
                         :put(datepart(sop_compl_date),yymmn6.)         eq
"&report_month"
                 and or411_excl_ind ne 'C'
                         :put(datepart(sop_compl_date),yymmn6.)         eq
"&report_month"
                         :put(datepart(sop_compl_date),yymmn6.)         eq
"&report_month"
       , valucond= sop_to_cris_ontime_ind3 eq 'Y'
                         :ontime_sop_compl eq 'Y'
                         :work_compl_to_pcn_days le 1
                         :prov_compl_to_bcn_days le 2
       , sm_catgs= 2000:3000
                         |2000:3000
                         |2000:3000
                         |2000:3000
       , sm_conds=  1:1
                         | 1:1
                         | 1:1
                         | 1:1
  )
```

DCI Recalculation Results

Table B-26 provides the results of DCI's OR-4 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of April 2003:

Table B-26

Performance Metric	DCI numer	DCI denom	DCI result	VZ C2C numer	VZ C2C denom	VZ C2C result	Num Diff	Denom Diff	Result Diff
OR-4-09-2000	66906	69771	95.89%	1384	1460	94.79%	-65522	-68311	-1.10%
OR-4-09-3000	66906	69771	95.89%	65529	68354	95.87%	-1377	-1417	-0.03%
OR-4-11-2000	59	69771	0.08%	92	69803	0.13%	33	32	0.05%
OR-4-11-3000	59	69771	0.08%	92	69803	0.13%	33	32	0.05%
OR-4-16-2000	69218	69771	99.21%	69218	69803	99.16%	0	32	-0.05%
OR-4-16-3000	69218	69771	99.21%	69218	69803	99.16%	0	32	-0.05%
OR-4-17-2000	63903	69771	91.59%	63148	69803	90.47%	-755	32	-1.12%
OR-4-17-3000	63903	69771	91.59%	63148	69803	90.47%	-755	32	-1.12%

Table B-27 provides the results of DCI's OR-4 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of May 2003:

Table B-27

Performance Metric	DCI numer	DCI denom	DCI result	VZ C2C numer	VZ C2C denom	VZ C2C result	Num Diff	Denom Diff	Result Diff
OR-4-09-2000	50048	53288	93.92%	1249	1287	97.05%	-48799	-52001	3.13%
OR-4-09-3000	50048	53288	93.92%	48803	52031	93.80%	-1245	-1257	-0.12%
OR-4-11-2000	32	53288	0.06%	57	53318	0.11%	25	30	0.05%
OR-4-11-3000	32	53288	0.06%	57	53318	0.11%	25	30	0.05%
OR-4-16-2000	52629	53288	98.76%	52633	53318	98.72%	4	30	-0.05%
OR-4-16-3000	52629	53288	98.76%	52633	53318	98.72%	4	30	-0.05%
OR-4-17-2000	47313	53288	88.79%	45962	53318	86.20%	-1351	30	-2.58%
OR-4-17-3000	47313	53288	88.79%	45962	53318	86.20%	-1351	30	-2.58%

Table B-28 provides the results of DCI's OR-4 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of June 2003:

Table B-28

Performance Metric	DCI numer	DCI denom	DCI result	VZ C2C numer	VZ C2C denom	VZ C2C result	Num Diff	Denom Diff	Result Diff
OR-4-09-2000	61324	65451	93.69%	Not Disaggregated					
OR-4-09-3000	61324	65451	93.69%	Not Disaggregated					
OR-4-11-2000	74	65451	0.11%	76	65455	0.12%	2	4	0.00%
OR-4-11-3000	74	65451	0.11%	76	65455	0.12%	2	4	0.00%
OR-4-16-2000	64598	65451	98.70%	64602	65455	98.70%	4	4	0.00%
OR-4-16-3000	64598	65451	98.70%	64602	65455	98.70%	4	4	0.00%
OR-4-17-2000	59674	65451	91.17%	57783	65455	88.28%	-1891	4	-2.89%
OR-4-17-3000	59674	65451	91.17%	57783	65455	88.28%	-1891	4	-2.89%

OR-5: PERCENT FLOW-THROUGH

Definition

This metric measures the precent of valid LSRs received electronically that process directly to the SOP without manual intervention.

Sub-metrics

OR-5-01 – % of all electronically submitted LSRs which flow through – No standard.

OR-5-03 – % of flowthru-eligible LSRs which flowed through – Standard: >=95%.

Orders submitted via LSRs

From the LSR Ordering Data Mart, among the orders which are not globally excluded and meet the criteria for a reportable sub-metric and product disaggregation, those records whose PROCESS_FLOW_CATEGORY is '1', '3', or '5' are electronically-received orders and are counted in the denominator of OR-5-01. Orders whose INITIAL_FLOWTHRU_IND has a value of "Y" appear to be flow-through eligible on submission and are counted in DCI's calculation in the denominator of OR-5-03. Orders whose PROCESS_FLOW_CATEGORY is '1' did actually flow through, and are counted in the numerators of both OR-5-01 and OR-5-03.

The Guidelines are insufficiently clear on defining the timing criteria for records to be considered within a reporting month for OR-5. Verizon PA selects those orders whose confirmation occurred during the reporting month. DCI agrees with this approach, and suggests it be incorporated into the C2C Guidelines.

Verizon PA interprets the phrase "for specified product" in the Guidelines Numerator and Denominator sections as an exclusion of orders whose product is not categorized into the values of SVC_ORDER_CLASS_ID. No confirmations of electronically submitted

orders had a null value in the SVC_ORDER_CLASS_ID field, so while DCI disagrees with Verizon PA's interpretation, (as discussed in the Findings for OR-3), and with filtering out such orders, this did not impact the results.

Flowthru Data Mart, ACE Files

In September, Verizon PA emailed DCI as follows:

> "During a review of data previously provided to DCI Verizon PA identified additional data to send to DCI…
>
> It is supplemental data for the following FACT Table:
>
> - TB_DM_OR_FLOWTHRU_FACT and includes data for May and June
> - TB_DM_OR_ACCURACY_FILING_MART and includes data for April, May and June"

In DR D-016, DCI requested documentation for the above tables, and data to support Verizon PA's OR-5-03 calculation for the month of April. Verizon PA has since provided Fact Table Layouts and the June Carrier Metric Algorithms (CMA's). On October 23, Verizon PA provided DCI with a 120 Mb Access database application and several associated files produced by ACE which analyzes system response messages (which are not in the LSR Ordering Data Mart) to determine if a PA April 2003 order whose INITIAL_FLOWTHRU_IND indicated that it was flowthru eligible, really was flowthru eligible.   At this late date in its review, DCI could not analyze this extensive application.

It appears to DCI, that the ACE process is still being used subsequent to April, however only the resultant determination is stored in the Flowthru Data Mart.

From the Flowthru Data Mart, among the orders which are not globally excluded (any value in PARTS_EXCL_IND causes the record to be excluded), and meet the criteria for a reportable sub-metric and product disaggregation, those records whose FORCED_FLOWTHRU is 'F', 'Y', or 'N' are electronically-received orders and are counted in the denominator of OR-5-01. Orders whose FORCED_FLOWTHRU is 'F' or 'Y' have been determined by ACE to be flow-through eligible and are counted in the denominator of OR-5-03. Orders whose FORCED_FLOWTHRU is 'F' did actually flow through, and are counted in the numerators of both OR-5-01 and OR-5-03.

The Guidelines are not clear on defining the timing criteria for records to be considered within a reporting month for OR-5. Verizon PA selects those orders whose confirmation (CONFIRM_DATE1) occurred during the reporting month. DCI agrees with this approach, and suggests it be incorporated into the C2C Guidelines.

DCI Recalculation Macro Invocations

As described in the DCI Recalculation Process section under OR-1, DCI implemented the information described above into the following SAS macro invocations, using the LSR Ordering Data Mart for April, and the Flowthru Data Mart for May and June:

```
%if &report_month=200304 %then %do;

%pm_or( tbl=or_dm_gen, yearmm=&report_month, metric=OR-5
            , glblcond=parts_excl_ind eq '@' and not(test_acc_ind in('R','Z'))
                    and put(datepart(conf_date),yymmn6.) eq "&report_month"
            , submetrics=01 03, sbpm_typ=count count
            , eligvars=OR_5_01_elig OR_5_03_elig
            , valuvars=pct_flowthru_of_total pct_flowthru_of_eligible
            , eligcond= process_flow_category in('1','3','5')
                                :initial_flowthru_ind eq 'Y'
            , valucond= process_flow_category in('1')
                                :process_flow_category in('1')
            , sm_catgs= 2000:3000
                                |2000:3000
            , sm_conds=  order_type eq '1':order_type in('2','3')
                                | order_type eq '1':order_type in('2','3')
            )

%end;

%else %do;

%pm_or( tbl=or_dm_flowthru, yearmm=&report_month, metric=OR-5
            , glblcond=parts_excl_ind eq ' '
                    and put(datepart(confirm_date1),yymmn6.) eq "&report_month"
            , submetrics=01 03, sbpm_typ=count count
            , eligvars=OR_5_01_elig OR_5_03_elig
            , valuvars=pct_flowthru_of_total pct_flowthru_of_eligible
            , eligcond= forced_flowthru in('F','Y','N')
                                :forced_flowthru in('F','Y')
            , valucond= forced_flowthru eq 'F'
                                :forced_flowthru eq 'F'
            , sm_catgs= 2000:3000
                                |2000:3000
            , sm_conds=  order_type eq '1':order_type in('2','3')
                                | order_type eq '1':order_type in('2','3')
            )

%end;
```

DCI Recalculation Results

Table B-29 provides the results of DCI's OR-5 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of April 2003:

Table B-29

Performance Metric	DCI numer	DCI denom	DCI result	VZ C2C numer	VZ C2C Denom	VZ C2C result	Num Diff	Denom Diff	Result Diff
OR-5-01-2000	3023	4271	70.78%	3023	4271	70.78%	0	0	0.00%
OR-5-01-3000	92185	101335	90.97%	92185	101334	90.97%	0	-1	0.00%
OR-5-03-2000	3023	3412	88.60%	3023	3148	96.03%	0	-264	7.43%
OR-5-03-3000	92175	96211	95.81%	92185	94659	97.39%	10	-1552	1.58%

Table B-30 provides the results of DCI's OR-5 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of May 2003:

Table B-30

Performance Metric	DCI numer	DCI denom	DCI result	VZ C2C numer	VZ C2C Denom	VZ C2C result	Num Diff	Denom Diff	Result Diff
OR-5-01-2000	2779	4027	69.01%	2779	4027	69.01%	0	0	0.00%
OR-5-01-3000	76036	84978	89.48%	76037	84979	89.48%	1	1	0.00%
OR-5-03-2000	2779	2867	96.93%	2779	2867	96.93%	0	0	0.00%
OR-5-03-3000	76036	78101	97.36%	76037	78102	97.36%	1	1	0.00%

Table B-31 provides the results of DCI's OR-5 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of June 2003:

Table B-31

Performance Metric	DCI numer	DCI denom	DCI result	VZ C2C numer	VZ C2C denom	VZ C2C result	Num Diff	Denom Diff	Result Diff
OR-5-01-2000	2583	3882	66.54%	2583	3882	66.54%	0	0	0.00%
OR-5-01-3000	82941	92845	89.33%	82941	92845	89.33%	0	0	0.00%
OR-5-03-2000	2583	2665	96.92%	2583	2665	96.92%	0	0	0.00%
OR-5-03-3000	82941	85469	97.04%	82941	85469	97.04%	0	0	0.00%

OR-6: ORDER ACCURACY

Definition

This metric measures the percent of orders completed as ordered by the CLEC.

Sub-metrics Reviewed

OR-6-03 – % of all LSR Confirmations resent due to error – Standard: <= 5%.

DCI did not review the other OR-6 submetrics because they rely on data sources not provided until it was too late for DCI to conduct a review of them.

Orders submitted via LSRs

From the LSR Ordering Data Mart, among the orders which are not globally excluded and meet the criteria for a reportable sub-metric and product disaggregation, those records whose PROCESS_FLOW_CATEGORY is '1' flowed through and are excluded from this metric. All other orders required manual processing to reach the SOP and are counted in the denominator of OR-6-03 according to the value in the CONF_CNT field, which indicates the number of confirmations submitted for the LSR. In other words the denominator is the sum of the number of confirmations of the eligible orders. The VZ_RESENT_COUNT indicates the number of confirmations which were resent, and is summed over the eligible orders to determine the OR-6-03 numerator.

DCI Recalculation Macro Invocations

As described in the DCI Recalculation Process section under OR-1, DCI implemented the information described above into the following SAS macro invocation:

```
%pm_or( tbl=or_dm_gen, yearmm=&report_month, metric=OR-6
            , glblcond=parts_excl_ind eq '@'
              and put(datepart(conf_date),yymmn6.) eq "&report_month"
                           and not(test_acc_ind in('R','Z'))
                           and process_flow_category gt '1'
            , submetrics=03, sbpm_typ=count
            , eligvars=conf_cnt
            , valuvars=vz_resent_count
            , eligcond=
            , valucond=
            , sm_catgs= 2000:3143:3331
            , sm_conds=  order_type eq '1':order_type eq '3':order_type eq '2'
          )
```

DCI Recalculation Results

Table B-32 provides the results of DCI's OR-6-03 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of April 2003:

Table B-32

Performance Metric	DCI numer	DCI denom	DCI result	VZ C2C numer	VZ C2C denom	VZ C2C result	Num Diff	Denom Diff	Result Diff
OR-6-03-2000	0	1423	0.00%	0	1423	0.00%	0	0	0.00%
OR-6-03-3143	1	6500	0.02%	1	6500	0.02%	0	0	0.00%
OR-6-03-3331	0	3981	0.00%	0	3981	0.00%	0	0	0.00%

Table B-33 provides the results of DCI's OR-6-03 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of May 2003:

Table B-33

Performance Metric	DCI numer	DCI denom	DCI result	VZ C2C numer	VZ C2C denom	VZ C2C result	Num Diff	Denom Diff	Result Diff
OR-6-03-2000	0	1374	0.00%	0	1374	0.00%	0	0	0.00%
OR-6-03-3143	1	6091	0.02%	1	6091	0.02%	0	0	0.00%
OR-6-03-3331	1	4137	0.02%	1	4137	0.02%	0	0	0.00%

Table B-34 provides the results of DCI's OR-6-03 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of June 2003:

Table B-34

Performance Metric	DCI numer	DCI denom	DCI result	VZ C2C numer	VZ C2C denom	VZ C2C result	Num Diff	Denom Diff	Result Diff
OR-6-03-2000	0	1435	0.00%	0	1435	0.00%	0	0	0.00%
OR-6-03-3143	2	6720	0.03%	2	6720	0.03%	0	0	0.00%
OR-6-03-3331	0	4659	0.00%	0	4659	0.00%	0	0	0.00%

OR-7: ORDER CONFIRMATIONS/REJECTS SENT WITHIN 3 BUSINESS DAYS

Definition

This metric measures the precent of orders received which are either confirmed or rejected by Verizon PA within 3 business days of receipt.

Sub-metrics

OR-7-01: % Order Confirmations/Rejects Sent Within 3 Bus. Days – Standard: >= 95%.

Orders submitted via LSRs

From the LSR Ordering Data Mart, among the orders which are not globally excluded and meet the criteria for a reportable sub-metric and product disaggregation, those records whose RECEIPT_DATE was within the reporting month are counted in the denominator of OR-7, except for:

- Special Projects, which are signified by a value of 'C' in the OR701_EXCL_IND field;

- Supplemented LSRs, which are signified by a value of 'Z' in the CONF_TYPE field;

- Notification that the Order was Cancelled at the CLEC's request, which are signified by a CONF_TYPE value of 'N';

- Notification that Verizon PA initiated Cancellation of the Order, which are signified by a CONF_TYPE value of 'S'.

Any such orders which received a confirmation or rejection within 3 business days of receipt, (CONF_RJCT_ONTIME_IND3="Y"), are also counted in the numerator.

DCI Recalculation Macro Invocations

As described in the DCI Recalculation Process section under OR-1, DCI implemented the information described above into the following SAS macro invocation:

```
%pm_or( tbl=or_dm_gen, yearmm=&report_month, metric=OR-7
              , glblcond=parts_excl_ind eq '@'
               and put(datepart(receipt_date),yymmn6.) eq "&report_month"
                              and not(test_acc_ind in('R','Z'))
                              and or701_excl_ind ne 'C'
              , submetrics=01, sbpm_typ=count
              , eligvars= OR_7_01_elig
              , valuvars= conf_rjct_ontime
              , eligcond= not(conf_type in('S','Z','N'))
              , valucond= CONF_RJCT_ONTIME_IND3 in('Y')
              , sm_catgs= 2000:3143:3331
              , sm_conds=  order_type eq '1':order_type eq '3':order_type eq '2'
            )
```

DCI Recalculation Results

Table B-35 provides the results of DCI's OR-7 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of April 2003:

Table B-35

Performance Metric	DCI numer	DCI denom	DCI result	VZ C2C numer	VZ C2C denom	VZ C2C result	Num Diff	Denom Diff	Result Diff
OR-7-01-2000	5538	5572	99.39%	5538	5572	99.39%	0	0	0.00%
OR-7-01-3143	83745	83766	99.97%	83745	83766	99.97%	0	0	0.00%
OR-7-01-3331	28018	28144	99.55%	28018	28144	99.55%	0	0	0.00%

Table B-36 provides the results of DCI's OR-7 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of May 2003:

Table B-36

Performance Metric	DCI numer	DCI denom	DCI result	VZ C2C numer	VZ C2C denom	VZ C2C result	Num Diff	Denom Diff	Result Diff
OR-7-01-2000	5153	5184	99.40%	5153	5184	99.40%	0	0	0.00%
OR-7-01-3143	71292	71360	99.90%	71292	71360	99.90%	0	0	0.00%
OR-7-01-3331	27939	27994	99.80%	27939	27994	99.80%	0	0	0.00%

Table B-37 provides the results of DCI's OR-7 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of June 2003:

Table B-37

Performance Metric	DCI numer	DCI denom	DCI result	VZ C2C numer	VZ C2C denom	VZ C2C result	Num Diff	Denom Diff	Result Diff
OR-7-01-2000	5114	5178	98.76%	5114	5178	98.76%	0	0	0.00%
OR-7-01-3143	79228	79313	99.89%	79228	79313	99.89%	0	0	0.00%
OR-7-01-3331	28161	28206	99.84%	28161	28206	99.84%	0	0	0.00%

OR-8: ACKNOWLEDGEMENT TIMELINESS

Definition

This metric measures the percent of EDI LSRs received which are acknowledged within 2 hours of receipt.

Sub-metrics

OR-8-01 – % Acknowledgements on Time – Standard: >= 95% within 2 hours.

LSR Acknowledgements Data Mart

From the LSR Acknowledgements Data Mart, among the orders which meet the criteria for a reportable sub-metric and product disaggregation, those records whose acknowledgement date (ACK_DATE) was within the reporting month are counted in the denominator of OR-8.

Any such orders whose acknowledgement was transmitted within 2 hours of receipt, (ONTIME_HOUR="Y"), are also counted in the numerator.

DCI Recalculation Macro Invocations

As described in the DCI Recalculation Process section under OR-1, DCI implemented the information described above into the following SAS macro invocation:

```
%pm_or( tbl=or_dm_ack, yearmm=&report_month, metric=OR-8
        , glblcond=put(datepart(ack_date),yymmn6.) eq "&report_month"
        , submetrics=01, sbpm_typ=count
        , eligvars= OR_8_01_elig
        , valuvars= ack_ontime
        , eligcond= 1
        , valucond= ontime_hour in('Y')
        , sm_catgs= 2000:3000
        , sm_conds=  order_type eq '1':order_type ne '1'
      )
```

DCI Recalculation Results

Table B-38 provides the results of DCI's OR-8 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of April 2003:

Table B-38

Performance Metric	DCI numer	DCI denom	DCI result	VZ C2C numer	VZ C2C denom	VZ C2C result	Num Diff	Denom Diff	Result Diff
OR-8-01-2000	2014	2014	100.00%	2014	2014	100.00%	0	0	0.00%
OR-8-01-3000	86604	86624	99.98%	86604	86624	99.98%	0	0	0.00%

Table B-39 provides the results of DCI's OR-8 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of May 2003:

Table B-39

Performance Metric	DCI numer	DCI denom	DCI result	VZ C2C numer	VZ C2C Denom	VZ C2C result	Num Diff	Denom Diff	Result Diff
OR-8-01-2000	1851	1851	100.00%	1851	1851	100.00%	0	0	0.00%
OR-8-01-3000	78332	78339	99.99%	78332	78339	99.99%	0	0	0.00%

Table B-40 provides the results of DCI's OR-8 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of June 2003:

Table B-40

Performance Metric	DCI numer	DCI denom	DCI result	VZ C2C numer	VZ C2C denom	VZ C2C result	Num Diff	Denom Diff	Result Diff
OR-8-01-2000	2048	2048	100.00%	2048	2048	100.00%	0	0	0.00%
OR-8-01-3000	87627	87644	99.98%	87627	87644	99.98%	0	0	0.00%

OR-9: ORDER ACKNOWLEDGEMENT COMPLETENESS

Definition

This metric measures the percent of EDI LSRs received which are acknowledged on the same day. Orders received after 10 PM Eastern Time are considered received the next day.

Sub-metrics

OR-9-01 – % Acknowledgement Completeness – Standard: >= 99%.

LSR Acknowledgements Data Mart

From the LSR Acknowledgements Data Mart, among the orders which meet the criteria for a reportable sub-metric and product disaggregation, those records which were received (REC_DATE) within the reporting month are counted in the denominator of OR-9.

Any such orders whose acknowledgement was transmitted the same day, (ONTIME_DAY="Y"), are also counted in the numerator.

DCI Recalculation Macro Invocations

As described in the DCI Recalculation Process section under OR-1, DCI implemented the information described above into the following SAS macro invocation:

```
%pm_or( tbl=or_dm_ack, yearmm=&report_month, metric=OR-9
           , glblcond=put(datepart(rec_date),yymmn6.) eq "&report_month"
           , submetrics=01, sbpm_typ=count
           , eligvars= OR_9_01_elig
           , valuvars= ack_ontime
           , eligcond= 1
           , valucond= ontime_day in('Y')
           , sm_catgs= 2000:3000
           , sm_conds=  order_type eq '1':order_type ne '1'
         )
```

DCI Recalculation Results

Table B-41 provides the results of DCI's OR-9 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of April 2003:

Table B-41

Performance Metric	DCI numer	DCI denom	DCI result	VZ C2C numer	VZ C2C denom	VZ C2C result	Num Diff	Denom Diff	Result Diff
OR-9-01-2000	2014	2014	100.00%	2014	2014	100.00%	0	0	0.00%
OR-9-01-3000	86624	86624	100.00%	86624	86624	100.00%	0	0	0.00%

Table B-42 provides the results of DCI's OR-9 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of May 2003:

Table B-42

Performance Metric	DCI numer	DCI denom	DCI result	VZ C2C numer	VZ C2C Denom	VZ C2C result	Num Diff	Denom Diff	Result Diff
OR-9-01-2000	1851	1851	100.00%	1851	1851	100.00%	0	0	0.00%
OR-9-01-3000	78339	78339	100.00%	78339	78339	100.00%	0	0	0.00%

Table B-43 provides the results of DCI's OR-9 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of June 2003:

Table B-43

Performance Metric	DCI numer	DCI denom	DCI result	VZ C2C numer	VZ C2C denom	VZ C2C result	Num Diff	Denom Diff	Result Diff
OR-9-01-2000	2048	2048	100.00%	2048	2048	100.00%	0	0	0.00%
OR-9-01-3000	87644	87644	100.00%	87644	87644	100.00%	0	0	0.00%

OR-10: PON NOTIFIER EXCEPTION RESOLUTION TIMELINESS

Definition

The OR-10 sub-metrics measure the percent of Netlink EDI PON Notifier Exceptions resolved within three (3) business days and ten (10) business days.[3]

Sub-metrics

OR-10-01 – Measures the percentage of PON exceptions resolved within three (3) business days.[4]

OR-10-02 – Measures the percentage of PON exceptions resolved within ten (10) business days.[5]

Formula

OR-10-01:   This metric measures the percentage of PON exceptions resolved within three (3) business days. The numerator for this metric is developed from the number of PON Notifier Exceptions resolved within three (3) days. The denominator is derived from the total number of PON Notifier Exceptions resolved in the Wholesale Customer Care Center (WCCC) in the reporting month less resolved PON Notifier Exceptions that

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[3] Verizon Pennsylvania Carrier to Carrier Guidelines
[4] Verizon Pennsylvania Carrier to Carrier Guidelines
[5] Verizon Pennsylvania Carrier to Carrier Guidelines

were included as unresolved PON Notifier Exceptions in the previous month's denominator for metric OR-10-02.[6]

OR-10-02: This metric measures the percentage of PON exceptions resolved within ten (10) business days. The numerator for this metric is developed from the number of PON Notifier Exceptions resolved within ten (10) business days. The denominator is derived from the total number of PON Notifier Exceptions resolved in the WCCC in the reporting month plus unresolved PON Notifier Exceptions greater than ten (10) business days.

Metric Evaluation Process

In order to evaluate the metric calculation, DCI consultants requested the data file of Netlink PON Notifier Exceptions with their related time date stamps as generated from the WCCC. In response, Verizon provided the Ordering Domain OR-10 source files used to calculate the monthly metrics within NMP. DCI extracted this data for the sample month of June 2003 and performed an analysis of the data using the process described in the Carrier to Carrier Guidelines, OR-10 PON Notifier Exception Resolution Timeliness.[7] The final results of this analysis are presented below:

Table B-44 – DCI Calculation of OR-10-01

STATE_CODE	REPORT_PERIOD	FILING_DATE	CCNA_TYPE	OR1001_CA
PN	200306	7/7/2003 0:00	ALL	82.01730898
PN	200306	7/7/2003 0:00	VADI	100

```
OR-10-01-2000 CLEC Aggregate
DCI Derived Metric Statement (SQL)
VW_OR_10_01_2000_PA0603_CA

select STATE_CODE,
REPORT_PERIOD,
FILING_DATE,
CCNA_TYPE,
avg(OR1001_C) OR1001_CA
from VW_OR_10_01_2000_PA0603_C
GROUP BY
STATE_CODE,
REPORT_PERIOD,
FILING_DATE,CCNA_TYPE
```

---

[6] Verizon Pennsylvania Carrier to Carrier Guidelines
[7] Information Request B-063 and supplemental

Table B-45 – DCI Calculation of OR-10-02

STATE_CODE	REPORT_PERIOD	FILING_DATE	CCNA_TYPE	OR1002_CA
PN	200306	7/7/2003 0:00	ALL	96.35093815
PN	200306	7/7/2003 0:00	VADI	98.38709677

```
OR-10-02-2000 CLEC Aggregate
DCI Derived Metric Statement (SQL)
VW_OR_10_02_2000_PA0603_CA

select STATE_CODE,
REPORT_PERIOD,
FILING_DATE,
CCNA_TYPE,
avg(OR1002_C) OR1002_CA
from VW_OR_10_02_2000_PA0603_C
GROUP BY
STATE_CODE,
REPORT_PERIOD,
FILING_DATE,CCNA_TYPE
```

A summary of the results achieved by the DCI calculation for June 2003 is as follows:

Table B-46

	OR-10-01	OR-10-02
CLEC Aggregate	82.017%	96.350%

The above calculations are for the CLEC aggregate, excluding VADI data.

Report Dimension

OR-10 is reported for the Verizon Pennsylvania service territory based on the following company dimensions:[8]

- CLEC aggregate
- CLEC specific
- Verizon affiliate aggregate
- Verizon affiliate specific

These sub-metrics are reported at a state specific level.

Exclusions

There are four listed exclusions to OR-10, specifically: [9]

- Non Netlink EDI PON Exception Notifier Trouble Tickets

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[8] Verizon Pennsylvania Carrier to Carrier Guidelines
[9] Carrier to Carrier Performance Standards and Reports Verizon Pennsylvania (April, May, June)

- VADI PON Exception Notifier Trouble Tickets excluded from CLEC aggregate
- Any request for Notifier for orders due/complete more than 30 business days old
- Orders for products/services that are not designed to produce the requested Notifier (e.g., LIDB)

Performance Standard

The specified performance standard for the OR-10 performance metrics are as follows: [10]

- OR-10-01 – 95% within three business days
- OR-10-02 – 99% within ten business days

For the audit period, the following were the results reported by Verizon Pennsylvania in the monthly Carrier to Carrier Performance Standards and Reports:[10]

Table B-47

OR-10-01	April	May	June
CLEC Aggregate	78.30%	86.56%	47.39%

OR-10-02	April	May	June
CLEC Aggregate	98.77%	99.63%	81.84%

Metric Creation

The elapsed time begins with the receipt at the Verizon WCCC of a completed PON Notifier trouble ticket template with the PONs in question enumerated with the appropriate identification for EDI notifiers (i.e., order acknowledgement (ACK), order confirmation (LSC), provisioning completion (PCN), or billing completion (BCN) notices).

PON Notifier Exceptions received after 5:00 p.m. are considered to be received the next business day.

The PON Notifier Exception is considered resolved when Verizon has either:

1. Sent or resent the requested notifier or higher notifier. If the notifier cannot be resent due to CLEC system availability or capacity, then the PON Notifier Exception shall be considered resolved when the resend was attempted as

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[10] Carrier to Carrier Performance Standards and Reports Verizon Pennsylvania (April, May, June)

demonstrated in Verizon's log files (copies of these files will be available to the CLECs on request).

2. Requested the CLEC to resubmit the PON if no Verizon notifiers have been generated.

3. Completed the investigation showing that the first action is a CLEC action and that the CLEC has been sent or resent the notifier for the action required (e.g., query, jeopardy), or Status File for Duplicate, earlier or late version of PON has been worked, PON previously cancelled, invalid PON number.

4. Competed work that will allow the PON to proceed to the next step in the business process, and sent the appropriate notifier to the CLEC.

5. Notified the CLEC that the Confirmed Due Date plus the notifier production interval has not yet passed for requested PON Notifier (PCNs and BCNs) and provided the current work status of the PON (i.e., provisioning completed, Notifier not yet produced). For PCNs and BCNs, Trouble Tickets are not to be initiated prior to or on the Confirmed Due Date; any Trouble Ticket initiated prior to the Confirmed Due Date is automatically considered to be resolved when the CLEC is provided with electronic notification that the initiation date is prior to the Confirmed Due Date.

CLEC notification for items 2, 3, 4, and 5 is accomplished via a daily file sent from Verizon to the individual CLEC. This notification file is sent every day by 5:00 p.m. For the purposes of this metric, the PON Notifier Exception(s) trouble ticket templates for Acknowledgments must be submitted within five (5) business days of the PON sent date. PON Notifiers Exceptions for confirmations must be reported within 30 business days of the PON sent date. PON Notifier exceptions for PCNs and BCNs must be reported to Verizon within 30 business days of the PON Confirmed Due Date.

C – FINDINGS

OR-1 FINDINGS

1. The Documentation Provided By Verizon PA Is Extremely Cumbersome

The Metrics calculation process for OR-1 is completely[11] and clearly described in pages 2 through 9 of this Appendix. Of this, pages 2 through 6 are general and do not need to be repeated for other metrics. Only pages 7 through 9 relate specifically to OR-1. Contrast this clear, concise[12] and complete documentation with the 92 separate OR-1 algorithms on pages 6 through 54 of the Ordering CMA's, and about 10 pages each of Guidelines and Fact Table documentation. Consider that the additional information contained in 64 separate OR-2 algorithms on pages 57 through 90 of the Ordering CMA's will require only 1-2 additional pages using the documentation format presented here.

While a CLEC could use the current CMA's, Fact Table Layouts, and C2C Guidelines to recalculate an individual metric result, e.g. OR-1-02-2320 from their data as supplied to them by Verizon PA, this provides very little understanding into Verizon PA's general metric calculation processes. If a CLEC wanted to recalculate all, or most, of its metric results, it would face a daunting task. In addition to the documentation currently provided, Verizon PA could develop and provide documentation of all their metric calculation processes in the form of the above pages 2 through 9 of this Appendix A.9.2.

2. Several PA CMA OR-1 Algorithms Were Incorrect (ER D-019).

The ***LSR-based algorithms*** provided in the PA CMA for several OR-1 ordering metrics are incorrect:

   a. OR-1-04-2100 – Denominator should exclude TEST_ACC_IND='B' as the numerator does and the denominator algorithms for the other OR-1-04 metrics do. Also, the denominator incorrectly restricts process_flow_category to '1' (orders which flowed through), when this metric applies to electronic orders which did not flow through and don't require facility check (process_flow_category='3', as correctly indicated in the numerator algorithm).

   b. OR-1-04-3143, – Both numerator and denominator algorithms incorrectly restrict process_flow_category='5' (facility check) whereas this metric is for no facility check (process_flow_category='3').

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[11]   There are a few filters used in Verizon's metric calculation processes which are the subject of Findings detailed below which DCI has not included in the above documentation.
[12]   A large portion of these 8 pages discusses DCI analyses, data requests, and Verizon's responses, so an objective comparison would pit 5-6 pages of the above DCI documentation versus the 100+ pages Verizon uses to document its measurement calculation processes for just OR-1 and OR-2. While the nuggets of information required to produce the DCI documentation are (mostly) all contained in the Verizon CMA, Fact Table Layouts and C2C Guidelines, it takes substantial work to analyze and extract them.

c. OR-1-04-3331: Two sets of numerator and denominator algorithms provided. First set is for order_type='2' (UNE Loop) which is correct. Second set is for order_type in('2','3') (UNE Loop or UNE Platform) which does not apply to this metric. Algorithm instructions are to add the two numerators and divide by the sum of the denominators. This is incorrect. In actuality, Verizon PA does not use this algorithm to produce the C2C results, but correctly uses only the first numerator and denominator algorithms, as is evident from DCI replication of the C2C results. (This issue was previously reported in ER A-001, and Verizon PA responded:

> "The OR-1-02-3331 Numerator 2 and Denominator 2 calculations are superfluous code and not used in the metric calculation. The CMA documentation provided by VZ contained the algorithms for the February data month for New York and was not used to produce Verizon PA's published results for Pennsylvania in April."

While the algorithm for OR-1-02-3331 has been corrected in the PA CMA, this issue still exists in the PA CMA for other sub-metrics including OR-1-04-3331.)

Both numerator and denominator algorithms incorrectly restrict process_flow_category='5' (facility check) whereas this metric is for no facility check (process_flow_category='3').

d. OR-1-06-2213: Facility Check DS3: Incorrectly restricting to non-facility check (process_flow_category='3'). Should be facility check (process_flow_category='5').

e. OR-1-06-2320: POTS/Prequalified Complex: Facility check. Incorrectly restricting to manual facility check (process_flow_category='4'). Should be electronic facility check (process_flow_category='5').

f. OR-1-06-3143: UNE Platform: Facility check. Incorrectly restricting to manual facility check (process_flow_category='4'). Should be electronic facility check (process_flow_category='5').

g. OR-1-06-3331: UNE Loop / Pre-qualified Complex / LNP: Facility Check: Two sets of numerator and denominator algorithms provided. First set is for order_type='2' (UNE Loop) which is correct. Second set is for order_type in('2','3') (UNE Loop or UNE Platform) which does not apply to this metric. Algorithm instructions are to add the two numerators and divide by the sum of the denominators. This is incorrect. In actuality, Verizon PA does not use this algorithm to produce the C2C results, but correctly uses only the first numerator and denominator algorithms, as is evident from DCI replication of the C2C results. (This issue was previously reported in ER A-001, and Verizon PA responded:

"The OR-1-02-3331 Numerator 2 and Denominator 2 calculations are superfluous code and not used in the metric calculation. The CMA documentation provided by VZ contained the algorithms for the February data month for New York and was not used to produce Verizon PA's published results for Pennsylvania in April."

While the algorithm for OR-1-02-3331 has been corrected in the PA CMA, this issue still exists in the PA CMA for other sub-metrics including OR-1-06-3331.)

Incorrectly restricting to manual facility check (process_flow_category='4'). Should be electronic facility check (process_flow_category='5').

DCI noted that in all of the above cases, the issues stated appear to be problems with the PA CMA documentation only. In each of these cases, DCI replicated VZ's performance results by using the correct code, not the code in the PA CMA.

In their response to ER D-019, Verizon PA acknowledged these CMA documentation errors and indicated that they would be corrected in the June version of the CMA scheduled to be available at the end of September. DCI has verified that Verizon PA has implemented all the above corrections into the June version of the CMA.

3. <u>Verizon PA Correctly Calculates Most Of The OR-1 Results.</u>

As is apparent from the above tables, in most cases DCI's recalculated OR-1 results and Verizon PA's C2C reported OR-1 results matched perfectly or had very minimal discrepancies.

4. <u>Verizon PA Excludes EDI Orders From The OR-1 Results If Their Confirmation Was Not Provided Electronically (ER D-025).</u>

Most of the slight discrepancies in the above tables are due to Verizon PA's practice of excluding EDI orders (from both numerator and denominator) if the outbound notification was not submitted via EDI. DCI did not see support for this practice in the C2C Guidelines and considered that such orders might be likely to have confirmations not on time because a manual process was being used, so this practice could lead to biased results. Verizon PA responded that these orders are excluded at the request of the CLECs, because a non-electronic outbound notification is not the final notification. Ultimately an even later final electronic notification will be provided and that record will be included in the reported results. Verizon PA finds support for this practice in the Guidelines statement:

"For EDI/NetLink orders, the notifier is considered sent when it is time-stamped after EDI translation and encryption, immediately prior to transmission to the CLEC."

If the intent of the Guidelines is to exclude such orders, then this should be stated clearly as an exclusion. Verizon PA pointed out that the differences in whether these orders are included or not are extremely minimal. DCI agrees and finds Verizon PA's practice acceptable if a final outbound electronic notification will always be forthcoming and will be included in the results at that point, even if in a different month.

The following additional filter implements Verizon PA's practice: ©[13]

```
and ((ORDER_ORIGIN eq 'E' and CONF_SOURCE_TYPE eq 'E') or ORDER_ORIGIN ne 'E')
```

5. **Because Of Documentation Inadequacies It Appeared That Verizon PA Was Underreporting UNE DS3 Specials In Its C2C Results For OR-1-06-3213 (ER D-041).**

The one major discrepancy between DCI's recalculated OR-1 results and Verizon PA's reported C2C results occurred with OR-1-06-3213 (On-time Confirmation for mechanically ordered UNE DS3 Specials requiring a Facility Check).

Verizon PA's response to ER D-041 indicates that DCI   did not remove ASR VADI orders in its ordering metric recalculations. DCI accepts Verizon PA's explanation of the discrepancy. However, while reviewing the CMAs, DCI was unaware that Verizon was explicitly excluding these orders due to the manner in which Verizon implements this exclusion – see Finding 6 below.

6. **Including A Field In A List Of Grouping Variables Within A CMA Algorithm Does Not Sufficiently Document An Exclusion (ER D-041).**

There was no exclusion of VADI implemented in the OR-1-06-3213 CMA. Verizon PA indicated that the exclusion is implemented via grouping the results separately by whether the EXCL_IND field is set to 'Y' or 'N'. Following is the code in the June CMA which accomplishes this: ©[14]

```
group by a113.STATE_CD,
a113.REP_TYP,
a113.PROD_TYP,
a113.PON,
a19.MONTH_ID,
a113.EXCL_IND,
a113.EVENT_DT,
a113.CCNA,
a113.EVENT_TYP
```

---

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Such documentation is insufficient for identifying records that have been excluded. Exclusions need to be clearly identified in the CMA with code such as " and EXCL_IND <> 'Y' ", rather than via part of a list of grouping variables.

7. **Disconnects Of UNE DS1 And DS3 ASR Specials Are Not Included In OR-1 Reporting (DR D-025).**

The Performance Standard section of the C2C Guidelines for OR-1, under UNE Special Services, states:

- Orders with no facility check: 48 hours. Note: The 48 hour standard does not apply to UNE Specials (UNE DS0 EELs >= 6 lines, UNE DS1 and above) received via ASR.

DCI understands the above note to imply a 72 hour standard for UNE ASR nonDS0 Specials (as is the standard for those requiring a facility check), and not that these should be excluded from C2C reporting. However, the fact that Specials DS1, Specials DS3 and Specials (Non DS0, NonDS1, & Non DS3) are not listed in the Guidelines under the UNE section of submetrics OR-1-04 and OR-1-06, nor are they reported in the C2C reports, seems to indicate that Verizon PA (and perhaps the Carrier Working Group (CWG)) interpret the above note differently, that it implies these should not be reported at all.

In light of the fact that throughout the 3-month audit period, no activity whatsoever is being reported under either OR-1-04 or OR-1-08, DCI finds it strange that in April 177 DS1 and 22 DS3 ASR Disconnects are not reported anywhere, in May 123 DS1 and 4 DS3 ASR Disconnects are not reported anywhere, and in June 204 DS1 and 9 DS3 ASR Disconnects are not reported anywhere. DCI considers that this is due to overlooking the fact that some UNE DS1 and DS3 ASRs, namely Disconnects, do not require facility checks. The PA CWG and/or the PA PUC could clarify their intent, the Guidelines be updated accordingly, and Verizon PA include these orders in the appropriate disaggregation.

8. **Specials Ordered Via LSRs: Product Not Properly Identified (ER D-040).**

a. Throughout the three month audit period, all Specials ordered via LSRs (60 in April, 66 in May, 70 in June) are identified in the Ordering data mart with a SVC_ORDER_CLASS_ID value of "1". However, a substantial portion of these are definitively DS1's as indicated by their NC_CODEs of "HCEI" (10 in April, 15 in May, 13 in June), "HCE-" (1 in May, 1 in June), "HCZD" (1 in May), and "XH-R" (2 in April, 2 in May) and in some cases their SECNCI_CODEs of "04DU9.1SN" (3 in April, 4 in May). These have been incorrectly reported in the "Specials Other than DS0, DS1 or DS3" disaggregations (-2214 and -3214) and incorrectly excluded from the "Specials – DS1" disaggregations (-2211 and -3211), due to their SVC_ORDER_CLASS_ID not having been correctly identified as a "7".

b. The only other NC_CODEs present among the identified LSR Specials is "LXC-" (2 in April, 12 in June). This represents 4-wire Digital High-bit-rate Digital Subscriber Line (HDSL) Qualified, and seems appropriately identified as "Specials – Other than DS0, DS1, DS3". However, most of the LSRs identified as Specials have no NC_CODE (46 in April, 47 in May, and 44 in June) and no SECNCI_CODE. In their response to DR D-022, Verizon PA indicated that all Resale Specials and some UNE Specials (DS0s and limited DS1s) are ordered via LSRs. Most UNE Specials (most DS1s and DS3s, including Enhanced Extended Loops (EELs) and Interoffice Facilities (IOF)) are ordered via ASRs. This is generally because the LSR form does not have some of the fields needed to order most Specials besides DS0s and limited DS1s. From this response, it seems extremely likely that at least some, if not all, of the LSRs identified as Specials which have no NC_CODE are really DS0s. DS0s should have SVC_ORDER_CLASS_ID = "6" rather than "1". Any DS0s ordered via LSR are incorrectly included in the "Specials – Other than DS0, DS1 and DS3" product disaggregations (-2214 and -3214), and incorrectly excluded from the "Specials – DS0" product disaggregations (-2210 and -3210).

c. DCI examined all LSR orders which have DS1-signifying NC_CODEs beginning with "HC" or "XH" and found 43 in April, 40 in May, and 33 in June. (Where provided the SECNCI_CODE was "04DU9.1SN" (30 April, 16 May, 7 June) or "04DU9.SN" (1 April, 1 May), both indicative of DS1). Of these, only 12 in April, 19 in May, and 14 in June were even identified as Specials (although in the wrong Specials disaggregations 2214 and 3214, instead of 2211 and 3211, as indicated in paragraph #1 above). Most of the remainder, (31 in April, 16 in May, 7 in June) had a SVC_ORDER_CLASS_ID of "0" with an ORDER_TYPE of "2", so they were incorrectly reported in the "UNE Loop / PreQualified Complex / LNP" disaggregations (-3331) and incorrectly excluded from the "UNE Specials – DS1" disaggregations (-3211), due to their SVC_ORDER_CLASS_ID not having been correctly identified as a "7".

d. The remaining 5 in May and 4 in June LSRs with DS1-signifying NC_CODEs beginning with "HC" or "XH" have no value in the SVC_ORDER_CLASS_ID field and are therefore not reported in any product-specific disaggregations, and are incorrectly excluded from the "UNE Specials – DS1" disaggregations (-3211), due to their SVC_ORDER_CLASS_ID not having been correctly identified as a "7".

e. Similar issues to #c and #d likely exist with regard to DS0's, but cannot be quantified because no NC_CODE is provided on the LSRs which are likely DS0's (as discussed in #b above).

f. DCI notes that while the above issues are inferred from the LSR Ordering data mart and impact the metric results, these issues are not with the calculation of the metric results from the data mart. Rather, they concern the inability of Verizon PA's current Network Metric Platform (NMP) systems to properly identify DS0 and DS1 LSR orders, and the source of this problem likely precedes the data mart.

Verizon PA responded to this ER D-040 as follows:

"Verizon disagrees that Specials ordered via LSRs are not properly identified.

NMP does not use NC codes, instead the source Operations Suppport Systems (OSS) uses them to do a lookup in a table to determine the correct product type. The source OSS then sets the initial value of the SVC_ORDER_CLASS_ID and the CONF_ORD_CLASS_PROD_TYP/RJCT_ORD_CLASS_PROD_TYPE values and sends this to NMP. NMP takes this information and also compares the SPEC (lsog 4 only) and LOOPQUAL to derive the final SVC_ORDER_CLASS_ID value to further break this information into the Specials (Non DS0, Non DS1 & Non DS3), Specials DS0, Specials DS1, and Specials DS3 product types. This process is defined on page 98 of the System Design Document – Ordering Domain and was reviewed by Verizon in the Ordering domain workshop.

See responses below following each identified issue.

a. NC_CODEs of HCEI, HCEU, HCE5, SNBT, SNBW, SNBX, SNBT and YN-A are all UNE Platform ISDN as described in the LSOG 5 Handbook version 5.6.1. Therefore, these are all correctly identified as Specials Other (Non DS0, Non DS1 & Non DS3) with SVC_ORDER_CLASS_ID = 1.

b. An NC_CODE of "LXC" is a Specials (Non DS0, Non DS1 & Non DS3) product and not a Specials DS0 so it is correctly categorized with SVC_ORDER_CLASS_ID = "1".

c. Verizon was unable to find the orders referenced above that had a SVC_ORDER_CLASS_ID of "0" and an ORDER_TYPE of "2". Please send the afore mentioned orders for investigation.

d. NC_CODES beginning with "HC" and "XH" are frame relay products and are not UNE Specials DS1 but are specials that fall into the Specials (Non DS0, Non DS1 & Non DS3) category.

e. Please reference response to issue # b above. If DCI still has a
question please provide specific examples for investigation.

f. As stated previously, the initial product determination is done in the
source OSS system and not NMP. The source OSS uses a lookup table
to determine the correct product classification and sends this
information to NMP. NMP then further breaks this information into
the Specials (Non DS0, Non DS1 & Non DS3), Specials DS0, Specials
DS1, and Specials DS3 product types."

DCI respectfully disagrees with Verizon PA's response. DCI performed an internet
search for some of these NC codes, and one of the pages found was the following:

http://www.verizon.com/wholesale/clecsupport/east/wholesale/customer_docs/2002_type1_n
otifications/fn.2547Posted.pdf

It indicates the following:

Table B-48 – 3.2.2 Bell Atlantic South Digital Loop –
TOS/SLI/NC/NCI/SECNCI/LOOPQUAL Table

ELEMENT	NC	NCI	SECNCI
4 Wire Digital Loop DS1	HC--	04QB9.11	04DU9.BN
	HCD-		04DU9.1KN
	HCE-		04DU9.1SN
	HCEI		04DU9.1SN
	HCZ-		04DU9.DN

No other instances of NC codes starting with HC were found in the 10 page document.
This seems evidence to DCI that such NC codes are considered DS1's by Verizon PA.
Verizon PA states in its response to issue #d that NC_CODEs beginning with HC are
frame relay products. The table above shows them to be DS1's. Yet Verizon PA calls
several of these Platform ISDN in its response to issue #a.

If Platform ISDN is so all-inclusive, then it may justify the Rebundling status of these
orders (ORDER_TYPE='3'), however it does not justify removing them from their DS1
product categorization.

OR-2 FINDINGS

1. Several PA CMA OR-2 Algorithms Were Incorrect (ER D-019).

The *LSR-based algorithms* provided in the PA CMA for several OR-2 ordering metrics
are incorrect:

a. OR-2-04-2320: POTS / Pre-qualified Complex: No Facility Check – Both numerator and denominator algorithms incorrectly restrict process_flow_category='5' (facility check) whereas this metric is for no facility check (process_flow_category='3').

b. OR-2-04-3331: UNE Loop / Pre-qualified Complex / LNP: No Facility Check: Both numerator and denominator algorithms incorrectly restrict process_flow_category='5' (facility check) whereas this metric is for no facility check (process_flow_category='3').

c. OR-2-06-2320: POTS / Pre-qualified Complex: Facility Check – Both numerator and denominator algorithms incorrectly restrict process_flow_category='4' (Manual with facility check) whereas this metric is for electronic with facility check (process_flow_category='5').

d. OR-2-06-3331: UNE Loop / Pre-qualified Complex / LNP: Facility Check: Both numerator and denominator algorithms incorrectly restrict process_flow_category='4' (Manual with facility check) whereas this metric is for electronic with facility check (process_flow_category='5').

DCI notes that in all of the above cases, the issues stated appear to be problems with the PA CMA documentation only. In each of these cases, DCI replicated VZ's performance results by using the correct code, not the code in the PA CMA.

In their response to ER D-019, Verizon PA acknowledged these CMA documentation errors and indicated that they would be corrected in the June version of the CMA scheduled to be available at the end of September. DCI has verified that Verizon PA has implemented all the above corrections into the June version of the CMA.

2.   Verizon PA Correctly Calculates Most Of The OR-2 Results.

As is apparent from the above tables, in most cases DCI's recalculated OR-2 results and Verizon PA's C2C reported OR-2 results matched perfectly or had very minimal discrepancies.

3.   Verizon PA Excludes EDI Orders From The OR-2 Results If Their Reject Was Not Provided Electronically (ER D-025).

Most of the slight discrepancies in the above tables are due to Verizon PA's practice of excluding EDI orders (from both numerator and denominator) if the outbound notification was not submitted via EDI. DCI did not see support for this practice in the C2C Guidelines and considered that such orders might be likely to have rejects not on time because a manual process was being used, so this practice could lead to biased results. Verizon PA responded that these orders are excluded at the request of the CLECs, because a non-electronic outbound notification is not the final notification. Ultimately an even later final electronic notification will be provided and that record will

be included in the reported results. Verizon PA finds support for this practice in the Guidelines statement:

> "For EDI/NetLink orders, the notifier is considered sent when it is time-stamped after EDI translation and encryption, immediately prior to transmission to the CLEC."

If the intent of the Guidelines is to exclude such orders, then this should be stated clearly as an exclusion. Verizon PA pointed out that the differences in whether these orders are included or not are extremely minimal. DCI agrees and finds Verizon PA's practice acceptable if a final outbound electronic notification will always be forthcoming and will be included in the results at that point, even if in a different month.

The following additional filter implements Verizon PA's practice: ©[15]

```
and ((ORDER_ORIGIN eq 'E' and CONF_SOURCE_TYPE eq 'E') or ORDER_ORIGIN ne 'E')
```

4. Because Of Documentation Inadequacies It Appeared That Verizon PA Was Underreporting UNE Specials Requiring A Facility Check In Its C2C Results For OR-2-06-3200 (ER D-042).

A major discrepancy between DCI's recalculated OR-2 results and Verizon PA's reported C2C results occurred with OR-2-06-3200 (On-time Reject for mechanically ordered UNE Specials requiring a Facility Check).

This error would have affected PAP Penalty Payments for Critical Measures for the month of May.

Verizon PA's response to ER D-042 indicates that DCI did not remove from its OR-2 calculation: rejects of ASR VADI orders, Cancelled orders, and orders whose reject interval is greater than 72 hours (numerator only).   DCI accepts Verizon PA's explanation of this discrepancy insofar as the first two categories are concerned. . With regard to not excluding ASR VADI orders, while reviewing the CMAs, DCI was unaware that Verizon was explicitly excluding these orders due to the manner in which Verizon implements this exclusion – see Finding 5 below. DCI's numerator calculation did not include orders whose reject interval was greater than 72 hours.

5. Including A Field In List Of Grouping Variables In A CMA Algorithm Does Not Sufficiently Document An Exclusion (ER D-042).

DCI found no exclusion of VADI implemented in the OR-2-06-3200 CMA. Verizon PA indicated that the exclusion is implemented via grouping the results separately by

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whether the EXCL_IND field is set to 'Y' or 'N'. Following is the code in the June CMA which accomplishes this: ©[16]

```
group by a113.STATE_CD,
a113.REP_TYP,
a113.PROD_TYP,
a113.PON,
a19.MONTH_ID,
a113.EXCL_IND,
a113.EVENT_DT,
a113.CCNA,
a113.EVENT_TYP
```

Such documentation is insufficient for identifying records that have been excluded. Exclusions need to be clearly identified in the CMA with code such as " and EXCL_IND <> 'Y' ", rather than via part of a list of grouping variables.

OR-3 – FINDINGS

1. There Can Be Differences In Definition Interpretation For The OR-3 Metric – "Percent Rejects"

The C2C Guidelines Definition of OR-3 states "This metric measures the percent of orders received … that are rejected or queried". This implies that for an order to be included in the numerator, it must also be part of the denominator. Verizon PA however calculates numerator and denominator as two separate queries – orders rejected this month, and orders received this month. Consequently a very small number of orders which are received this month and whose reject takes place next month will be incorrectly excluded from the numerator. However there will be a roughly similarly small number of orders rejected this month which were received in the previous month which will be incorrectly included in the numerator. As long as this metric is not granularly disaggregated, the fact that these two errors are very small relative to the total number of orders, and the fact they are expected to offset each other, make Verizon PA's approach to the calculation of this metric completely reasonable, even though technically not compliant with the Guidelines Definition. If at some point in the future more granular disaggregation of this metric is considered, this issue should be revisited, resulting in either a change of Verizon PA's calculation process or the Guidelines Definition.

**2.   There Can Be Differences In Definition Interpretation For The OR-3 Metric –
"For Specified Product"**

Verizon PA interprets the words "for specified product" in the Numerator and
Denominator sections of the C2C Guidelines OR-3-01 Calculation in a manner as to
exclude LSR orders whose SVC_ORDER_CLASS_ID has a null value.

DCI considers this incorrect. Immediately above the Calculation section are listed the
Products for which OR-3-01 is to be calculated: Resale and UNE. This disaggregation is
completely   implementable   using   the   ORDER_TYPE   field,   so   the
SVC_ORDER_CLASS_ID field is unnecessary for the calculation of OR-3-01, and the
Guidelines do not support the exclusion of such orders. If the CWG had intended for
such orders were to be excluded, DCI expects that this would have been clearly stated in
the Exclusions section.

As indicated earlier, null values in this field occurred for 550 orders received in April,
448 in May, and 489 in June. No rejected orders throughout the three months had a null
value in the SVC_ORDER_CLASS_ID field. These orders account for all but 15 (177 +
388 - 550) of the orders which were in DCI's denominator but not in Verizon PA's in
April, all but 7 of the May denominator discrepancies, and all but 59 of the June
denominator discrepancies.

As shown in the above tables, the net impact of Verizon PA's exclusion to the OR-3-01
metric results during the three months is to slightly overstate the percent of orders
rejected by about 0.7% for Resale orders, and by about 0.05% for UNE.

3.   There Are Other Small Unexplained OR-3 Metric Discrepancies

As detailed in the previous finding, an additional 15 orders in April, 7 in May, and 59 in
June are excluded by Verizon PA from the OR-3-01 denominators. Also, as indicated in
the above tables, Verizon PA excluded 4 rejects in April, 1 in May, and 11 in June from
the OR-3-01-3000 numerator. DCI did not research these further, as their impact to the
metric result is exceedingly minimal, and OR-3-01 is a diagnostic measure only.

4.   PA CMA algorithms Provided For OR-3-02 Were Incorrect (ER D-020)

The PA CMA algorithms provided for OR-3-02-2000 and OR-3-02-3000 were incorrect:

- They contained no clause restricting to EDI PONs.
- They contained no clause restricting to resubmissions.
- They contained no clause restricting the resubmissions to those at
  Verizon PA's request.
- They incorrectly restricted SVC_ORDER_CLASS_ID to a value of '0', which
  would allow only POTS, Prequalified Complex, and Local Number Portability
  (LNP) orders (including UNE-P)

- The numerator algorithms contained no clause excluding those orders rejected by Verizon PA's systems as being duplicative of EDI PONs already in Verizon PA systems

DCI does not see any way to identify (i) resubmissions, (ii) at Verizon PA's request, and (iii) Verizon PA system rejections as duplicative, using the information contained in the TB_ORDER_FACT data mart table.

Verizon PA reported NA (No Activity) for these metrics throughout April, May, and June 2003. The incorrect algorithms provided in the May PA CMA would have resulted in substantial numbers of orders for each of these metrics.

In its response to ER D-020, Verizon PA agreed that the algorithms provided for OR-3-02-2000 and OR-3-02-3000 were incorrect and indicates that the algorithms will be corrected in the next release of the CMAs. Verizon PA emphasized that this issue is not metric impacting, but a CMA documentation issue, and indicated that the reported performance results have reflected no activity in this metric for the past three months.

The June CMAs (provided at the end of September) still exhibit this problem. On October 10, Verizon PA provided an updated CMA algorithm for OR-3-02 and the TB_DM_OR_RESEND Fact Table Layout. However, Verizon PA has provided no data extract because "there were 0 observations for OR-3-02 for April, May and June data month, therefore no extract or schema details have been provided".

While the updated CMA algorithm for OR-3-02 provided on October 10, 2003 now correctly references the new TB_DM_OR_RESEND_FILING_MART table, it is still incorrect, in that the numerator box contains an algorithm apparently suitable for the OR-3-02 denominator, and the denominator box contains an algorithm apparently suitable for the OR-3-02 numerator.

It could be that it is only the CMA documentation which is incorrect in reversing numerator and denominator, and the actual code is correct. Alternatively, it may be that the CMA correctly documents code which is incorrect. As long as there is no data extract, it is impossible for DCI to determine which is the case. If the actual code itself is in error in reversing the numerator and denominator, then any data subject to the metric will always provide a passing result, even if all resubmissions were rejected, because the (incorrect) numerator will always be at least as large as the (incorrect) denominator. Verizon PA should make sure that the actual code is correct, and document it accordingly in a future release of the CMA. ©[17]

Mode Of Entry: **Product Description:** EDI

Metric: OR-3-02-2000: % LSR Resubmission Not Rejected

Standard: 95%

Numerator Description:

Total EDI PONs resubmitted at Verizon's request that are not rejected by Verizon's systems as duplicative of EDI PONs already in Verizon's systems.

Denominator Description:

Total number of EDI PONs resubmitted at Verizon's request.

Formula for CLEC: (Numerator 1 / Denominator 1) * 100

Domain-SubDomain: OR

Numerator 1   **Alias:** D1

```
create table ZZMD01 nologging as
select a11.STATE_CODE STATE_CODE,
 a11.CLEC_ID CLEC_ID,
 count(distinct a11.PURCHASE_ORDER_NUMBER) D1,
 count(distinct a11.PURCHASE_ORDER_NUMBER) D11
from TB_DM_OR_RESEND_FILING_MART a11
where (a11.REPORT_PERIOD||a11.FILING_DATE||a11.REPORT_TYPE
in ('20030607-08-2003M')
 and
to_char(a11.SATISFIED_DATE,'YYYYMM')=a11.REPORT_PERIOD)
group by a11.STATE_CODE,
 a11.CLEC_ID
```

Denominator 1   **Alias:** N1

```
create table ZZMD00 nologging as
select a11.STATE_CODE STATE_CODE,
 a11.CLEC_ID CLEC_ID,
 count(distinct a11.PURCHASE_ORDER_NUMBER) N1,
 count(distinct a11.PURCHASE_ORDER_NUMBER) N11
from TB_DM_OR_RESEND_FILING_MART a11
where (a11.REPORT_PERIOD||a11.FILING_DATE||a11.REPORT_TYPE
in ('20030607-08-2003M')
 and
to_char(a11.SATISFIED_DATE,'YYYYMM')=a11.REPORT_PERIOD
 and a11.REJECT_DATE is null)
group by a11.STATE_CODE,
 a11.CLEC_ID
```


OR-4 FINDINGS

1.   OR-4 record Selection Based On SOP_NOTIF_DATE (ER D-023 Response) Is Incorrect

Verizon PA selects records for inclusion in the monthly C2C reported OR-4 results based on their SOP_NOTIF_DATE being within the report month. However, the C2C Guidelines define the Denominators of the OR-4 metrics in terms of the number of EDI LSRs whose last service order has been updated as *provisioning complete* during the reporting month. Per the LSR Ordering Fact Table Layout, the SOP_COMPL_DATE is the date and time "the LAST order was completed in the SOP system", so records should instead be selected based on whether the SOP_COMPL_DATE is within the reporting month.

Verizon PA responded:

> "SOP_NOTIF_DATE is more appropriate than SOP_COMPL_DATE because the PCN creation date occurs immediately after the last service order associated with a LSR is completed and sent to Request Manager. PONS may include multiple service orders on them. A PON is not service order complete and ready for PCN until every service order on that PON completes. SOP is a task driven system and does not track the individual service orders associated with a LSR request. Rather, it is the Verizon PA gateway system (Request Manager) that

tracks such data. Using the SOP_NOTIF_DATE ensures that the full universe of orders to be evaluated in the current reporting period is included in the reported metric. Consequently, the base of orders evaluated in a reporting period will include orders SOP completed and PCN'd in the current month, as well as any orders that were SOP completed in a prior month but PCN'd in the current month."

Verizon PA's practice is reasonable, although not semantically in compliance with the Guidelines. If acceptable to the Carrier Working Group, the Guidelines should be updated to define the denominators in terms of the number of EDI LSRs whose SOP notification date is within the reporting month.

In the light of Verizon PA's responses, the above-quoted field description for SOP_COMPL_DATE in the LSR Ordering Fact Table Layout is misleading. It should clearly state that this is not necessarily the LAST order to complete for this PON, only the LAST order completed as of the time the reporting month's filing data mart was produced.

2. __Verizon PA Incorrectly Excludes EDI Ordering Records From The OR-4 Results If None Of Their Outbound Notifications (Confirmation, Reject, PCN, And BCN) Were Provided Via EDI (ER D-024).__

A small part of the discrepancies in the above tables are due to Verizon PA's practice of excluding EDI orders (from both numerator and denominator) if the outbound notification was not submitted via EDI. DCI did not see support for this practice in the C2C Guidelines and considered that such orders might be likely to have confirmations not on time because a manual process was being used, so this practice could lead to biased results. Requiring ORDER_ORIGIN to have a value of 'E' is sufficient to identify an order as an EDI order. During the discussion of Verizon PA's response to ERs D-024, D-025, and D-028, Verizon PA indicated that this filter was previously needed to distinguish Netlink/EDI orders from those orders received via the VAN EDI system, which is no longer used. Verizon PA responded that these orders are excluded at the request of the CLECs, because a non-electronic outbound notification is not the final notification. Ultimately an even later final electronic notification will be provided and that record will be included in the reported results. Verizon PA finds support for this practice in the Guidelines statement:

> "For EDI/NetLink orders, the notifier is considered sent when it is time-stamped after EDI translation and encryption, immediately prior to transmission to the CLEC."

If the intent of the Guidelines is to exclude such orders, then this should be stated clearly as an exclusion. Verizon PA pointed out that the differences in whether these orders are included or not are extremely minimal. DCI agrees; Verizon PA's practice is acceptable if a final outbound electronic notification will always be forthcoming and will be included in the results at that point, even if in a different month.

The following additional filter implements Verizon PA's practice:

```
and (   RECEIPT_SOURCE_TYPE = 'E'
        or CONF_SOURCE_TYPE = 'E'
        or RJCT_SOURCE_TYPE = 'E'
        or SOP_NOTIF_SOURCE_TYPE = 'E'
        or CRIS_NOTIF_SOURCE_TYPE = 'E'
                )
```

3. **Verizon PA's Use Of A Proxy For SOP Completion In Calculating The OR-4 Metrics Is Unreasonable In Certain Situations (ER D-001, ER D-039).**

DCI independently recalculated the fields Verizon PA uses to determine if they met the criteria of each of the OR-4 sub-metrics. In response to ER-D001, which objected to the ONTIME_SOP_COMPL field being populated when SOP_COMPL_DATE had no value, Verizon PA referred to their use of a proxy for this field in such situations as follows:

> "The calculation for the ONTIME_SOP_COMPL filed is provided on page 103 of the Ordering Detailed Design Document (tab 11 of the workshop material). Per change control 04153, if the SOP_COMPL_DATE is absent Verizon uses the WORK_COMPL_DATE. This is referenced as 'proxy' in the detailed design document. If the WORK_COMPL_DATE is greater than the RM_PCN_DATE or if the WORK_COMPL_DATE is more than 200 business days before the RM_PCN_DATE, then WORK_COMPL_DATE is invalid and indicative of a typographical error. In that case RM_PCN_DATE is used (pg. 102 of the detailed design)."

Lack of data in a field necessary to calculate a metric constitutes a legitimate reason to exclude records from the calculation of that metric's numerator and denominator. In such situations it would be appropriate to also include the number of such records excluded on the C2C report.

Verizon PA has opted for a different approach, constructing proxies for key fields when they are missing. This is usually also reasonable, provided (1) the proxy field provides useful information, as demonstrated by data analyses, (2) use of the proxy does not introduce bias into the metrics.

In this case, using WORK_COMPL_DATE as a proxy for SOP_COMPL_DATE when SOP_COMPL_DATE has no value, is reasonable under the conditions Verizon PA uses it, which is when WORK_COMPL_DATE has a "valid" value.

However, Verizon PA's use of RM_PCN_DATE as a second proxy used when SOP_COMPL_DATE has no value and WORK_COMPL_DATE has an "invalid" value violates at least the second of the two reasonability conditions DCI indicated in the previous paragraph. This is because starting the interval to the PCN from an instant before the PCN, rather than when the work was actually completed or the SOP was

updated with its completion, guarantees that such records with invalid WORK_COMPL_DATEs automatically have their PCNs considered On-Time, biasing OR-4-11 and OR-4-16 in Verizon PA's favor. It also shortens the time to BCNs, therefore also biasing OR-4-09 and OR-4-17 in Verizon PA's favor.

Verizon PA should exclude records that have neither a valid SOP_COMPL_DATE not a valid WORK_COMPL_DATE from the OR-4 metrics, and report the number of such records excluded in the C2C reports.

4. The Name And Description Of The Field ONTIME_SOP_COMPL (Used To Calculate OR-4-11) Are Incorrect And Misleading (ER A-001).

In the OR LSR Fact Table Layout, the Description for the ONTIME_SOP_COMPL states "Indicates if the SOP completion is On time." However, the field does not indicate anything about whether provisioning was completed on time. Verizon PA uses the ONTIME_SOP_COMPL field to determine if either a PCN or BCN has been sent within 2 days of provisioning completion. Values of "N" indicate that a notifier was supplied on time; values of "Y" indicate that the notifiers were supplied late. To clearly describe its contents and function, the field should be named something like LATE_COMPL_NOTIF. Its Description in the Fact Table Layout should be changed to something like "Indicates if both PCN and BCN were supplied Late". Code and documentation referencing this field should also be changed accordingly.

5. The OR Fact Table Layout Comments For The Field ONTIME_SOP_COMPL (used to calculate OR-4-11 in the April/May 2003 CMA) Indicated Interpretation Of Values Inconsistent With The C2C Guidelines (ER D-001).

The original OR LSR Fact Table Layout (Workshop Tab 14a) provides the following interpretations for the different possible values of the ONTIME_SOP_COMPL field:

> This indicator is used to calculate the OR-4-11 metric.
> Valid values:
>   Y = No PCN or a BCN within 3 days of SOP completion
>   N = With a PCN or a BCN within 3 days of SOP completion.
>   Blank -- >> Default

However, the C2C Guidelines state:

> "If no PCN and no BCN have been sent in two (2) business days after *provisioning completion*, the order will be captured here in this measure."

Verizon PA's response to ER D-001 indicated that "the ONTIME_SOP_COMPL description in the TB_ORDER_FACT document provided during the workshop included only NJ criteria and has been updated to reflect the complete VZ East logic."

DCI has verified that the current Fact Table Layout (v0306) has this correction:

> Y = No PCN or a BCN within 3 days of SOP completion in NJ or 2 days for all other VZ east.
> N = With a PCN or a BCN within 3 days of SOP completion in NJ or 2 days for all other VZ east.
> Blank -- >> Default

so this documentation issue is now closed.

6. Disaggregation Of OR-4-09 Into Resale And UNE Is Not Implied By C2C Guidelines (ER D-022).

The C2C Guidelines do not specify disaggregation into Resale and UNE modes of entry for any of the OR-4 submetrics. Verizon PA correctly reports OR-4-11, OR-4-16, and OR-4-17 as combined Resale / UNE results. However, Verizon PA reports OR-4-09 disaggregated into Resale and UNE.

Verizon PA's response to ER D-022 indicated that the reason for reporting disaggregated results for OR-4-09 is to support both the PA PAP-required separate OR-4-09 Resale and UNE Critical Measures 95% criteria and the PA PAP-required combined OR-4-09 Resale/UNE Special Provisions 90% criteria. "To correspond and support the level of disaggregation in the PA PAP reports, the C2C's also provided the UNE and Resale disaggregation. In addition, reporting in this manner, provided the PA Commission with the components to caculate the combination."

Verizon PA's explanation is satisfactory; however the Guidelines should have incorporated the Resale / UNE disaggregation. It is now too late for that, as beginning with June, OR-4-09 was removed from both the C2C and PA PAP reporting.

7. Verizon PA Overcounts Late PCNs And BCNs In OR-4-16 And OR-4-17 (ER D-028).

DCI's ER D-028 stated:

> "Verizon's PA CMA numerator and denominator algorithms and code for OR-4-17 are inconsistent with each other, causing Verizon's performance to appear much worse than it actually is.

> The denominator considers EDI orders as eligible with the additional (undocumented) condition that at least one of the Confirmation, Rejection, Receipt, BCN, or PCN must have come via EDI.

> The numerator additionally requires that the BCN have been provided via EDI. (also undocumented). This excludes many more orders which were not excluded in the denominator, invalidating the metric result.

> The number of ontime orders incorrectly eliminated from the numerator in this manner is:

> 787 in April, 1381 in May, and 1895 in June.
> This causes Verizon's results to be understated by 1.1% in April, 2.6% in May, and 2.9% in June.

Supplement 9/15/03: The same issue applies to OR-4-16 in that the CMA numerator requires that the PCN have been provided via EDI. The impact however is much smaller than the impact described above to OR-4-17, affecting no more than 4 orders in the OR-4-16 numerator during each of April May and June.**"**

Verizon PA responded:

"Verizon disagrees with this exception.

In the definition the C2C guideline documentation states, "the notifier is considered sent when it is time stamped after EDI translation and encryption, immediately prior to transmission to the CLEC".

For metrics OR-4-16 PCN timeliness and OR- 4-17 BCN timeliness, the numerator should only contain orders that show the PCN or BCN have been sent out via Netlink/ EDI. If the field is blank, this is an indication that the notifier was not yet sent and the order should not be included in the numerator.

Verizon requests DCI provide the orders identified in their analysis as being incorrectly excluded."

In an ER review call discussing ER D-028, DCI and Verizon PA came to a consensus that not counting these records in the numerator while counting them in the denominator effectively counts them as late notifications. This is reasonable. However, when the anticipated Netlink/EDI-transmitted PCN or BCN eventualy shows up, (even in a later month if there is a PCN in that month) the order will be counted as having late notifications again. Such double-counting renders OR-4-16 and OR-4-17 biased in the direction of indicating performance worse than actually provided.

8.   Except For The Above Issues, Verizon PA Correctly Calculates The OR-4 Metrics.

The above issues explain all of the discrepancies in the DCI – VZ C2C calculation comparison tables above.

OR-5 FINDINGS

1.   The ACE Process Substantially Reduces The OR-5-03 Denominators

Of 389 April Resale orders whose INITIAL_FLOWTHRU_IND was "Y" and failed to flow through, the ACE process determined that 264 (68%) were not actually flow through eligible. This raised OR-5-03-2000 from a failing 88.6% to a passing 96.03%. Of 4036 April UNE orders whose INITIAL_FLOWTHRU_IND was "Y" and failed to flow through, the ACE process determined that 1552 (38%) were not actually flow through eligible.

It is therefore important to review the ACE process and flowthru eligibility determinations. DCI did not have time to do this during the scope of the review because of the late date that the ACE data was supplied (October 23).

2. From The Data In The Flowthru Data Mart, Verizon PA Correctly Calculates The OR-5 Results.

In May and June, DCI and Verizon PA both used the Flowthru Data Mart to calculate the OR-5 metrics. The results are nearly identical. The only discrepancy is that Verizon PA counted one more UNE flowthru order in May than DCI. DCI did not research the reason for this minimal difference.

OR-6 FINDINGS

1. Verizon PA Correctly Calculates The OR-6-03 Results.

The DCI independently calculated results and the Verizon PA reported C2C results are completely identical in all OR-6-03 disaggregations. Verizon PA calculates this metric correctly.

OR-7 FINDINGS

1. Verizon PA Correctly Calculates The OR-7 Results.

The DCI independently calculated results and the Verizon PA reported C2C results are completely identical in all OR-7 disaggregations. Verizon PA calculates this metric correctly.

2. The PA CMA Contains Undocumented Exclusions For The OR-7 Numerator And Denominator. Numerator And Denominator Algorithms Are Inconsistent With Each Other. (ER D-026)

Verizon PA's PA CMA numerator and denominator algorithms and code for OR-7 are incorrect and inconsistent with each other.

The denominator considers orders as eligible with the additional (undocumented) conditions that the order must have been submitted via EDI and that at least one of the Confirmation, Rejection, Receipt, BCN, or PCN must have come via EDI.

The numerator also incorrectly requires that the order has been submitted via EDI, but additionally requires that either the confirmation or the rejection has been provided via EDI (also undocumented). This excludes many more orders which were not excluded in the denominator, invalidating any metric result produced from such an algorithm.

DCI notes that per the guidelines, neither does the LSR need to have been received via EDI, nor do any transmissions provided by Verizon PA need to have been provided via EDI, for the LSR to be eligible for OR-7.

However, Verizon PA is not using these incorrect and inconsistent algorithms, as is evidenced from the fact that Verizon PA's reported results match perfectly with DCI's independently calculated results for each of the three product disaggregations (Resale, UNE, Platform) during each of the three months April, May, and June 2003. Although Verizon PA and DCI results matched, DCI's code did not include any requirement that an LSR be submitted via EDI, or that any subsequent Verizon PA transmissions provided via EDI.

Verizon PA responded to ER D-026 as follows:

> "Verizon disagrees with this exception.
>
> During the April and May report months, Verizon published the PA C2C reports in a dual reporting mode, both under the old PA Guidelines and the revised NY based PA Guidelines.   Under the old PA Guidelines, the EDI component filter were required for metric OR 7. As referenced in the draft May CMA, data for this filter was identified with the state prefix of "PA". Under the revised NY based PA Guidelines, metric data for Pennsylvania were processed with an identifier prefix of "PN", thereby bypassing the section of CMA code associated with EDI eligibility statements."

DCI is satisfied with Verizon PA's explanation insofar as the correctness of the results and the algorithms for the revised NY based PA Guidelines.

3.   The LSR Order Fact Table Layout Insufficiently Documents The Values Of The CONF_TYPE Field. (ER D-026)

Verizon PA's Ordering workshop documentation describing the CONF_TYPE field in the TB_ORDER_FACT table layout indicates only that the value 'Z' means a Supplement, and that "Other values are provided by RM" (Request Manager). DCI found the following other values for the conf_type field in the data: 'C', 'I', 'J', 'S' and 'N'. Their interpretations and relationships to the exclusions specified by the C2C Guidelines are not adequately documented.

Verizon PA responded to this part of ER D-026 with:

> "Verizon disagrees with this exception.
>
> Verizon provided documentation during the Ordering workshop that detailed the CONF_TYPE field in the TB_ORDER_FACT table, for which "supplements" is the only appropriate exclusion for metric OR-

7.   As stated in the documentation, Request Manager passes on additional values.   These additional values have no impact on this metric. Value "C" is a firm order confirmation. Value "I" refers to Line Identification Database (LIDB) orders only. Value "N" indicates notice of cancellation, whereby Verizon has cancelled an order per the CLECs request. Value "S" indicates communication of a Verizon initiated cancellation of a PON. Value "J" indicates communication that the order is in jeopardy.

In addition, Verizon provided detailed information about fields including conf_type field on the Verizon business rules documents which were supplied to DCI and is publicly available on the Verizon Wholesale website - http://www22.verizon.com/wholesale/clecsupport/content/1,16835,east-business_rules-business_rules,00.html.   The definitions for the confirmation types described above are also included in the business rules.

The Verizon East Order Business Rule document provides a comprehensive explanation of all the fields necessary to submit a transaction to the Verizon OSS systems-   http://www.verizon.com/wholesale/clecsupport/east/business_rules/downloads/next_draft/vz-e_lsog5_ord_br_5.4.pdf"

In an exception review call discussing this ER, DCI pointed out that values "N" and "S" are part of the exclusions for this metric. Verizon PA then agreed to include them in a future release of the Fact Table Layout. This is acceptable, but documenting all values would be even more helpful, since it would facilitate future system maintenance and review.

OR-8 FINDINGS

1.   Verizon PA Correctly Calculates The OR-8 Results.

The DCI independently calculated results and the Verizon PA reported C2C results are completely identical in all OR-8 disaggregations. Verizon PA calculates this metric correctly.

OR-9 FINDINGS

1.   Verizon PA Correctly Calculates The OR-9 Results.

The DCI independently calculated results and the Verizon PA reported C2C results are completely identical in all OR-9 disaggregations. Verizon PA calculates this metric correctly.

OR-10 FINDINGS

1. **Based on the data that Verizon provided, DCI consultants could not duplicate the results published for the month of June in the C2C Report.**

DCI duplicated Verizon PA's calculations to the extent possible with the information given by Verizon and performed the same Structured Query Lanaguage (SQL) queries against the database as Verizon PA specified in the documentation.   Doing so should have yielded the same results as Verizon reported, but in fact it did not. The following table presents a summary of the results of the analysis for June 2003.[18]

Table B-51

	DCI Results	Verizon Results
OR-10-01	82.017%	47.39%
OR-10-02	96.350%	81.84%

A review of the results clearly demonstrates a large discrepancy between the two data sets, especially in regard to OR-10-01. Further analysis by DCI was able to verify the Verizon PA denominator, but DCI was unable to verify the Verizon PA numerator.

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[18]   Information Request B-063 and supplemental

D – RECOMMENDATIONS

1. <u>**Verizon Should Review Its Calculation Of The OR-10-01 And OR-10-02 Metric Results For June 2003 To Determine The Reason For The Discrepancy With The Results Calculated By DCI (Refer to Finding 1, OR-1).**</u>

As DCI was unable to duplicate the results presented in the June in the C2C Report, Verizon PA should review the accuracy of its data and calculations to determine if final results are accurate.[19]

Note: This Appendix has presented detailed findings which support and amplify on findings in Chapters IV – Measurement Calcuations, and V – Measurement Calculation Results.   Potential recommendations, other than the one listed above, are subsumed in Recommendations located in either or both of those chapters.

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[19] This is an open item as of 11/14/03 as ER-B-009.

APPENDIX C – PROVISIONING METRICS

APPENDIX C – PROVISIONING METRICS

A - INTRODUCTION

OVERVIEW

In its performance metrics on the Provisioning Domain, Verizon PA measures and reports its performance on:

- Average Interval Offered (PR-1)
- Rate of:

    – Installation-related Troubles per lines / circuits / trunks installed (PR-6)
    – Open orders in a Hold Status per orders completed (PR-8)

- Percent of

    – Service Orders Completed within Specified Number of Days (PR-3)
    – Missed Appointments (PR-4)
    – Facility Missed Orders (PR-5)
    – Unbundled Network Element (UNE) Hot Cut Loops completed On Time (PR-9)

DATA MART TABLES

The Provisioning metrics results are calculated from the data contained in the following three data mart tables:

- TB_PRV_DM_SVC_ORD_FACT (Local Service Requests (LSRs): all PR metrics except PR-9)
- TB_PRV_DM_FILING_MART (Automated Service Request (ASRs): all PR metrics except PR-9)
- TB_PRV_DM_LNP_FILING_MART (UNE Hot Cut Loops: PR-9)

PROVISIONING LSR DATA MART

Service order provisioning records for Competitive Local Exchange Carrier (CLEC) orders submitted via LSRs and for all Retail orders are stored in the Provisioning LSR Data Mart.

Global Exclusions

Any of the following conditions will cause a record in the Provisioning LSR Data Mart to be excluded from all the Carrier-to-Carrier (C2C) Provisioning metrics results:

- A value other than '55B' (Completed) in the STATUS field, except that a value of 'CAN' (Cancelled) is also allowed for PR-1.
- A value other than "N" in the GLOBAL_EXCLUSION field
- A value other than "N" in the TEST_SELLER_IND field.
- A value other than "N" in the EXCLUSION_IND field
- The Related Order Number starts with a 'S' and the SALE_CODE field starts with either '915T' or '916T' (Retail Suspend for NonPayment and Associated Restore Orders)
- A value other than 'N' in the C2C_PROJECT_IND field..

The Status field is restricted to '55B' or 'CAN' in the extracts supplied to DCI, and no records were found matching the above Retail Suspend for NonPayment and Associated Restore condition. The following table lists the frequency of all provisioning LSR data mart records globally excluded due to the other exclusions:

Table C-1 – Globally Excluded LSR Provisioning records

	April	May	June
Total records	748339 (100.00%)	703070 (100.00%)	705358 (100.00%)
Cancelled (count in PR-1 only)	22448 (3.00%)	23008 (3.27%)	24940 (3.54%)
Global_exclusion='Y'	37008 (4.95%)	39060 (5.56%)	39860 (5.65%)
Test_Seller_Ind='Y'	19 (0.00%)	10 (0.00%)	15 (0.00%)
Exclusion_Ind='Y'	185670 (24.81%)	165403 (23.53%)	142894 (20.26%)
C2c_project_ind='RPL'	71 (0.01%)	146 (0.02%)	120 (0.02%)
C2c_project_ind='RSL'	48 (0.01%)	147 (0.02%)	66 (0.01%)
C2c_project_ind='UNE'	331 (0.04%)	319 (0.05%)	376 (0.05%)
C2c_project_ind='UPF'	5 (0.00%)	1 (0.00%)	0 (0.00%)

Most of the global exclusions in the above table result from the EXCLUSION_IND field. It is derived by determining if any of the following conditions apply:

- CLEC order with no value in the PURCHASE_ORDER_NUMBER field
- 'Y' value in the SNPRES_IND (Suspend for No Payment and associated Restore) field
- Any value other than 'N' in the ADMIN_IND (Administrative Indicator) field.
- CLEC order whose Local Service Request Number (LSRN) field starts with 'ZZ'

Table C-2 – Globally Excluded POTS Troubles

	April	May	June
Exclusion_Ind='Y'	185670 (100.00%)	165403 (100.00%)	142894 (100.00%)
CLEC order, empty PON	2709 (1.46%)	2215 (1.34%)	1765 (1.24%)
Suspend for NoPay, Restore	142443 (76.72%)	154765 (93.57%)	138878 (97.19%)
Administrative Order	0 (0.00%)	0 (0.00%)	1 (0.00%)
CLEC LSR # beginning with 'ZZ'	40513 (21.82%)	8407 (5.08%)	2247 (1.57%)
Other	5 (0.00%)	16 (0.01%)	3 (0.00%)

Product Disaggregations

The following table indicates how product disaggregations are determined from several key fields of the LSR Provisioning Data Mart. Note that provisioning data for all Resale and Retail Specials is contained in the LSR Provisioning Data Mart, whereas all UNE Specials provisioning data is contained in the ASR Provisioning Data Mart, although its retail comparative results are determined from the LSR Provisioning Data Mart.

Table C-3 – LSR and ASR Provisioning Product Disaggregations

Product Code	Description	Mode Of Entry	Provider	RBC FI	C2C Service Ind	Complexity Ind	Product Ind	dS Level Ind	PR Vadi Ind	Hot Cut Ind	Loop Ind
2100	Resale POTS	Resale / Retail	R / 1	R,B	P	S				N	
2110	Resale POTS Business	Resale / Retail	R / 1	B	P	S				N	
2120	Resale POTS Residence	Resale / Retail	R / 1	R	P	S				N	
2200	Resale Specials	Resale / Retail	R / 1		S					N	
2210	Resale Specials DS0	Resale / Retail	R / 1		S				0	N	
2211	Resale Specials DS1	Resale / Retail	R / 1		S				1	N	
2213	Resale Specials DS3	Resale / Retail	R / 1		S				3	N	
2214	Resale Specials Other	Resale / Retail	R / 1		S				null	N	
2341	Resale 2-wire Digital Services	Resale / Retail	R / 1	R,B				3		N	
3100	UNE POTS - Total	UNE / Retail	U / 1	R,B	P	S				N	
3111	UNE Hot Cut loop No Disp	UNE / Retail	U / 1	R,B	P	S				N	Y
3112	UNE POTS Loop - Total	UNE / Retail	U / 1	R,B	P	S				N	N	1
3113	UNE POTS Loop New, Disp	UNE / Retail	U / 1	R,B	P	S				N	N	1
3140	UNE POTS Platform	UNE / Retail	U / 1	R,B	P	S	5			N	N
3200	UNE Specials	UNE / Retail	U / 1		S					N	
3210	UNE Specials DS0	UNE / Retail	U / 1		S				0	N	
3211	UNE Specials DS1	UNE / Retail	U / 1		S				1	N	

Table C-3 – LSR and ASR Provisioning Product Disaggregations - (Continued)

Product Code	Description	Mode Of Entry	Provider	RBC Fl	C2C Service Ind	Complexity Ind	Product Ind	dS Level Ind	PR Vadi Ind	Hot Cut Ind	Loop Ind
3213	UNE Specials DS3	UNE Retail	U 1		S			3	N		
3214	UNE Specials Other	UNE Retail	U 1		S			null	N		
3341	UNE 2-wire Digital Svcs	UNE Retail	U 1	R,B	P		3		N		
3342	UNE 2-wire xDSL Loops	UNE Retail	U 1	R,B			2		N		
3343	UNE 2w xDSL Line Sharing	UNE Retail	1 1	R,B			1		N Y		
3345	UNE 2w xDSL LineSplitting	UNE Retail	U 1	R,B			4 1		N Y		
3510	UNE Specials -EEL	UNE Retail	U 1		S		6,7	1	N		
3520	UNE POTS Hot Cut Loop	UNE	U	R,B	P	S			N	Y	1
3530	UNE Specials IOF	UNE Retail	U 1		S		8	3	N		

Certain metrics exclude orders where the customer requested an interval longer than the standard offered interval. For resale and retail orders, this is accomplished by restricting the ORG_APPT_CODE (Original Appointment Code) field to the values 'S' (customer requested an interval shorter than standard interval) or 'W' (customer accepted the standard interval). For several UNE Loop product disaggregations, the standard interval is a constant, and the exclusion is accomplished by restricting a derived field (eg. TWO_WIRE_INTV) to a value of 1. This denotes orders whose PON_APPINTV is less than or equal to the constant standard interval for that product (e.g. 6 days). Retail comparatives based on Appointment Coding exclusions are inappropriate for UNE loop products whose exclusions were based on a constant standard interval – See Findings below.

Three issues regarding the LSR Provisioning Data Mart necessitated that DCI perform some initial pre-processing of this data mart before using it to obtain metric results. These issues were:

- Cancelled orders whose REPORT_PERIOD field was unpopulated were inadvertently omitted from the LSR Provisioning data extract Verizon PA provided to DCI. These were supplied in a separate extract later, and DCI needed to incorporate these into the LSR Provisioning Data Mart.
- Unlike in other domains such as Ordering and Network Performance, in Provisioning and Maintenance Verizon PA distinguishes between its handling of Affiliates data (aka VADI) and DSNO data (aka VADI). In Provisioning (and Maintenance), Verizon PA

uses the C2C_VADI_IND field to identify affiliates data only, and identifies DSNO providers by using a list of CLEC_ID's. For ease of coding, DCI identified these DSNO providers using the (DCI-defined) PR_VADI_IND field.

- DCI implemented the logic used to obtain the PR-4-02 numerators as a separate field, for ease of coding in its macro invocations.

Below is the SAS[1] code DCI used to pre-process the LSR provisioning data mart:

```
data report_period_nulls;
     set pa.pr_dm_svc_ord_2003040506;

                /* Select only those records representing Cancelled Orders
                whose SOP completion date is within the report month: */
     if status='CAN'
  and put(datepart(socd_date_val),yymmn6.) eq "&report_month";

                /* Select only the copy of the record filed with the report
                month's FILING FACT TABLE: */
     if put(datepart(filing_date),yymmn6.)
     eq "%trim(%left(%eval(&report_month+1)))";

                /* Populate the (previously blank) REPORT_PERIOD with the
                current report month so the code will operate appropriately
                on these records: */
     report_period=&report_month;

                /* Create a new copy of the data mart file: */
data pa.pr_dm_svc_ordv_&report_month;

                /* which combines the original Verizon data feed and the
                report period nulls relevant to this month as determined
                above: */
     set pa.pr_dm_svc_ord_&report_month
               report_period_nulls;

                /* Identify DSNO providers by defining PR_VADI_IND: */
     if clec_id in( 'BNK','BAND','BANK','VADI','BAN'
                          ,'1915','2125','2132','2470','4316'
                          ,'4325','VAD','VDG','4318','OUT')
       then pr_vadi_ind = 'Y';
       else pr_vadi_ind = 'N';

                /* Derive the PR-4-02 numerators: */
     if cmpintv - appintv = 0
       then pr_4_02_num = comp_mac_dy_cnt;
       else pr_4_02_num = least_delay_days;
```

PROVISIONING ASR DATA MART

Service order provisioning records for CLEC orders submitted via ASRs are stored in the Provisioning ASR Data Mart.

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[1] Original Definition was Statistical Analysis System. The term has since migrated to a noun with no specific meaning.

Global Exclusions

Any of the following conditions will cause a record in the Provisioning ASR Data Mart to be excluded from all the C2C Provisioning metrics results:
- A value other than 'C' (Completed) in the PRV_STAT field for Trunk orders or in the ORD_STAT field for all other Specials orders, except that a value of 'K' (Cancelled) is also allowed for PR-1 and PR-5-04.
- A value other than "C2C" in the REP_TYP (Report Type) field
- A value other than "BA" in the FBA_FGTE_IND field.
- A value other than "N" in the EXCL_IND field
- A value other than 'C' (Change) or 'N' (New) in the ACTV_TYP (Activity Type) field, except for PR-1-12 which excludes everything except 'D' (Disconnect) values.

All records provided in the extracts supplied to DCI had "C2C" in the REP_TYP field and "BA" in the FBA_FGTE_IND field. The following table lists the frequency of all provisioning ASR data mart records globally excluded due to the other exclusions:

Table C-4 – Globally Excluded ASR Provisioning Records

	April	May	June
Total records	58047(100.00%)	41910(100.00%)	35101(100.00%)
Pending (mostly Trunks)	257 (0.44%)	84 (0.20%)	320 (0.91%)
Cancelled (count in PR-1 only) (DS1 & EEL)	86 (0.15%)	87 (0.21%)	98 (0.28%)
Excl_Ind='Y' (Test Accts)	19 (0.03%)	8 (0.02%)	12 (0.03%)
Excl_Ind='A' (VZ Affiliates)	2487 (4.28%)	3628 (8.66%)	840 (2.39%)
Actv_Typ='D' (count in PR-1-12 only)	24189 (41.67%)	17212 (41.07%)	18111 (51.60%)
Actv_Typ='R'	2 (0.01%)	2 (0.00%)	2 (0.01%)
Actv_Typ='T'	0 (0.00%)	3 (0.01%)	1 (0.00%)
Actv_Typ=' '	0 (0.00%)	1 (0.00%)	0 (0.00%)

Product Disaggregations

The following table indicates how product disaggregations are determined from several key fields of the ASR Provisioning Data Mart. Note that provisioning data for all Resale and Retail Specials is contained in the LSR Provisioning Data Mart, whereas all UNE Specials provisioning data is contained in the ASR Provisioning Data Mart, although its retail comparative results are determined from the LSR Provisioning Data Mart.

Table Table C-5 – ASR Provisioning Product Disaggregations

Product Code	Description	Mode Of Entry	Product Type	Sub-Product Type	Trunk Service Type	Complex Type	Order Qty.	ForeCast Ind	Projected Num
3200	UNE Specials	UNE	DS0, DS1, DS3, OTH						
3210	UNE Specials DS0	UNE	DS0						
3211	UNE Specials DS1	UNE	DS1						
3213	UNE Specials DS3	UNE	DS3						
3214	UNE Specials Other	UNE	OTH						
3510	UNE Specials -EEL	UNE	EEL						
3511	UNE Specials EEL Backbone	UNE	EEL	BB					
3512	UNE Specials EEL Loop	UNE	EEL	LP, D0					
3530	UNE Specials IOF	UNE	IOF						
5000	UNE Trunks	UNE	TR		T	(For PR-4 only, also include Trnk_serv_typ=R (reciprocal trunks) in CLEC results)			
5020	UNE Trunks Forecasted	Retail UNE Retail	TR		I,W T I,W	A	<= 192	Y	N or null
5030	UNE Trunks Non-Forecasted	UNE Retail	TR		T I,W	not A, > 192, N, or not N or null			

B – SPECIFIC METRICS

PR-1: AVERAGE INTERVAL OFFERED

Definition

This metric measures the average interval offered (in business days) for completed and cancelled orders.

LSR Orders: From the LSR Provisioning Data Mart, those records which are not globally excluded and meet the criteria for a reportable sub-metric (see below) and product disaggregation (see the product code table at the end of the LSR Provisioning Data Mart section above), will be counted to obtain the PR-1 denominators. The value of the APPINTV field is summed up for all these records within each disaggregation to obtain the PR-1 numerators.

ASR Orders: From the ASR Provisioning Data Mart, those records which are not globally excluded and meet the criteria for a reportable sub-metric (see below) and product disaggregation (see the product code table at the end of the ASR Provisioning Data Mart section above), will be counted to obtain the PR-1 denominators. The value of the OBJ_INTV field is summed up for all these records within each disaggregation to obtain the PR-1 numerators.

Sub-Metrics

The following table indicates the number of provisioning records which were not globally excluded and are potentially relevant to the PR-1 submetrics, prior to product and provider disaggregation:

Table C-6 – PR-1 SubMetric Eligibility – April 2003

PR-1 Submetric	Dispatch (LSRs)	Number of Lines (LSRs)	Specials & Trunks Product Types	CLEC Resale	CLEC UNE	Verizon Retail
PR-1-01	No Dispatch			2016	72234	335376
PR-1-02	Dispatch			367	2825	29635
PR-1-03	Dispatch	1-5		343	2436	24113
PR-1-04	Dispatch	6-9		4	91	267
PR-1-05	Dispatch	≥10		2	43	232
PR-1-06			DS0	18	46	287
PR-1-07			DS1	2	2	107
					142	
PR-1-08			DS3			
					1	
PR-1-09			IOF, EEL, TR		80	12
					4935	11806
PR-1-12 (Disconnects)	All	All		2003	11611	55111
			DS0, DS1,	39	28	739
			DS3, OTH		94	

Table C-7 – PR-1 SubMetric Eligibility – May 2003

PR-1 Submetric	Dispatch (LSRs)	Number of Lines (LSRs)	Specials & Trunks Product Types	CLEC Resale	CLEC UNE	Verizon Retail
PR-1-01	No Dispatch			1642	53174	316284
PR-1-02	Dispatch			395	2880	30086
PR-1-03	Dispatch	1-5		359	2493	23766
PR-1-04	Dispatch	6-9		4	94	264
PR-1-05	Dispatch	≥10		2	42	241
PR-1-06			DS0	16	47	316
PR-1-07			DS1	2	0	113
					179	
PR-1-08			DS3		1	
PR-1-09			IOF, EEL, TR		93	10
					2817	8531
PR-1-12 (Disconnects)	All	All		3667	11698	63028
			DS0, DS1, DS3, OTH	33	22	557
					79	

Table C-8 – PR-1 SubMetric Eligibility – June 2003

PR-1 Submetric	Dispatch (LSRs)	Number of Lines (LSRs)	Specials & Trunks Product Types	CLEC Resale	CLEC UNE	Verizon Retail
PR-1-01	No Dispatch			1916	59600	338884
PR-1-02	Dispatch			349	2904	29008
PR-1-03	Dispatch	1-5		327	2541	23669
PR-1-04	Dispatch	6-9		7	79	265
PR-1-05	Dispatch	≥10		6	46	196
PR-1-06			DS0	13	17	231
PR-1-07			DS1	2		95
					194	
PR-1-08			DS3			2
					2	
PR-1-09			IOF, EEL, TR		82	4
					4266	3953
PR-1-12 (Disconnects)	All	All		1617	13285	59830
			DS0, DS1, DS3, OTH	29	20	669
					112	

DCI Recalculation Process

DCI developed an SAS macro to calculate metric results based on a clear specification of the metrics definitions. DCI then implemented the information described in the pages immediately

above into three SAS macro invocations, one for LSR Disconnects (PR-1-12), one for all other LSR PR-1 submetrics, and one for ASRs. DCI then pooled these results to obtain its metric numerators, denominators, and results. Using these values, DCI calculated its own statistical scores to determine compliance. DCI also automatically extracted Verizon PA's C2C report results to obtain Verizon PA's calculated numerators[2], denominators, results, and statistical scores. DCI's recalculation program then combines and compares DCI's results and Verizon PA's C2C reported results in an Excel spreadsheet.

DCI presents below the three SAS macro invocations which are completely sufficient to calculate all the PR-1 results. The first of these calculates the PR-1 results for Disconnects ordered via LSRs:

```
%pm_pr(   tbl=pr_dm_svc_ordv, yearmm=&report_month, metric=PR-1
               , glblcond=status in('55B','CAN')
                                    and global_exclusion eq 'N'
                                    and test_seller_ind eq 'N'
                                    and exclusion_ind eq 'N'
                                    and report_period eq &report_month
                                    and 0 le appintv le 200
                                    and not(substr(ron,1,1) eq 'S' and substr(sale_code,1,4)
in('915T','916T'))
               , submetrics=12, sbpm_typ=Interval, eligvars=PR_1_12_elig, valuvars=appintv
               , eligcond= rbc_fl in('R','B') and pr_vadi_ind eq 'N' and org_appt_code ne 'Y'
                               and c2c_vadi_ind eq 'N'
               , eligcmpr= rbc_fl in('R','B') and org_appt_code ne 'Y'
               , sm_catgs= 2103:2200:3133:3200
               , sm_conds=(  svc_order_type in('D','F')
                                    or c_disconnect eq 'Y' and appintv le 2 and
not(org_appt_code in('X'))
                               ) and provider eq 'R' and (product_ind in('2','3') or
c2c_service_ind eq 'P')
                               :(  svc_order_type in('D','F')
                                    or c_disconnect eq 'Y' and not(org_appt_code
in('X'))
                               ) and provider eq 'R' and c2c_service_ind eq 'S'
                               :(  svc_order_type in('D','F')
                                    or c_disconnect eq 'Y' and appintv le 2 and
not(org_appt_code in('X'))
                               ) and provider eq 'U' and c2c_service_ind eq 'P'
                               :(  svc_order_type in('D','F')
                                    or c_disconnect eq 'Y' and not(org_appt_code
in('X'))
                               ) and provider eq 'U' and product_ind in('6','7','8')
               , sm_cmprs= (  svc_order_type in('D','F')
                                    or c_disconnect eq 'Y' and appintv le 2 and
not(org_appt_code in('X'))
                               ) and        PROVIDER eq '1'      and   C2C_VADI_IND   eq
'N'
                                    and (  PRODUCT_IND in ('2','3') or C2C_SERVICE_IND
eq 'P' )
                                    or     (      C2C_VADI_IND eq 'Y' and PRODUCT_IND
in('1','2')    )
                               :(  svc_order_type in('D','F')
                                    or c_disconnect eq 'Y' and not(org_appt_code
in('X'))
                               ) and provider eq '1' and c2c_service_ind eq 'S'
                               :(  svc_order_type in('D','F')
```

---

[2] Verizon PA does not provide numerators on the C2C Guideline reports. DCI back-calculated what Verizon PA's numerators would have been based on Verizon PA's reported C2C Guideline results and denominators. DCI's analysis determined that Verizon PA truncates all its results and standard deviations at 5 decimal places, (before dividing by 100% to obtain percentage results), rather than rounding them. DCI therefore added .000005 to Verizon PA's non-percentage results and .0005 to Verizon PA's percentage results before multiplying them by the denominator, then rounded the product to the nearest integer to obtain DCI's estimate of the numerator Verizon PA used in its calculations. This procedure is guaranteed to obtain the exact numerator used by Verizon PA when the denominator is 10000 or less. When the denominator is over 10000, this procedure will provide the best possible approximation available given the C2C Guideline reports, but may be slightly different from the actual numerator used by Verizon PA.

```
                                                    or  c_disconnect  eq  'Y'  and  appintv  le  2     and
not(org_appt_code in('X'))            ) and    PROVIDER eq '1'    and C2C_VADI_IND eq 'N'
                                              and (  PRODUCT_IND in ('2','3') or C2C_SERVICE_IND
eq 'P' )                                       or    (       C2C_VADI_IND  eq  'Y'  and  PRODUCT_IND
in('1','2')    )                      :(  svc_order_type in('D','F')
                                              or  c_disconnect  eq  'Y'  and  not(org_appt_code
in('X'))                              ) and provider eq '1' and c2c_service_ind eq 'S'
            )
```

The second DCI SAS macro invocation calculates the PR-1 results for all LSR orders other than Disconnects:

```
%pm_pr(   tbl=pr_dm_svc_ordv, yearmm=&report_month, metric=PR-1
                , glblcond=status in('55B','CAN')
                                    and global_exclusion eq 'N'
                                    and test_seller_ind eq 'N'
                                    and exclusion_ind eq 'N'
                                    and report_period eq &report_month

                                    and 0 le appintv le 200
                                    and c2c_project_ind eq 'N'
                                    and not(substr(ron,1,1) eq 'S' and substr(sale_code,1,4) in('915T','916T'))
                , submetrics=01 02 03 04 05 06 07 08 09
                , sbpm_typ=Interval Interval Interval Interval Interval
                                    Interval Interval Interval Interval
                , eligvars=PR_1_01_elig PR_1_02_elig PR_1_03_elig PR_1_04_elig PR_1_05_elig
                                    PR_1_06_elig PR_1_07_elig PR_1_08_elig PR_1_09_elig
                , valuvars=appintv appintv appintv appintv appintv appintv appintv appintv appintv
                , eligcond= dispatch_ind eq 'N'
                                    :dispatch_ind eq 'Y'
                                    :c2c_vadi_ind eq 'N' and dispatch_ind eq 'Y' and org_appt_code in('S','W')
                                            and  c2c_service_ind  eq  'P'and  complexity_ind  eq  'S'  and  (1  le
tot_line_no le 5)
                                    :c2c_vadi_ind eq 'N' and dispatch_ind eq 'Y' and org_appt_code in('S','W')
                                     and c2c_service_ind eq 'P'and complexity_ind eq 'S' and rbc_fl in('R','B') and
(6 le tot_line_no le 9)
                                    :c2c_vadi_ind eq 'N' and dispatch_ind eq 'Y' and org_appt_code in('S','W')
                                            and  c2c_service_ind  eq  'P'and  complexity_ind  eq  'S'  and  rbc_fl
in('R','B') and tot_line_no ge 10
                                    :c2c_vadi_ind eq 'N' and c2c_service_ind eq 'S' and org_appt_code in('S','W')
and rbc_fl in('R','B')
                                    :c2c_vadi_ind eq 'N' and c2c_service_ind eq 'S' and org_appt_code in('S','W')
and rbc_fl in('R','B')
                                    :c2c_vadi_ind eq 'N' and c2c_service_ind eq 'S' and org_appt_code in('S','W')
and rbc_fl in('R','B')
                                    :c2c_vadi_ind eq 'N' and provider eq 'U' and org_appt_code in('S','W') and
rbc_fl in('R','B')
                , eligcmpr= dispatch_ind eq 'N' and c_disconnect eq 'N' and svc_order_type in('N','C','T')
                                    :dispatch_ind eq 'Y' and c_disconnect eq 'N' and svc_order_type in('N','C','T')
                        :c2c_vadi_ind eq 'N' and dispatch_ind eq 'Y' and org_appt_code in('S','W') and c_disconnect eq 'N'
and
                                     svc_order_type in('N','C','T')   and c2c_service_ind eq 'P' and complexity_ind eq 'S' and (1 le
tot_line_no le 5)
                                    :c2c_vadi_ind eq 'N' and dispatch_ind eq 'Y' and org_appt_code in('S','W') and c_disconnect eq 'N'
and
                            svc_order_type in('N','C','T') and c2c_service_ind eq 'P' and complexity_ind eq 'S' and rbc_fl in('R','B')
                            and (6 le tot_line_no le 9)
                                    :c2c_vadi_ind eq 'N' and dispatch_ind eq 'Y' and org_appt_code in('S','W') and c_disconnect eq 'N'
and
                            svc_order_type in('N','C','T') and c2c_service_ind eq 'P' and complexity_ind eq 'S' and rbc_fl in('R','B') and
                            tot_line_no ge 10
                        :c2c_vadi_ind eq 'N' and c2c_service_ind eq 'S' and org_appt_code in('S','W') and rbc_fl in('R','B') and
                        c_disconnect eq 'N' and svc_order_type in('N','C','T')
                                    :c2c_vadi_ind  eq  'N'  and  c2c_service_ind  eq  'S'  and  org_appt_code  in('S','W')  and  rbc_fl
in('R','B') and
                                     c_disconnect eq 'N' and svc_order_type in('N','C','T')
                                    :c2c_vadi_ind  eq  'N'  and  c2c_service_ind  eq  'S'  and  org_appt_code  in('S','W')  and  rbc_fl
in('R','B') and
                            c_disconnect eq 'N' and svc_order_type in('N','C','T')
                                    :c2c_vadi_ind eq 'N' and provider eq 'U' and org_appt_code in('S','W') and rbc_fl in('R','B')
                            and c_disconnect eq 'N' and svc_order_type in('N','C','T')

                    , sm_catgs= 2110:2120:2341:3140:3341:3342:3343:3345
                                            |2341:3341:3342:3343:3345
                                            |2110:2120:3112:3140
                                            |2100:3112:3140
                                            |2100:3112:3140
                                            |2200:3200
                                            |2200:3200
                                            |2200:3200
                                            |3511:3512:3530
                    , sm_cmprs=  provider eq '1' and c2c_service_ind eq 'P' and complexity_ind eq 'S' and rbc_fl eq 'B'
                                                and org_appt_code in('S','W') and c2c_vadi_ind eq 'N' and product_ind
ne '1'
                                    :provider eq '1' and c2c_service_ind eq 'P' and complexity_ind eq 'S' and
rbc_fl eq 'R'
                                                and org_appt_code in('S','W') and c2c_vadi_ind eq 'N' and product_ind
ne '1'
                                    :provider  eq  '1'  and  product_ind  eq  '3'  and  rbc_fl  in('R','B')  and
org_appt_code in('S','W')
                                                and c2c_vadi_ind eq 'N'
                                    :provider  eq  '1'  and  c2c_service_ind  eq  'P'  and  complexity_ind  eq  'S'  and
rbc_fl in('R','B')
                                and org_appt_code in('S','W') and c2c_vadi_ind eq 'N'
```

```
                                                    :provider  eq  '1'  and  product_ind  eq  '3'  and  rbc_fl  in('R','B')  and
org_appt_code in('S','W','X')                                and c2c_vadi_ind eq 'N' and PON_APPINTV le 6
                                                    :0
                                                    :provider eq '1' and product_ind eq '1' and pon_qual_ind eq 'N' and ls_intv eq
'Y'
              and rbc_fl in('R','B') and not(org_appt_code in('Y','K')) and pr_vadi_ind eq 'Y'
                                                    :provider eq '1' and product_ind eq '1' and pon_qual_ind eq 'N' and ls_intv eq
'Y'
              and rbc_fl in('R','B') and not(org_appt_code in('Y','K')) and pr_vadi_ind eq 'Y'
                                                    |  provider  eq  '1'  and  product_ind  eq  '3'  and  rbc_fl  in('R','B')  and
org_appt_code in('S','W')
                      and c2c_vadi_ind eq 'N'
                                                    :provider  eq  '1'  and  product_ind  eq  '3'  and  rbc_fl  in('R','B')  and
org_appt_code in('S','W','X')
                      and c2c_vadi_ind eq 'N' and PON_APPINTV le 6
                                                    :0
                                                    :provider eq '1' and product_ind eq '1' and pon_qual_ind eq 'N' and ls_intv eq
'Y'
              and rbc_fl in('R','B') and not(org_appt_code in('Y','K')) and pr_vadi_ind eq 'Y'
                                                    :provider eq '1' and product_ind eq '1' and pon_qual_ind eq 'N' and ls_intv eq
'Y'
              and rbc_fl in('R','B') and not(org_appt_code in('Y','K')) and pr_vadi_ind eq 'Y'
                                                    | provider eq '1' and rbc_fl eq 'B'
                                                    :provider eq '1' and rbc_fl eq 'R'
                                                    :provider eq '1' and rbc_fl in('R','B')
                                                    :provider eq '1' and rbc_fl in('R','B')
                                                    | provider eq '1'
                                                    :provider eq '1'
                                                    :provider eq '1'
                                                    | provider eq '1'
                                                    :provider eq '1'
                                                    :provider eq '1'
                                                    | provider eq '1' and c2c_service_ind eq 'S' and ds_level_ind eq '0'
                                                    :provider eq '1' and c2c_service_ind eq 'S' and ds_level_ind eq '0'
                                                    | provider eq '1' and c2c_service_ind eq 'S' and ds_level_ind eq '1'
                                                    :provider eq '1' and c2c_service_ind eq 'S' and ds_level_ind eq '1'
                    and not(isdn_pri_feature_ind eq 'Y' and dispatch_ind eq 'N')
                                                    | provider eq '1' and c2c_service_ind eq 'S' and ds_level_ind eq '3'
                                                    :provider eq '1' and c2c_service_ind eq 'S' and ds_level_ind eq '3'
                                                    | 0
                                                    :0
                                                    :0
              , sm_conds=  provider eq 'R' and c2c_service_ind eq 'P' and complexity_ind eq 'S' and rbc_fl eq 'B'
                                                    and ( c_disconnect eq 'N' and svc_order_type in('N','C','T') or
resale_migr_appintv_lte1 eq 'Y' )
                                                    and pr_vadi_ind eq 'N' and unn1_in_data eq ' '
                                                    and (org_appt_code in('S','W') or resale_migr_appintv_lte1 eq 'Y')
and c2c_vadi_ind eq 'N'                                 :provider eq 'R' and c2c_service_ind eq 'P'
and complexity_ind eq 'S' and rbc_fl eq 'R'
                                                    and ( c_disconnect eq 'N' and svc_order_type in('N','C','T') or
resale_migr_appintv_lte1 eq 'Y' )
                                                    and (org_appt_code in('S','W') or resale_migr_appintv_lte1 eq 'Y')
and c2c_vadi_ind eq 'N'
                      and pr_vadi_ind eq 'N' and unn1_in_data eq ' '
                                              :provider eq 'R' and product_ind eq '3' and rbc_fl in('R','B')
resale_migr_appintv_lte2 eq 'Y' )                          and ( c_disconnect eq 'N' and svc_order_type in('N','C','T') or
                                                    and org_appt_code in('S','W') and c2c_vadi_ind eq 'N' and pr_vadi_ind eq
'N' and unn1_in_data eq ' '
                                              :provider eq 'U' and product_ind eq '5' and c2c_service_ind eq 'P' and complexity_ind
eq 'S'
                                          and hot_cut_ind eq 'N' and rbc_fl in('R','B') and ( c_disconnect eq 'N' and
svc_order_type in('N','C','T'))
                                                    and (org_appt_code in('S','W')) and c2c_vadi_ind eq 'N' and
pr_vadi_ind eq 'N'
eq 'S'                                        :provider eq 'U' and product_ind eq '3' and c2c_service_ind eq 'P' and complexity_ind
                                              and pon_qual_ind eq 'N' and two_wire_intv eq 'Y' and rbc_fl in('R','B')
'N'                                           and not(org_appt_code in('Y','K')) and c2c_vadi_ind eq 'N' and pr_vadi_ind eq
dl_intv eq 'Y'                                :provider eq 'U' and product_ind eq '2' and pon_qual_ind eq 'N' and loop_ind eq '2' and
                                              and rbc_fl in('R','B') and not(org_appt_code in('Y','K')) and c2c_vadi_ind eq
'N' and pr_vadi_ind eq 'N'
                                              :provider eq '1' and product_ind eq '1' and c2c_vadi_ind eq 'N' and  pr_vadi_ind eq 'N'
                                                    and pon_qual_ind eq 'N' and ls_intv eq 'Y' and rbc_fl in('R','B')
                                                    and ( c_disconnect eq 'N' and svc_order_type in('N','C','T') )
                                                    and   not(org_appt_code   in('Y','K'))   and   not(c2c_project_ind
in('UNE','RAU'))
                                                    :provider eq 'U' and product_ind eq '4' and pon_qual_ind eq 'N' and lp_intv eq
'Y'                                                 and not(org_appt_code in('Y','K')) and c2c_vadi_ind eq 'N' and rbc_fl
in('R','B')                                         | provider eq 'R' and product_ind eq '3' and rbc_fl in('R','B')
                                                    and ( c_disconnect eq 'N' and svc_order_type in('N','C','T') or
resale_migr_appintv_lte2 eq 'Y' )                          and not(org_appt_code in('Y','K')) and c2c_vadi_ind eq 'N' and
pr_vadi_ind eq 'N'
                                                    and two_wire_intv eq 'Y' and pon_qual_ind eq 'N'
in('R','B')                                   :provider eq 'U' and product_ind eq '3' and c2c_service_ind eq 'P'
                                                    and  pon_qual_ind  eq  'N'  and  two_wire_intv  eq  'Y'  and  rbc_fl
pr_vadi_ind eq 'N'                                  and not(org_appt_code in('Y','K')) and c2c_vadi_ind eq 'N' and
dl_intv eq 'Y'                                :provider eq 'U' and product_ind eq '2' and pon_qual_ind eq 'N' and loop_ind eq '2' and
                                              and rbc_fl in('R','B') and not(org_appt_code in('Y','K')) and c2c_vadi_ind eq
'N' and pr_vadi_ind eq 'N'                         :provider  eq  '1'  and  product_ind  eq  '1'  and  c2c_vadi_ind  eq  'N'  and
pr_vadi_ind eq 'N'                                  and ( c_disconnect eq 'N' and svc_order_type in('N','C','T') )
                                                    and pon_qual_ind eq 'N' and ls_intv eq 'Y' and rbc_fl in('R','B')
                                                    and   not(org_appt_code   in('Y','K'))   and   not(c2c_project_ind
in('UNE','RAU'))
'Y'                                                 :provider eq 'U' and product_ind eq '4' and pon_qual_ind eq 'N' and lp_intv eq
```

```
                             and rbc_fl in('R','B') and not(org_appt_code in('Y','K')) and c2c_vadi_ind eq 'N'
                                           | provider eq 'R' and rbc_fl eq 'B'  and unn1_in_data eq ' '
                                           :provider eq 'R' and rbc_fl eq 'R' and unn1_in_data eq ' '
                                           :provider eq 'U' and hot_cut_ind eq 'N' and loop_ind eq '1' and rbc_fl
in('R','B')
                                           :provider eq 'U' and hot_cut_ind eq 'N' and product_ind eq '5' and rbc_fl
in('R','B')
                                           | provider eq 'R' and unn1_in_data eq ' '
                                           :provider eq 'U' and hot_cut_ind eq 'N' and loop_ind eq '1'
                                           :provider eq 'U' and hot_cut_ind eq 'N' and product_ind eq '5'
                                           | provider eq 'R' and unn1_in_data eq ' '
                                           :provider eq 'U' and hot_cut_ind eq 'N' and loop_ind eq '1'
                                           :provider eq 'U' and hot_cut_ind eq 'N' and product_ind eq '5'
                                           | provider eq 'R' and c2c_service_ind eq 'S' and ds_level_ind eq '0' and
unn1_in_data eq ' '
                                           :provider eq 'U' and c2c_service_ind eq 'S' and ds_level_ind eq '0'
                                           | provider eq 'R' and c2c_service_ind eq 'S' and ds_level_ind eq '1' and
unn1_in_data eq ' '
                                           :provider eq 'U' and c2c_service_ind eq 'S' and ds_level_ind eq '1'
                                           | provider eq 'R' and c2c_service_ind eq 'S' and ds_level_ind eq '3' and
unn1_in_data eq ' '
                                           :provider eq 'U' and c2c_service_ind eq 'S' and ds_level_ind eq '3'
                                           | product_ind eq '7'
                                           :product_ind eq '6'
                                           :product_ind eq '8'
              )
```

The third DCI SAS macro invocation calculates the PR-1 results for all ASR orders:

```
%pm_pr(   tbl=pr_dm_gen, yearmm=&report_month, metric=PR-1
          ,  glblcond=(wcoded_ind  eq  'Y'  or  appt_typ  in('S','W','K'))  and  ord_stat
in('C','K')
              and rep_typ eq 'C2C' and fba_fgte_ind eq 'BA' and excl_ind ne 'Y'
          , submetrics=07 08 09 12
          , sbpm_typ=Interval Interval Interval Interval
          , eligvars=PR_1_07_elig PR_1_08_elig PR_1_09_elig PR_1_12_elig
          , valuvars=obj_intv obj_intv obj_intv obj_intv
          , eligcond= actv_typ in('N','C') and prod_typ eq 'DS1'
                                :actv_typ in('N','C') and prod_typ eq 'DS3'
                                :actv_typ in('N','C')
                                :actv_typ in('D') and not(prod_typ in('DF','TR'))
          , eligcmpr= 0:0:0:0
          , sm_catgs= 3211
                                |3213
                                |3511:3512:3530
                                |3200
          , sm_cmprs= 0
                                |0
                                |0:0:0
                                |0
          , sm_conds=  1
                                | 1
                                | prod_typ eq 'EEL' and sub_prod_typ eq 'BB'
                                :prod_typ eq 'EEL' and sub_prod_typ in('LP','D0')
                                :prod_typ eq 'IOF'
                                | 1
          )
```

DCI Recalculation Results

Table C-9 provides the results of DCI's PR-1 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of April 2003.

Table C-10 provides the results of DCI's PR-1 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of May 2003.

Table C-11 provides the results of DCI's PR-1 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of June 2003.

Table C-9 – PR-1 Average Offered Interval – April 2003

April 2003 Submetric ID	DCI calculation								Verizon C2C Reported Results								Discrepancy							
	CLEC			Retail			Stat. Score	Compliance	CLEC			Retail			Stat. Score	Compliance	CLEC			Retail			Stat. Score	Compliance
	Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt		
PR-1-01-2110	543	335	1.621	17826	11372	1.568	-0.28364	0	543	335	1.621	17826	11372	1.568	-0.28355	0	0	0	0.000	0	0	0.000	0.00009	0
PR-1-01-2120	1607	884	1.818	152329	155272	0.981	15.48377	-2	1607	884	1.818	152329	155272	0.981	15.48535	-2	0	0	0.000	0	0	0.000	0.00158	0
PR-1-01-2341	18	4	4.500	979	326	3.003			18	4	4.500	975	324	3.009			0	0	0.000	-4	-2	0.006		
PR-1-01-3140	2123	2215	0.958	5	4	1.021	4.90036	0	2123	2215	0.958	4	4	1.021	4.90155	0	0	0	0.000	-1	0	0.000	0.00119	0
PR-1-01-3341				701	334	2.099						975	324	3.009						274	-10	0.910		
PR-1-01-3342	141	22	6.409																					
PR-1-01-3343	1255	418	3.002	27116	9022	3.006	0.41486	0	1255	418	3.002	27116	9022	3.006	0.41505	0	0	0	0.000	0	0	0.000	0.00019	0
PR-1-01-3345				27116	9022	3.006						27116	9022	3.006						0	0	0.000		
PR-1-02-2341	11	2	5.500	1965	326	6.028			6	1	6.000	1965	326	6.028			-5	-1	0.500	0	0	0.000		
PR-1-02-3341	174	29	6.000	1280	310	4.129	-6.42515	-2	180	30	6.000	1965	326	6.028	0.03855	0	6	1	0.000	685	16	1.899	6.46370	2
PR-1-02-3342	1496	248	6.032						1577	260	6.065						81	12	0.033					
PR-1-02-3343	64	21	3.048	1110	369	3.008	-1.95750	-2	64	21	3.048	1110	369	3.008	-1.95735	-2	0	0	0.000	0	0	0.000	0.00015	0
PR-1-02-3345				1110	369	3.008						1110	369	3.008						0	0	0.000		
PR-1-03-2110	220	58	3.793	11099	3146	3.528	-0.55617	0	220	58	3.793	11099	3146	3.528	-0.55615	0	0	0	0.000	0	0	0.000	0.00002	0
PR-1-03-2120	648	196	3.306	46777	12489	3.745	2.46964	0	648	196	3.306	46777	12489	3.745	2.46975	0	0	0	0.000	0	0	0.000	0.00011	-
PR-1-03-3112	912	237	3.848	57876	15635	3.702	-0.81744	0	912	237	3.848	57876	15635	3.702	-0.81745	0	0	0	0.000	0	0	0.000	0.00001	-
PR-1-03-3140	1328	328	4.049	57876	15635	3.702	-2.27328	-2	1328	328	4.049	57876	15635	3.702	-2.27345	-2	0	0	0.000	0	0	0.000	0.00017	0
PR-1-04-2100	6	2	3.000	558	119	4.689			6	2	3.000	558	119	4.689			0	0	0.000	0	0	0.000		
PR-1-04-3112	194	32	6.063	558	119	4.689	-1.35054	-1	194	32	6.063	558	119	4.689	-1.35055	-1	0	0	0.000	0	0	0.000	0.00001	-
PR-1-04-3140	73	15	4.867	558	119	4.689	-0.12692	0	73	15	4.867	558	119	4.689	-0.12685	0	0	0	0.000	0	0	0.000	0.00007	0
PR-1-05-2100				473	80	5.913						473	80	5.913						0	0	0.000		
PR-1-05-3112	126	15	8.400	473	80	5.913	-1.70727	-2	126	15	8.400	473	80	5.913	-1.70725	-2	0	0	0.000	0	0	0.000	0.00002	0
PR-1-05-3140	12	3	4.000	473	80	5.913			12	3	4.000	473	80	5.913			0	0	0.000	0	0	0.000		
PR-1-06-2200	247	26	9.500	1929	189	10.206	0.36884	0	176	13	13.538	1929	189	10.206	-1.26925	-1	-71	-13	4.038	0	0	0.000	1.63809	-1
PR-1-06-3200	340	43	7.907	1929	189	10.206	1.48643	0	322	40	8.050	1929	189	10.206	1.35325	0	-18	-3	0.143	0	0	0.000	0.13318	0
PR-1-07-2200	15	1	15.000	740	79	9.367			15	1	15.000	740	79	9.367			0	0	0.000	0	0	0.000		
PR-1-07-3200	1	1	1.000	714	74	9.649			1	1	1.000	714	74	9.649			0	0	0.000	0	0	0.000		
PR-1-07-3211	1201	138	8.703																					
PR-1-08-2200																								
PR-1-08-3200																								

Table C-9 – PR-1 Average Offered Interval – April 2003 (Continued)

April 2003 Submetric ID	DCI CLEC Num	DCI CLEC Den	DCI CLEC Rslt	DCI Retail Num	DCI Retail Den	DCI Retail Rslt	DCI Stat. Score	DCI Compliance	Ver CLEC Num	Ver CLEC Den	Ver CLEC Rslt	Ver Retail Num	Ver Retail Den	Ver Retail Rslt	Ver Stat. Score	Ver Compliance	Disc CLEC Num	Disc CLEC Den	Disc CLEC Rslt	Disc Retail Num	Disc Retail Den	Disc Retail Rslt	Disc Stat. Score	Disc Compliance
PR-1-08-3213	16	1	16.000																					
PR-1-09-3511	838	68	12.324						1092	88	12.409						254	20	0.086					
PR-1-09-3512	2218	198	11.202						242	17	14.235						-1976	-181	3.033					
PR-1-09-3530	320	25	12.800						9	1	9.000						-311	-24	-3.800					
PR-1-09-5020	1008	48	21.000	27672	1872	14.782	-6.22405	-2				315	27	11.667		-2				-27357	-1845	-3.115		0
PR-1-09-5030	63168	4632	13.637	174659	9886	17.667	-18.16095	0	372	38	9.789	11445	105	10.895	1.41835	0	-62796	-4594	-3.848	-173515	-9781	-6.772	16.74260	0
PR-1-12-2103	6368	1863	3.418	190858	51580	3.700	1.80138	0	6368	1863	3.418	195701	52457	3.731	2.00435	0	0	0	0.000	4843	877	0.030	0.20297	0
PR-1-12-2200	270	35	7.714	3273	544	6.017	-2.14627	-2	270	35	7.714	3272	543	6.026	-2.13485	-2	0	0	0.000	-1	-1	-0.009	0.01142	0
PR-1-12-3133	27362	11027	2.481	190858	51580	3.700	17.49572	0	27241	10979	2.481	195701	52457	3.731	18.00175	0	-121	-48	0.000	4843	877	0.030	0.50603	0
PR-1-12-3200	2162	276	7.833	3273	544	6.017	-5.41963	-2	577	89	6.483	3272	543	6.026	-0.88185	-1	-1585	-187	-1.350	-1	-1	-0.009	4.53778	1

Table C-10 – PR-1 Average Offered Interval – May 2003

May 2003	DCI calculation								Verizon C2C Reported Results								Discrepancy							
	CLEC			Retail			Stat. Score	Compliance	CLEC			Retail			Stat. Score	Compliance	CLEC			Retail			Stat. Score	Compliance
Submetric ID	Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt		
PR-1-01-2110	542	240	2.258	16983	11205	1.516	-4.52558	-2	542	240	2.258	16983	11205	1.516	-4.52565	-2	0	0	0.000	0	0	0.000	-0.00007	0
PR-1-01-2120	1109	663	1.673	145844	142029	1.027	-10.75139	-2	1109	663	1.673	145845	142029	1.027	-10.75305	-2	0	0	0.000	1	0	0.000	-0.00166	0
PR-1-01-2341	67	18	3.722	559	217	2.576	-1.94017	-2	67	18	3.722	559	217	2.576	-1.94015	-2	0	0	0.000	0	0	0.000	0.00002	0
PR-1-01-3140	19302	16404	1.177	162827	153234	1.063	-8.47173	-2	19302	16404	1.177	162827	153234	1.063	-8.47395	-2	0	0	0.000	0	0	0.000	-0.00222	0
PR-1-01-3341	10	1	10.000	575	246	2.337			10	1	10.000	559	217	2.576			0	0	0.000	-16	-29	0.239		
PR-1-01-3342	252	42	6.000																					
PR-1-01-3343	2462	818	3.010	26006	8623	3.016	0.91216	0	2462	818	3.010	26006	8623	3.016	0.91335	0	0	0	0.000	0	0	0.000	0.00119	0
PR-1-01-3345				26006	8623	3.016						26006	8623	3.016						0	0	0.000		
PR-1-02-2341	21	4	5.250	2149	296	7.260						2149	296	7.260						0	0	0.000		
PR-1-02-3341	180	30	6.000	1114	264	4.220	-6.10112	-2	204	34	6.000	2149	296	7.260	0.97935	0	24	4	0.000	1035	32	3.040	7.08047	2
PR-1-02-3342	1458	244	5.975						1536	257	5.977						78	13	0.001					
PR-1-02-3343	102	34	3.000	1064	351	3.031	0.47789	0	102	34	3.000	1064	351	3.031	0.47785	0	0	0	0.000	0	0	0.000	-0.00004	0
PR-1-02-3345				1064	351	3.031						1064	351	3.031						0	0	0.000		
PR-1-03-2110	288	70	4.114	10446	2902	3.600	-0.87786	-1	288	70	4.114	10446	2902	3.600	-0.87785	-1	0	0	0.000	0	0	0.000	0.00001	0
PR-1-03-2120	573	202	2.837	42520	11743	3.621	6.89274	0	573	202	2.837	42520	11743	3.621	6.89335	0	0	0	0.000	0	0	0.000	0.00061	0
PR-1-03-3112	830	245	3.388	52966	14645	3.617	1.37113	0	830	245	3.388	52966	14645	3.617	1.37125	0	0	0	0.000	0	0	0.000	0.00012	0
PR-1-03-3140	1601	400	4.003	52966	14645	3.617	-2.93784	-2	1601	400	4.003	52966	14645	3.617	-2.93785	-2	0	0	0.000	0	0	0.000	-0.00001	0
PR-1-04-2100	13	3	4.333	521	113	4.611			13	3	4.333	521	113	4.611			0	0	0.000	0	0	0.000		
PR-1-04-3112	178	31	5.742	521	113	4.611	-1.81816	-2	178	31	5.742	521	113	4.611	-1.81815	-2	0	0	0.000	0	0	0.000	0.00001	0
PR-1-04-3140	84	18	4.667	521	113	4.611	-0.07196	0	84	18	4.667	521	113	4.611	-0.07195	0	0	0	0.000	0	0	0.000	0.00001	0
PR-1-05-2100	4	1	4.000	801	106	7.557			4	1	4.000	801	106	7.557			0	0	0.000	0	0	0.000		
PR-1-05-3112	106	12	8.833	801	106	7.557	-0.51280	0	106	12	8.833	801	106	7.557	-0.51275	0	0	0	0.000	0	0	0.000	0.00005	0
PR-1-05-3140	47	9	5.222	801	106	7.557	0.82251	0	47	9	5.222	801	106	7.557		0	0	0	0.000	0	0	0.000		0
PR-1-06-2200	163	20	8.150	1975	234	8.440	0.22262	0	140	16	8.750	1975	234	8.440	-0.21425	0	-23	-4	0.600	0	0	0.000	-0.43687	0
PR-1-06-3200	353	39	9.051	1975	234	8.440	-0.63152	0	345	37	9.324	1975	234	8.440	-0.89315	-1	-8	-2	0.273	0	0	0.000	-0.26163	-1
PR-1-07-2200	6	1	6.000	864	91	9.495			6	1	6.000	864	91	9.495			0	0	0.000	0	0	0.000		
PR-1-07-3200	2	1	2.000	829	84	9.869						829	84	9.869						0	0	0.000		
PR-1-07-3211	1277	162	7.883																					
PR-1-08-2200																								
PR-1-08-3200																								
PR-1-08-3213	12	1	12.000																					
PR-1-09-3511	936	78	12.000						1609	129	12.473						673	51	0.473					
PR-1-09-3512	2942	259	11.359						256	18	14.222						-2686	-241	2.863					
PR-1-09-3530	456	39	11.692						58	4	14.500						-398	-35	2.808					
PR-1-09-5020	2016	144	14.000	20928	1584	13.212	-1.89500	-2	23	2	11.500	304	27	11.259		0	-1993	-142	-2.500	-20624	-1557	-1.953		2
PR-1-09-5030	38122	2376	16.045	83864	6899	12.156	-22.00834	-2	239	25	9.560	955	88	10.852		0	-37883	-2351	-6.485	-82909	-6811	-1.304		2
PR-1-12-2103	6391	3589	1.781	229450	58621	3.914	19.99456	0	6390	3588	1.781	240559	60752	3.960	20.68505	0	-1	-1	0.000	11109	2131	0.046	0.69049	0
PR-1-12-2200	236	28	8.429	3533	487	7.255	-0.83358	-1	236	28	8.429	3533	487	7.255	-0.83355	-1	0	0	0.000	0	0	0.000	0.00003	0
PR-1-12-3133	27033	11196	2.415	229450	58621	3.914	23.43196	0	26915	11157	2.412	240559	60752	3.960	24.50205	0	-118	-39	-0.002	11109	2131	0.046	1.07009	0
PR-1-12-3200	1854	258	7.186	3533	487	7.255	0.12289	0	463	77	6.013	3533	487	7.255	1.39715	0	-1391	-181	-1.173	0	0	0.000	1.27426	0

Table C-11 – PR-1 Average Offered Interval – June 2003

Jun 2003	DCI calculation								Verizon C2C Reported Results								Discrepancy							
	CLEC			Retail			Stat. Score	Compliance	CLEC			Retail			Stat. Score	Compliance	CLEC			Retail			Stat. Score	Compliance
Submetric ID	Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt		
PR-1-01-2110	304	216	1.407	14843	10466	1.418	0.05756	0	304	216	1.407	14843	10466	1.418		0	0	0	0.000	0	0	0.000		0
PR-1-01-2120	936	740	1.265	147933	140126	1.056	-3.84561	-2	936	740	1.265	147933	140126	1.056		-2	0	0	0.000	0	0	0.000		0
PR-1-01-2341	7	2	3.500	516	221	2.335			7	2	3.500	505	216	2.338			0	0	0.000	-11	-5	0.003		
PR-1-01-3140	10499	13896	0.756	162776	150592	1.081	22.96923	0	10499	13896	0.756	162776	150592	1.081		0	0	0	0.000	0	0	0.000		0
PR-1-01-3341	10	1	10.000	468	233	2.009			10	1	10.000	505	216	2.338			0	0	0.000	37	-17	0.329		
PR-1-01-3342	258	43	6.000																					
PR-1-01-3343	3212	1072	2.996	32331	10611	3.047	6.73463	0	3212	1072	2.996	32331	10611	3.047		0	0	0	0.000	0	0	0.000		0
PR-1-01-3345				32331	10611	3.047						32331	10611	3.047						0	0	0.000		
PR-1-02-2341	4	1	4.000	2335	305	7.656						2335	305	7.656						0	0	0.000		
PR-1-02-3341	270	45	6.000	1162	261	4.452	-6.71257	-2	300	51	5.882	2335	305	7.656		0	30	6	-0.118	1173	44	3.204		2
PR-1-02-3342	1502	246	6.106						1538	252	6.103						36	6	-0.003					
PR-1-02-3343	91	29	3.138	1323	433	3.055	-1.51832	-1	91	29	3.138	1323	433	3.055		-1	0	0	0.000	0	0	0.000		0
PR-1-02-3345				1323	433	3.055						1323	433	3.055						0	0	0.000		
PR-1-03-2110	185	49	3.776	10498	2828	3.712	-0.08035	0	185	49	3.776	10498	2828	3.712		0	0	0	0.000	0	0	0.000		0
PR-1-03-2120	677	206	3.286	42645	11494	3.710	3.22859	0	677	206	3.286	42645	11494	3.710		0	0	0	0.000	0	0	0.000		0
PR-1-03-3112	1085	301	3.605	53143	14322	3.711	0.61637	0	1085	301	3.605	53143	14322	3.711		0	0	0	0.000	0	0	0.000		0
PR-1-03-3140	1882	450	4.182	53143	14322	3.711	-3.33839	-2	1882	450	4.182	53143	14322	3.711		-2	0	0	0.000	0	0	0.000		0
PR-1-04-2100	12	3	4.000	533	100	5.330			12	3	4.000	533	100	5.330			0	0	0.000	0	0	0.000		0
PR-1-04-3112	200	28	7.143	533	100	5.330	-1.89972	-2	200	28	7.143	533	100	5.330		-2	0	0	0.000	0	0	0.000		0
PR-1-04-3140	85	18	4.722	533	100	5.330	0.53185	0	85	18	4.722	533	100	5.330		0	0	0	0.000	0	0	0.000		0
PR-1-05-2100	17	3	5.667	518	87	5.954			17	3	5.667	518	87	5.954			0	0	0.000	0	0	0.000		0
PR-1-05-3112	105	12	8.750	518	87	5.954	-1.83487	-2	105	12	8.750	518	87	5.954		-2	0	0	0.000	0	0	0.000		0
PR-1-05-3140	37	8	4.625	518	87	5.954	0.72697	0	37	8	4.625	518	87	5.954		0	0	0	0.000	0	0	0.000		0
PR-1-06-2200	165	21	7.857	1270	160	7.938																		
PR-1-06-2210									93	8	11.625	1270	160	7.938										
PR-1-06-3200	86	13	6.615	1270	160	7.938																		
PR-1-06-3210									85	11	7.727	1270	160	7.938										
PR-1-07-2200	16	1	16.000	655	75	8.733																		
PR-1-07-2211									16	1	16.000	655	75	8.733										
PR-1-07-3200				649	71	9.141																		
PR-1-07-3211	1624	177	9.175									649	71	9.141										
PR-1-08-2200				40	2	20.000																		
PR-1-08-2213												40	2	20.000										
PR-1-08-3200				40	2	20.000																		
PR-1-08-3213	55	2	27.500									40	2	20.000										
PR-1-09-3511	826	58	14.241						1384	100	13.840						558	42	-0.401					
PR-1-09-3512	2744	240	11.433						436	29	15.034						-2308	-211	3.601					
PR-1-09-3530	450	31	14.516						118	8	14.750						-332	-23	0.234					
PR-1-09-5020	12552	696	18.034	16600	1444	11.496	-25.81619	-2	24	2	12.000	187	20	9.350		-1	-12528	-694	-6.034	-16413	-1424	-2.146		1
PR-1-09-5030	48336	3552	13.608	29305	2509	11.680	-16.97530	-2	506	43	11.767	367	34	10.794		-1	-47830	-3509	-1.841	-28938	-2475	-0.886		1
PR-1-12-2103	3053	1564	1.952	230697	56769	4.064	13.13929	0	3053	1564	1.952	235503	57519	4.094		0	0	0	0.000	4806	750	0.031		0
PR-1-12-2200	161	27	5.963	4041	571	7.077	0.81014	0	161	27	5.963	4041	571	7.077		0	0	0	0.000	0	0	0.000		0
PR-1-12-3133	25189	12839	1.962	230697	56769	4.064	34.30148	0	25124	12811	1.961	235503	57519	4.094		0	-65	-28	-0.001	4806	750	0.031		0
PR-1-12-3200	1284	191	6.723	4041	571	7.077	0.60746	0	602	81	7.432	4041	571	7.077		0	-682	-110	0.710	0	0	0.000		0

PR-3: PERCENT COMPLETED WITHIN SPECIFIED NUMBER OF DAYS (1-5 LINES)

Definition

This metric measures the percent of Plain Old Telephone Service (POTS) orders with five (5) or fewer lines completed in specified number (by metric) of business days, between application and work completion dates..

LSR Orders

From the LSR Provisioning Data Mart, those records which are not globally excluded and meet the criteria for a reportable sub-metric (see below) and product disaggregation (see the product code table at the end of the LSR Provisioning Data Mart section above), will be counted to obtain the PR-3 denominators. Any of these records whose value of the CMPINTV field is less than or equal to the (submetric-specific) number of days will be counted in the PR-3 numerators.

Sub-Metrics

The following table indicates the conditions relevant to the PR-3 submetrics, prior to product and provider disaggregation:

Table C-12 – PR-3 SubMetrics

PR-3 Submetric	Products	Dispatch	Number of Days
PR-3-01	2100, 3140	No Dispatch	1
PR-3-03	3343, 3345	No Dispatch	3
PR-3-06	2100,3113,3140	Dispatch	3
PR-3-08	3111	No Dispatch	5
PR-3-09	2100,3113,3140	Dispatch	5
PR-3-10	3341, 3342		6
PR-3-11	3342		9

DCI Recalculation Process

DCI developed an SAS macro to calculate metric results based on a clear specification of the metrics definitions. DCI then implemented the information described in the pages immediately above into a single SAS macro invocations for all LSR PR-3 submetrics. DCI then pooled these results to obtain its metric numerators, denominators, and results. Using these values, DCI calculated its own statistical scores to determine compliance. DCI also automatically extracted Verizon PA's C2C report results to obtain Verizon PA's calculated numerators, denominators, results, and statistical scores. DCI's recalculation program then combines and compares DCI's results and Verizon PA's C2C reported results in an Excel spreadsheet.

The following SAS macro invocation is completely sufficient to calculate all the PR-3 results:

```
%pm_pr(   tbl=pr_dm_svc_ordv, yearmm=&report_month, metric=PR-3
                 , glblcond=status in('55B')
                                        and global_exclusion eq 'N'
                                        and test_seller_ind eq 'N'
                                        and exclusion_ind eq 'N'
                                        and report_period eq &report_month
                                        and c_disconnect eq 'N'
                                        and svc_order_type in('N','C','T')
```

```
                              and ord_seg_num in('00','01')
                              and 0 le appintv le 200
                              and c2c_project_ind eq 'N'
                              and not(substr(ron,1,1) eq 'S' and substr(sale_code,1,4) in('915T','916T'))
                              and 1 le tot_line_no le 5
                              and sub_delay_ind eq 'N'
                              and rbc_fl in('R','B')
                              and c2c_vadi_ind eq 'N'
                    , submetrics=01 03 06 08 09 10 11
                    , sbpm_typ=Count Count Count Count Count Count Count
                    , eligvars=PR_3_01_elig PR_3_03_elig PR_3_06_elig PR_3_08_elig PR_3_09_elig PR_3_10_elig PR_3_11_elig
                    , valuvars=cmp_1 cmp_3 cmp_3 cmp_5 cmp_5 cmp_6 cmp_9
                    , valucond=cmpintv le 1: cmpintv le 3:cmpintv le 3:cmpintv le 5:cmpintv le 5:cmpintv le 6:cmpintv le 9
                    , eligcond= dispatch_ind eq 'N' and c2c_service_ind eq 'P' and complexity_ind eq 'S'
                              :dispatch_ind eq 'N' and pon_qual_ind eq 'N' and unn1_in_data ne 'OUT' and
facility_miss_ind eq 'N'
                               and not(org_appt_code in('Y','K'))
                              :dispatch_ind eq 'Y' and c2c_service_ind eq 'P' and complexity_ind eq 'S' and
org_appt_code in('S','W')
                              :dispatch_ind eq 'N' and c2c_service_ind eq 'P' and complexity_ind eq 'S' and
org_appt_code in('S','W')
                              :dispatch_ind eq 'Y' and c2c_service_ind eq 'P' and complexity_ind eq 'S' and
org_appt_code in('S','W')
                              :provider eq 'U' and pr310_intv eq 'Y' and not(org_appt_code in('Y','K'))
                              :provider eq 'U' and pr310_intv eq 'Y' and not(org_appt_code in('Y','K'))
                    , eligcmpr= dispatch_ind eq 'N' and c2c_service_ind eq 'P' and complexity_ind eq 'S' and provider eq '1'
                              :dispatch_ind eq 'N' and pon_qual_ind eq 'N' and unn1_in_data ne 'OUT' and
facility_miss_ind eq 'N'
                               and not(org_appt_code in('Y','K')) and pr_vadi_ind eq 'Y'
                              :dispatch_ind eq 'Y' and c2c_service_ind eq 'P' and complexity_ind eq 'S'  and
org_appt_code in('S','W')
                               and provider eq '1'
                              :0
                              :dispatch_ind eq 'Y' and c2c_service_ind eq 'P' and complexity_ind eq 'S'  and
org_appt_code in('S','W')
                               and provider eq '1'
                      :provider eq '1' and not(org_appt_code in('Y','K')) and c2c_service_ind eq 'P' and pon_qual_ind ne 'Y'
                       and pon_appintv le 6
                              :0
                    , sm_catgs= 2100:3140
                              |3343:3345
                              |2100:3113:3140
                              |3111
                              |2100:3113:3140
                              |3341:3342
                              |3342
                    , sm_cmprs=  provider eq '1' and org_appt_code in('S','W')
                              :provider eq '1' and org_appt_code in('S','W')
                              | provider eq '1' and product_ind eq '1' and pon_qual_ind eq 'N' and ls_intv eq
'Y'
               and not(org_appt_code in('Y','K')) and unn1_in_data ne 'OUT'  and pr_vadi_ind eq 'Y'
                              :provider eq '1' and product_ind eq '1' and pon_qual_ind eq 'N' and ls_intv eq
'Y'
               and not(org_appt_code in('Y','K')) and unn1_in_data ne 'OUT'  and pr_vadi_ind eq 'Y'
                              |1:1:1
                              |0
                              |1:1:1
                              |1:0
                              |0
                    , sm_conds=  provider eq 'R' and org_appt_code in('S','W') and unn1_in_data eq ' '
                              :provider eq 'U'  and product_ind in('5','9') and hot_cut_ind eq 'N' and
(org_appt_code in('S','W') )
                              |:provider eq '1' and product_ind eq '1' and pon_qual_ind eq 'N' and ls_intv eq
'Y'
               and not(org_appt_code in('Y','K')) and unn1_in_data ne 'OUT'  and pr_vadi_ind eq 'N'
                              :provider eq 'U' and product_ind eq '4' and pon_qual_ind eq 'N' and lp_intv eq
'Y'
               and not(org_appt_code in('Y','K')) and unn1_in_data ne 'OUT'  and pr_vadi_ind eq 'N'
                              | provider eq 'R' and unn1_in_data eq ' '
                              :provider eq 'U' and hot_cut_ind eq 'N' and loop_ind eq '1' and ln_i_cnt gt 0
                              :provider eq 'U' and hot_cut_ind eq 'N' and product_ind in('5','9')
                              | provider eq 'U' and hot_cut_ind eq 'Y' and loop_ind eq '1' and hotcut_intv eq
'Y'
                              | provider eq 'R' and unn1_in_data eq ' '
                              :provider eq 'U' and hot_cut_ind eq 'N' and loop_ind eq '1' and ln_i_cnt gt 0
                              :provider eq 'U' and hot_cut_ind eq 'N' and product_ind in('5','9')
                              | product_ind eq '3' and c2c_service_ind eq 'P' and pon_qual_ind eq 'N'
                              :product_ind  eq '2'  and pon_qual_ind eq 'N' and  loop_ind eq '2' and
facility_miss_ind eq 'N'
                              |  product_ind  eq  '2'  and  pon_qual_ind  eq  'N'  and  loop_ind  eq  '2'  and
facility_miss_ind eq 'N'

                    )
run;
```

Recalculation Results

Table C-13 provides the results of DCI's PR-3 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of April 2003.

Table C-14 provides the results of DCI's PR-3 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of May 2003.

Table C-15 provides the results of DCI's PR-3 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of June 2003:

C-13 – PR-3 Percent Completed within Specified Number of Days (1-5 Lines) – April 2003

Submetric ID (April 2003)	DCI CLEC Num	DCI CLEC Den	DCI CLEC Rslt	DCI Retail Num	DCI Retail Den	DCI Retail Rslt	DCI Stat Score	DCI Compliance	Verizon CLEC Num	Verizon CLEC Den	Verizon CLEC Rslt	Verizon Retail Num	Verizon Retail Den	Verizon Retail Rslt	Verizon Stat Score	Verizon Compliance	Disc CLEC Num	Disc CLEC Den	Disc CLEC Rslt	Disc Retail Num	Disc Retail Den	Disc Retail Rslt	Disc Stat Score	Disc Compliance
PR-3-01-2100	414	855	48.42%	88647	131907	67.20%	-11.66112	-2	414	855	48.42%	88676	131952	67.20%	-5.00000	-2	0	0	0.00%	29	45	0.00%	6.66112	0
PR-3-01-3140	648	1158	55.96%	88647	131907	67.20%	-24.72329	-2	648	1158	55.96%	88676	131952	67.20%	-5.00000	-2	3	4	0.01%	29	45	0.00%	19.72329	0
PR-3-03-3343	377	378	99.74%	7789	8041	96.87%	4.32942	0	377	379	99.47%	7789	8041	96.87%	3.73925	0	0	1	0.26%	0	0	0.00%	-0.59017	0
PR-3-03-3343	377	378	99.74%	7789	8041	96.87%	-3.12917	0	377	379	99.47%					0	0	1	0.26%					
PR-3-03-3345				7789	8041	96.87%						7789	8041	96.87%						0	0	0.00%		
PR-3-03-3345				7789	8041	96.87%																		
PR-3-06-2100	114	230	49.57%	6952	13086	53.13%	-1.00588	-1	114	230	49.57%	6958	13095	53.13%	-1.00865	-1	0	0	0.00%	6	9	0.01%	-0.00277	0
PR-3-06-3113	119	193	61.66%	6952	13086	53.13%	2.44389	0	119	193	61.66%	6958	13095	53.13%	2.44135	0	0	0	0.00%	6	9	0.01%	-0.00254	0
PR-3-06-3140	81	260	31.15%	6952	13086	53.13%	-7.03003	-2	81	260	31.15%	6958	13095	53.13%	-5.00000	-2	0	0	0.00%	6	9	0.01%	2.03003	0
PR-3-08-3111	307	307	100.00%						314	314	100.00%						7	7	0.00%					
PR-3-09-2100	216	230	93.91%	11968	13086	91.46%	1.48601	0	216	230	93.91%	11974	13095	91.44%	1.49475	0	0	0	0.00%	6	9	-0.02%	0.00874	0
PR-3-09-3113	184	193	95.34%	11968	13086	91.46%	2.19950	0	184	193	95.34%	11974	13095	91.44%	2.20725	0	0	0	0.00%	6	9	-0.02%	0.00775	0
PR-3-09-3140	245	260	94.23%	11968	13086	91.46%	1.77131	0	245	260	94.23%	11974	13095	91.44%	1.78055	0	0	0	0.00%	6	9	-0.02%	0.00924	0
PR-3-10-3341	19	20	95.00%	17306	17352	99.73%	-1.62445	-1	19	19	100.00%	426	513	83.04%	5.00000	0	0	-1	5.00%	172634	173010	16.69%	6.62445	1
PR-3-10-3342	220	222	99.10%						220	222	99.10%						0	0	0.00%					
PR-3-11-3342	222	222	100.00%																					

Table C-14 – PR-3 Percent Completed within Specified Number of Days (1-5 Lines) – May 2003

May 2003	DCI calculation								Verizon C2C Reported Results								Discrepancy							
	CLEC			Retail			Stat. Score	Compliance	CLEC			Retail			Stat. Score	Compliance	CLEC			Retail			Stat. Score	Compliance
Submetric ID	Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt		
PR-3-01-2100	238	592	40.20%	78367	120008	65.30%	-12.79758	-2	238	592	40.20%	78393	120043	65.30%	-5.00000	-2	0	0	0.00%	26	35	0.00%	7.79758	0
PR-3-01-3140	6390	10901	58.62%	78367	120008	65.30%	-14.03487	-2	6390	10902	58.61%	78393	120043	65.30%	-5.00000	-2	0	1	-0.01%	26	35	0.00%	9.03487	0
PR-3-03-3343	720	721	99.86%	7631	7861	97.07%	4.25005	0	720	721	99.86%	7631	7861	97.07%	5.00000	0	0	0	0.00%	0	0	0.00%	0.74995	0
PR-3-03-3343	720	721	99.86%	7631	7861	97.07%	-4.25005	0	720	721	99.86%					0	0	0	0.00%					
PR-3-03-3345				7631	7861	97.07%						7631	7861	97.07%						0	0	0.00%		
PR-3-03-3345				7631	7861	97.07%																		
PR-3-06-2100	154	239	64.44%	6949	12146	57.21%	2.31912	0	154	239	64.44%	6955	12159	57.20%	2.32275	0	0	0	0.00%	6	13	-0.01%	0.00363	0
PR-3-06-3113	157	205	76.59%	6949	12146	57.21%	5.55953	0	157	205	76.59%	6955	12159	57.20%	5.00000	0	0	0	0.00%	6	13	-0.01%	-0.55953	0
PR-3-06-3140	109	306	35.62%	6949	12146	57.21%	-7.53934	-2	109	306	35.62%	6955	12159	57.20%	-5.00000	-2	0	0	0.00%	6	13	-0.01%	2.53934	0
PR-3-08-3111	473	473	100.00%						486	487	99.79%						13	14	-0.21%					
PR-3-09-2100	232	239	97.07%	11275	12146	92.83%	2.96646	0	232	239	97.07%	11287	12159	92.83%	2.96685	0	0	0	0.00%	12	13	0.00%	0.00039	0
PR-3-09-3113	203	205	99.02%	11275	12146	92.83%	3.40944	0	203	205	99.02%	11287	12159	92.83%	4.43315	0	0	0	0.00%	12	13	0.00%	1.02371	0
PR-3-09-3140	273	306	89.22%	11275	12146	92.83%	-2.18838	-2	273	306	89.22%	11287	12159	92.83%	-2.18795	-2	0	0	0.00%	12	13	0.00%	0.00043	0
PR-3-10-3341	24	24	100.00%	158179	158599	99.74%	0.25242	0	24	24	100.00%	285	337	84.57%	5.00000	0	0	0	0.00%	-157894	-158262	-15.17%	4.74758	0
PR-3-10-3342	238	239	99.58%						238	239	99.58%						0	0	0.00%					
PR-3-11-3342	239	239	100.00%																					

Table C-15 – PR-3 Percent Completed within Specified Number of Days (1-5 Lines) – June 2003

June 2003	DCI calculation								Verizon C2C Reported Results								Discrepancy							
Submetric ID	CLEC			Retail			Stat. Score	Comp liance	CLEC			Retail			Stat. Score	Comp liance	CLEC			Retail			Stat. Score	Comp liance
	Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt		
PR-3-01-2100	346	594	58.25%	76073	118820	64.02%	-2.85650	-2	346	594	58.25%	76097	118850	64.03%			0	0	0.00%	24	30	0.00%		
PR-3-01-3140	5781	7116	81.24%	76073	118820	64.02%	29.39237	0	5779	7114	81.23%	76097	118850	64.03%	5.00000	0	-2	-2	-0.01%	24	30	0.00%	-24.39237	0
PR-3-03-3343	945	947	99.79%	9183	9861	93.12%	7.74170	0	945	947	99.79%	9183	9861	93.12%	5.00000	0	0	0	0.00%	0	0	0.00%	-2.74170	0
PR-3-03-3343	945	947	99.79%	9183	9861	93.12%	-7.74170	0	945	947	99.79%					0	0	0	0.00%					
PR-3-03-3345				9183	9861	93.12%						9183	9861	93.12%						0	0	0.00%		
PR-3-03-3345				9183	9861	93.12%																		
PR-3-06-2100	120	228	52.63%	6317	11897	53.10%	-0.07393	0	120	228	52.63%	6320	11902	53.10%			0	0	0.00%	3	5	0.00%		
PR-3-06-3113	153	253	60.47%	6317	11897	53.10%	2.40072	0	153	253	60.47%	6320	11902	53.10%			0	0	0.00%	3	5	0.00%		
PR-3-06-3140	123	385	31.95%	6317	11897	53.10%	-8.18421	-2	123	385	31.95%	6320	11902	53.10%	-5.00000	-2	0	0	0.00%	3	5	0.00%	3.18421	0
PR-3-08-3111	550	550	100.00%						558	558	100.00%						8	8	0.00%					
PR-3-09-2100	210	228	92.11%	10530	11897	88.51%	1.86606	0	210	228	92.11%	10534	11902	88.51%			0	0	0.00%	4	5	0.00%		
PR-3-09-3113	239	253	94.47%	10530	11897	88.51%	3.33342	0	239	253	94.47%	10534	11902	88.51%			0	0	0.00%	4	5	0.00%		
PR-3-09-3140	327	385	84.94%	10530	11897	88.51%	-2.01861	-2	327	385	84.94%	10534	11902	88.51%			0	0	0.00%	4	5	0.00%		
PR-3-10-3341	36	38	94.74%	154358	155123	99.51%	-2.16350	-2	36	37	97.30%	303	365	83.01%			0	-1	2.56%	-154055	-154758	-16.49%		
PR-3-10-3342	233	235	99.15%						233	235	99.15%						0	0	0.00%					
PR-3-11-3342	235	235	100.00%																					

PR-4: PERCENT MISSED APPOINTMENTS

Definition

This metric measures the Percent of Orders completed after the commitment date.

LSR Orders

From the LSR Provisioning Data Mart, those records which are not globally excluded and meet the criteria for a reportable sub-metric (see below) and product disaggregation (see the product code table at the end of the LSR Provisioning Data Mart section above), will be counted to obtain the PR-4 denominators.

Any such records whose COMPL_DATE is later than its ORG_DUE_DATE will be counted in the PR-4 numerators if the following additional sub-metric specific conditions are met:

- **PR-4-01, PR-4-04, PR-4-05:** records whose CISR_MAC field (first company missed appointment code encountered, or if there are none, the first customer missed appointment code encountered) begins with 'C' (is a company missed appointment code), whose COMP_MAC_LAST field (last company missed appointment code) has a value other than 'EO', and whose COMP_MAC_DY_CNT (duration in days due to company missed appointment) field has a value greater than 0.
- **PR-4-02:** if the CMPINTV (Completion interval) and APPINTV (Offered interval) field are equal, then the numerator is the value of the COMP_MAC_DY_CNT field; otherwise it is the value of the LEAST_DELAY_DAYS field (lesser of COMP_MAC_DAY_CNT and CMPINTV – APPINTV).
- **PR-4-03:** records whose CISR_MAC field (first company missed appointment code encountered, or if there are none, the first customer missed appointment code encountered) has any of the values: 'SA','SO','SR','SL', or 'SC'. (These are all the documented Subscriber missed appointment codes except SP and SE which both mean the Subscriber requested an earlier appointment).
- **PR-4-08:** records whose ON_TIME field (On-Time indicator) has the value 'N'.

ASR Orders

From the ASR Provisioning Data Mart, those records which are not globally excluded and meet the criteria for a reportable sub-metric (see below) and product disaggregation (see the product code table at the end of the ASR Provisioning Data Mart section above), will be selected for consideration for PR-4 eligibility. For PR-4-01, the order needs to have been provisioning-completed in the report month. For PR-4-02, the order needs to have been completed (ACUAL_CMPL_DT) on a day after its due date (PRV_DUE_DT), and needs to have a 'N' value in its CNR_IND (Customer Not Ready Indicator) field. Orders matching these conditions are counted in the PR-4 denominators.

Sub-Metrics

The following table indicates the conditions relevant to the PR-4 ASR submetrics, prior to product and provider disaggregation:

Table C-16 – PR-4 ASR SubMetrics

PR-4 Submetric	Products	Eligibility	Numerator
PR-4-01	DS0, DS1, DS3, OTH, EEL, IOF	Completed in Report Month	Completion date past due date Customer was Ready
PR-4-02	Specials, EEL, IOF, Trunks*	Completion date past due date Customer was Ready	Value of DLAY_DY field
PR-4-03	Specials, EEL, IOF, Trunks*		Completion date past due date Customer was NOT Ready
PR-4-08	Specials, EEL, IOF		Completion date past due date Customer was NOT Ready FOC was issued late
PR-4-15	Trunks*		Completion date past due date

* Trunks includes both CLEC and Reciprocal Trunks.

DCI RECALCULATION PROCESS

DCI developed a SAS macro to calculate metric results based on a clear specification of the metrics definitions. DCI then implemented the information described in the pages immediately above into 2 SAS macro invocations, one for LSR PR-4 submetrics, and one for ASRs. DCI then pooled these results to obtain its metric numerators, denominators, and results. Using these values, DCI calculated its own statistical scores to determine compliance. DCI also automatically extracted Verizon PA's C2C report results to obtain Verizon PA's calculated numerators[3], denominators, results, and statistical scores. DCI's recalculation program then combines and compares DCI's results and Verizon PA's C2C reported results in an Excel spreadsheet.

DCI presents below the 2 SAS macro invocations which are completely sufficient to calculate all the PR-4 results. The first of these calculates the PR-4 results for LSRs:

```
%pm_pr(    tbl=pr_dm_svc_ordv, yearmm=&report_month, metric=PR-4
          , glblcond=status in('55B')
                               and global_exclusion eq 'N'
                               and test_seller_ind eq 'N'
```

---

[3] Verizon PA does not provide numerators on the C2C reports. DCI back-calculated what Verizon PA's numerators would have been based on Verizon PA's reported C2C results and denominators. DCI analysis determined that Verizon PA truncates all its results and standard deviations at 5 decimal places, (before dividing by 100% to obtain percentage results), rather than rounding them. DCI therefore added .000005 to Verizon PA's non-percentage results and .0005 to Verizon PA's percentage results before multiplying them by the denominator, then rounded the product to the nearest integer to obtain DCI's estimate of the numerator Verizon PA used in its calculations. This procedure is guaranteed to obtain the exact numerator used by Verizon PA when the denominator is 10000 or less. When the denominator is over 10000, this procedure will provide the best possible approximation available given the C2C reports, but may be slightly different from the actual numerator used by Verizon PA.

```
                                    and exclusion_ind eq 'N'
                                    and report_period eq &report_month
                            and    (c_disconnect    eq   'N'    and    svc_order_type   in('N','C','T')    or
resale_migr_no_appintv eq 'Y')
                                    and ord_seg_num in('00','01')
                                    and c2c_project_ind eq 'N'
                                    and   not(substr(ron,1,1)    eq    'S'    and    substr(sale_code,1,4)
in('915T','916T'))
                                    and rbc_fl in('R','B')
                 , submetrics=01 02 03 04 05 08
                 , sbpm_typ=Count Interval Count Count Count Count
                 , eligvars=PR_4_01_elig PR_4_02_elig PR_4_03_elig PR_4_04_elig PR_4_05_elig PR_4_08_elig
                 , valuvars=late_01 pr_4_02_num late_03 late_04 late_05 late_08
                 , valucond= substr(cisr_mac,1,1) eq 'C' and comp_mac_last ne 'EO'
                    and datepart(compl_date) gt datepart(org_due_date) and comp_mac_dy_cnt gt 0
                              :_:cisr_mac in('SA','SO','SR','SL','SC')
                       and datepart(compl_date) gt datepart(org_due_date)
                                   :substr(cisr_mac,1,1) eq 'C' and comp_mac_last ne 'EO'
                    and datepart(compl_date) gt datepart(org_due_date) and comp_mac_dy_cnt gt 0
                                   :substr(cisr_mac,1,1) eq 'C' and comp_mac_last ne 'EO'
                    and datepart(compl_date) gt datepart(org_due_date) and comp_mac_dy_cnt gt 0
                             :datepart(compl_date) gt datepart(org_due_date) and on_time eq 'N'
                 ,  eligcond=  org_appt_code   in('M','W','R','X','C','S')   and   c2c_vadi_ind   eq   'N'   and
pr_vadi_ind eq 'N'
                                   :org_appt_code in('M','W','R','X','C','S') and substr(cisr_mac,1,1)
eq 'C'
                       and comp_mac_last ne 'EO' and compl_date gt org_due_date and comp_mac_dy_cnt gt 0
                       and c2c_vadi_ind eq 'N' and pr_vadi_ind eq 'N'
                                   :org_appt_code in('M','W','R','X','C','S') and c2c_vadi_ind eq 'N'
and pr_vadi_ind eq 'N'
                                   :org_appt_code in('M','W','R','X','C','S') and c2c_vadi_ind eq 'N'
                       and dispatch_ind eq 'Y' and pr_vadi_ind eq 'N'
                                   :org_appt_code in('M','W','R','X','C','S') and c2c_vadi_ind eq 'N'
                       and dispatch_ind eq 'N' and pr_vadi_ind eq 'N'
                                   :org_appt_code in('M','W','R','X','C','S') and c2c_vadi_ind eq 'N'
                       and pr_vadi_ind eq 'N'
                 , eligcmpr= c_disconnect eq 'N' and svc_order_type in('N','C','T') and provider eq '1'
                    and c2c_service_ind eq 'S' and c2c_vadi_ind eq 'N'
                    and (org_appt_code in('M','W','R','X','C','S') or cabs_rt_special eq 'Y')
                                   :c_disconnect eq 'N' and svc_order_type in('N','C','T') and provider
eq '1'
                    and substr(cisr_mac,1,1) eq 'C' and comp_mac_last ne 'EO' and compl_date gt org_due_date
                    and comp_mac_dy_cnt gt 0
                                   :0
                    :c_disconnect eq 'N' and svc_order_type in('N','C','T') and dispatch_ind eq 'Y'
                    and org_appt_code in('M','W','R','X','C','S') and c2c_vadi_ind eq 'N'
                                   :c_disconnect   eq   'N'   and   svc_order_type   in('N','C','T')   and
dispatch_ind eq 'N'
                    and org_appt_code in('M','W','R','X','C','S') and c2c_vadi_ind eq 'N'
                                   :0
                 , sm_catgs= 2210:2211:2213:2214:3210:3211:3213:3214:3510:3530
                             |2100:2200:2341:3100:3200:3341:3342:3343:3345:3510:3530
                             |2100:2200:2341:3100:3200:3341:3342:3343:3345:3510:3530
                             |2100:2341:3113:3140:3341:3342:3343:3345
                             |2100:2341:3140:3341:3343:3345
                             |2200:2341:3200:3341:3342
                 , sm_cmprs=  ds_level_ind eq '0' :ds_level_ind eq '1' :ds_level_ind eq '3' :ds_level_ind eq ' '
                                   :ds_level_ind eq '0' :ds_level_ind eq '1' and not(isdn_pri_feature_ind eq 'Y' and
dispatch_ind eq 'N')
                                   :ds_level_ind eq '3' :ds_level_ind eq ' '
                                   :ds_level_ind eq '1' and not(isdn_pri_feature_ind eq 'Y' and dispatch_ind eq 'N')
                                   :ds_level_ind eq '3'
                             |     provider     eq   '1'    and    c2c_service_ind    eq    'P'    and    org_appt_code
in('M','W','R','X','C','S')
                       and complexity_ind eq 'S' and c2c_vadi_ind eq 'N'
                                   :provider    eq    '1'    and    c2c_service_ind    eq    'S'    and    (org_appt_code
in('M','W','R','X','C','S')
                       or cabs_rt_special eq 'Y') and c2c_vadi_ind eq 'N'
                                   :provider    eq    '1'    and    product_ind    eq    '3'           and    org_appt_code
in('M','W','R','X','C','S')
                       and c2c_vadi_ind eq 'N'
                                   :provider    eq    '1'    and    c2c_service_ind    eq    'P'    and    org_appt_code
in('M','W','R','X','C','S')
                       and complexity_ind eq 'S' and c2c_vadi_ind eq 'N'
                                   :provider    eq    '1'    and    c2c_service_ind    eq    'S'    and    (org_appt_code
in('M','W','R','X','C','S')
                       or cabs_rt_special eq 'Y') and c2c_vadi_ind eq 'N'
                                   :provider    eq    '1'    and    c2c_service_ind    eq    'P'    and    org_appt_code
in('M','W','R','X','C','S')
                       and product_ind eq '3' and c2c_vadi_ind eq 'N'
                                   :provider eq '1' and product_ind eq '2' and org_appt_code in('M','W','R','X','C','S')
and loop_ind eq '2'
                                       and (org_appt_code in('M','W','R','X','C','S') or cabs_rt_special eq 'Y') and
c2c_vadi_ind eq 'N'
                                   :provider eq '1' and product_ind eq '1' and org_appt_code in('M','W','R','X','C','S')
and pr_vadi_ind eq 'Y'
                                   :provider eq '1' and product_ind eq '1' and org_appt_code in('M','W','R','X','C','S')
and pr_vadi_ind eq 'Y'
                                   :provider   eq   '1'   and   c2c_service_ind   eq   'S'   and   ds_level_ind   eq   '1'   and
not(isdn_pri_feature_ind eq 'Y'
                       and dispatch_ind eq 'N') and (org_appt_code in('M','W','R','X','C','S') or cabs_rt_special eq 'Y')
                       and c2c_vadi_ind eq 'N'
                                   :provider eq '1' and ds_level_ind eq '3' and org_appt_code in('M','W','R','X','C','S')
                       and c2c_vadi_ind eq 'N'
                                   |0:0:0:0:0:0:0:0:0:0:0
                                   | provider eq '1' and c2c_service_ind eq 'P' and complexity_ind eq 'S'
                                   :provider eq '1' and product_ind eq '3' and facility_miss_ind eq 'N'
                                   :provider eq '1' and c2c_service_ind eq 'P' and complexity_ind eq 'S'
```

```
                                                   :provider eq '1' and c2c_service_ind eq 'P' and complexity_ind eq 'S'
                                                   :provider  eq  '1'  and  product_ind  eq  '3'  and  c2c_service_ind  eq  'P'  and
facility_miss_ind eq 'N'
                                                   :0
                                                   :provider eq '1' and product_ind eq '1' and pr_vadi_ind eq 'Y'
                                                   :provider eq '1' and product_ind eq '1' and pr_vadi_ind eq 'Y'
                                                   | provider eq '1' and c2c_service_ind eq 'P' and complexity_ind eq 'S'
                                                   :provider eq '1' and product_ind eq '3' and facility_miss_ind eq 'N'
                                                   :provider eq '1' and c2c_service_ind eq 'P' and complexity_ind eq 'S'
                                                   :provider  eq  '1'  and  product_ind  eq  '3'  and  c2c_service_ind  eq  'P'  and
facility_miss_ind eq 'N'
                                                   :provider eq '1' and product_ind eq '1' and pr_vadi_ind eq 'Y'
                                                   :provider eq '1' and product_ind eq '1' and pr_vadi_ind eq 'Y'
                                                   |0:0:0:0:0
                 , sm_conds=  provider eq 'R' and c2c_service_ind eq 'S' and ds_level_ind eq '0'  and unn1_in_data eq ' '
                                                   :provider  eq  'R'  and  c2c_service_ind  eq  'S'  and  ds_level_ind  eq  '1'   and
unn1_in_data eq ' '
                                                   :provider  eq  'R'  and  c2c_service_ind  eq  'S'  and  ds_level_ind  eq  '3'   and
unn1_in_data eq ' '
                                                   :provider  eq  'R'  and  c2c_service_ind  eq  'S'  and  ds_level_ind  eq  ' '  and
unn1_in_data eq ' '
                                                   :provider  eq  'U'  and  c2c_service_ind  eq  'S'  and  ds_level_ind  eq  '0'  and
c_disconnect eq 'N'
                              and svc_order_type in('N','C','T')
                                                   :provider  eq  'U'  and  c2c_service_ind  eq  'S'  and  ds_level_ind  eq  '1'  and
c_disconnect eq 'N'
                              and svc_order_type in('N','C','T')
                                                   :provider  eq  'U'  and  c2c_service_ind  eq  'S'  and  ds_level_ind  eq  '3'  and
c_disconnect eq 'N'
                              and svc_order_type in('N','C','T')
                                                   :provider  eq  'U'  and  c2c_service_ind  eq  'S'  and  ds_level_ind  eq  ' '  and
c_disconnect eq 'N'
                              and svc_order_type in('N','C','T')
                                                   :provider eq 'U' and product_ind in('6','7')  and c_disconnect eq 'N'
                              and svc_order_type in('N','C','T')
                                                   :provider  eq  'U'  and  product_ind  in('8')  and  c_disconnect  eq  'N'  and
svc_order_type in('N','C','T')
                                                   | provider  eq  'R'  and  c2c_service_ind  eq  'P'  and  complexity_ind  eq  'S'  and
unn1_in_data eq ' '
                                                   :provider eq 'R' and c2c_service_ind eq 'S'  and unn1_in_data eq ' '
                                                   :provider eq 'R' and product_ind eq '3' and unn1_in_data eq ' '
                                                   :provider  eq  'U'  and  c2c_service_ind  eq  'P'  and  complexity_ind  eq  'S'  and
hot_cut_ind eq 'N'
                              and c_disconnect eq 'N' and svc_order_type in('N','C','T')
                                                   :provider  eq  'U'  and  c2c_service_ind  eq  'S'   and  c_disconnect  eq  'N'  and
svc_order_type in('N','C','T')
                                                   :provider  eq  'U'  and  c2c_service_ind  eq  'P'  and  product_ind  eq  '3'  and
c_disconnect eq 'N'
                              and svc_order_type in('N','C','T')
                                                   :provider eq 'U' and product_ind eq '2' and loop_ind eq '2' and c_disconnect
eq 'N'
                              and svc_order_type in('N','C','T')
                                                   :provider  eq  '1'  and  product_ind  eq  '1'  and  unn1_in_data  ne  'OUT'  and
c_disconnect eq 'N'
                              and svc_order_type in('N','C','T')
                                                   :provider  eq  'U'  and  product_ind  eq  '4'  and  unn1_in_data  ne  'OUT'  and
c_disconnect eq 'N'
                              and svc_order_type in('N','C','T')
                                                   :provider  eq  'U'  and  product_ind  in('6','7')  and  c_disconnect  eq  'N'  and
svc_order_type in('N','C','T')
                                                   :provider  eq  'U'  and  product_ind  eq  '8'  and  c_disconnect  eq  'N'  and
svc_order_type in('N','C','T')
                                                   | provider  eq  'R'  and  c2c_service_ind  eq  'P'  and  complexity_ind  eq  'S'  and
unn1_in_data eq ' '
                                                   :provider eq 'R' and c2c_service_ind eq 'S' and unn1_in_data eq ' '
                                                   :provider eq 'R' and product_ind eq '3' and unn1_in_data eq ' '
                                                   :provider  eq  'U'  and  c2c_service_ind  eq  'P'  and  complexity_ind  eq  'S'  and
hot_cut_ind eq 'N'
                              and c_disconnect eq 'N' and svc_order_type in('N','C','T')
                                                   :provider  eq  'U'  and  c2c_service_ind  eq  'S'  and  c_disconnect  eq  'N'  and
svc_order_type in('N','C','T')
                                                   :provider  eq  'U'  and  product_ind  eq  '3'  and  c_disconnect  eq  'N'  and
svc_order_type in('N','C','T')
                                                   :provider eq 'U' and product_ind eq '2' and loop_ind eq '2' and c_disconnect
eq 'N'
                              and svc_order_type in('N','C','T')
                                                   :provider  eq  'U'  and  product_ind  eq  '1'  and  unn1_in_data  ne  'OUT'  and
c_disconnect eq 'N'
                              and svc_order_type in('N','C','T')
                                                   :provider  eq  'U'  and  product_ind  eq  '4'  and  unn1_in_data  ne  'OUT'  and
c_disconnect eq 'N'
                              and svc_order_type in('N','C','T')
                                                   :provider  eq  'U'  and  product_ind  in('6','7')  and  c_disconnect  eq  'N'  and
svc_order_type in('N','C','T')
                                                   :provider  eq  'U'  and  product_ind  in('8')  and  c_disconnect  eq  'N'  and
svc_order_type in('N','C','T')
                                                   | provider  eq  'R'  and  c2c_service_ind  eq  'P'  and  complexity_ind  eq  'S'  and
unn1_in_data eq ' '
                                                   :provider  eq  'R'  and  product_ind  eq  '3'  and  facility_miss_ind  eq  'N'  and
unn1_in_data eq ' '
                                                   :provider  eq  'U'  and  c2c_service_ind  eq  'P'  and  complexity_ind  eq  'S'  and
hot_cut_ind eq 'N'
                              and loop_ind eq '1' and ln_i_cnt gt 0 and c_disconnect eq 'N' and svc_order_type in('N','C','T')
                                                   :provider  eq  'U'  and  product_ind  eq  '5'  and  hot_cut_ind  eq  'N'  and
c2c_service_ind eq 'P'
                              and complexity_ind eq 'S' and c_disconnect eq 'N' and svc_order_type in('N','C','T')
                                                   :provider  eq  'U'  and  product_ind  eq  '3'  and  c2c_service_ind  eq  'P'  and
facility_miss_ind eq 'N'
                              and c_disconnect eq 'N' and svc_order_type in('N','C','T')
                                                   :provider  eq  'U'  and  product_ind  eq  '2'  and  loop_ind  eq  '2'  and
facility_miss_ind eq 'N'
                              and c_disconnect eq 'N' and svc_order_type in('N','C','T')
                                                   :provider  eq  '1'  and  product_ind  eq  '1'  and  unn1_in_data  ne  'OUT'  and
facility_miss_ind eq 'N'
                              and c_disconnect eq 'N' and svc_order_type in('N','C','T')
                                                   :provider  eq  'U'  and  product_ind  eq  '4'  and  unn1_in_data  ne  'OUT'  and
facility_miss_ind eq 'N'
```

```
                              and c_disconnect eq 'N' and svc_order_type in('N','C','T')
                                         | provider eq 'R' and c2c_service_ind eq 'P' and complexity_ind eq 'S' and
unn1_in_data eq ' '
                                         :provider eq 'R' and product_ind eq '3' and facility_miss_ind eq 'N' and
unn1_in_data eq ' '
                                         :provider eq 'U' and product_ind eq '5' and hot_cut_ind eq 'N' and
c2c_service_ind eq 'P'
                              and complexity_ind eq 'S' and c_disconnect eq 'N' and svc_order_type in('N','C','T')
                                         :provider eq 'U' and product_ind eq '3' and c2c_service_ind eq 'P' and
facility_miss_ind eq 'N'
                              and c_disconnect eq 'N' and svc_order_type in('N','C','T')
                                         :provider eq '1' and product_ind eq '1' and unn1_in_data ne 'OUT' and
facility_miss_ind eq 'N'
                              and c_disconnect eq 'N' and svc_order_type in('N','C','T')
                                         :provider eq 'U' and product_ind eq '4' and unn1_in_data ne 'OUT' and
facility_miss_ind eq 'N'
                              and c_disconnect eq 'N' and svc_order_type in('N','C','T')
                                         | provider eq 'R' and c2c_service_ind eq 'S' and unn1_in_data eq ' '
                                         :provider eq 'R' and product_ind eq '3' and facility_miss_ind eq 'N' and
unn1_in_data eq ' '
                                         :provider eq 'U' and product_ind in('6','7','8') and c2c_service_ind eq 'S'
                              and facility_miss_ind eq 'N' and c_disconnect eq 'N' and svc_order_type in('N','C','T')
                                         :provider eq 'U' and product_ind eq '3' and c2c_service_ind eq 'P' and
facility_miss_ind eq 'N'
                              and c_disconnect eq 'N' and svc_order_type in('N','C','T')
                                         :provider eq 'U' and product_ind eq '2' and loop_ind eq '2' and
facility_miss_ind eq 'N'
                              and c_disconnect eq 'N' and svc_order_type in('N','C','T')

                 )

run;
```

The second DCI-developed PR-4 SAS macro invocation calculates the PR-4 results for ASRs:

```
%pm_pr(    tbl=pr_dm_gen, yearmm=&report_month, metric=PR-4
           , glblcond=actv_typ in('C','N') and fba_fgte_ind eq 'BA' and excl_ind eq 'N' and
rep_typ eq 'C2C'
           , submetrics=01 02 03 08 15
           , sbpm_typ=Count Interval Count Count Count
           , eligvars=PR_4_01_elig PR_4_02_elig PR_4_03_elig PR_4_08_elig PR_4_15_elig
           , valuvars=late_01 dlay_dy late_03 late_08 late_15
           , valucond=datepart(actual_cmpl_dt) gt datepart(prv_due_dt) and cnr_ind eq 'N'
                                  :_:datepart(actual_cmpl_dt)  gt  datepart(prv_due_dt)  and
cnr_ind eq 'Y'
                                  :datepart(actual_cmpl_dt) gt datepart(prv_due_dt)
                  and cnr_ind eq 'Y' and late_foc_ind eq 'Y'
                                  :datepart(actual_cmpl_dt) le datepart(prv_due_dt)
           ,  eligcond=ord_stat   eq   'C'   and   put(datepart(ord_stat_dt),yymmn6.)   eq
"&report_month"
                                  :datepart(actual_cmpl_dt)  gt  datepart(prv_due_dt)  and
cnr_ind eq 'N'
                                  :1
                                  :1
                                  :1
           , eligcmpr= 1:0:0:0:0

           , sm_catgs= 3210:3211:3213:3214:3510:3530
                               |3200:3510:3530:5000
                               |3200:3510:3530:5000
                               |3200
                               |5000
           , sm_cmprs= 0:0:0:0:0:0
                               |0:0:0:0
                               |0:0:0:0
                               |0
                               |0
           , sm_conds=  prod_typ eq 'DS0'
                                  :prod_typ eq 'DS1'
                                  :prod_typ eq 'DS3'
                                  :prod_typ eq 'OTH'
                                  :prod_typ eq 'EEL'
                                  :prod_typ eq 'IOF'
                                  | ord_stat eq 'C' and put(datepart(ord_stat_dt),yymmn6.) eq
"&report_month"
                  and prod_typ in('DS0','DS1','DS3','OTH')
                                  :ord_stat eq 'C' and put(datepart(ord_stat_dt),yymmn6.) eq
"&report_month"
                  and prod_typ in('EEL')
                                  :ord_stat eq 'C' and put(datepart(ord_stat_dt),yymmn6.) eq
"&report_month"
                  and prod_typ in('IOF')
                                  :prv_stat eq 'C' and put(datepart(prv_stat_dt),yymmn6.) eq
"&report_month"
                  and prod_typ in('TR') and trnk_serv_typ in('T','R')
```

```
                                      | ord_stat eq 'C' and put(datepart(ord_stat_dt),yymmn6.) eq
"&report_month"
                  and prod_typ in('DS0','DS1','DS3','OTH')
                                    :ord_stat eq 'C' and put(datepart(ord_stat_dt),yymmn6.) eq
"&report_month"
                  and prod_typ in('EEL')
                                    :ord_stat eq 'C' and put(datepart(ord_stat_dt),yymmn6.) eq
"&report_month"
                  and prod_typ in('IOF')
                                    :prv_stat eq 'C' and put(datepart(prv_stat_dt),yymmn6.) eq
"&report_month"
                  and prod_typ in('TR') and trnk_serv_typ in('T','R')
                                      | ord_stat eq 'C' and put(datepart(ord_stat_dt),yymmn6.) eq
"&report_month"
                  and prod_typ in('DS0','DS1','DS3','OTH','EEL','IOF')
                                      | prv_stat eq 'C' and put(datepart(prv_stat_dt),yymmn6.) eq
"&report_month"
                  and prod_typ in('TR') and trnk_serv_typ in('T','R')
              )
run;
```

DCI Recalculation Results

Table C-17 provides the results of DCI's PR-4 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of April 2003.

Table C-18 provides the results of DCI's PR-4 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of May 2003.

Table C-19 provides the results of DCI's PR-4 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of June 2003.

Table C-17 – PR-4 Percent Missed Appointments – April 2003

April 2003	DCI calculation								Verizon C2C Reported Results								Discrepancy							
	CLEC			Retail			Stat. Score	Comp liance	CLEC			Retail			Stat. Score	Comp liance	CLEC			Retail			Stat. Score	Comp liance
Submetric ID	Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt		
PR-4-01-2210	0	17	0.00%	5	240	2.08%	0.58119	0	0	17	0.00%	5	240	2.08%	5.00000	0	0	0	0.00%	0	0	0.00%	4.41881	0
PR-4-01-2211	0	2	0.00%	1	99	1.01%			0	2	0.00%	1	99	1.01%			0	0	0.00%	0	0	0.00%		
PR-4-01-2213																								
PR-4-01-2214				1	6	16.67%						1	6	16.67%			0	0	0.00%					
PR-4-01-3210	0	42	0.00%	5	240	2.08%	0.87208	0	0	42	0.00%	5	240	2.08%	5.00000	0	0	0	0.00%	0	0	0.00%	4.12792	0
PR-4-01-3211	3	113	2.65%	1	94	1.06%	-0.29799	0	2	106	1.89%	1	94	1.06%	0.11345	0	-1	-7	-0.77%	0	0	0.00%	0.41144	0
PR-4-01-3213	0	1	0.00%						0	1	0.00%						0	0	0.00%					
PR-4-01-3214	0	4	0.00%	1	6	16.67%			0	4	0.00%	1	6	16.67%			0	0	0.00%	0	0	0.00%		
PR-4-01-3510	6	218	2.75%	1	94	1.06%	-0.45669	0	4	146	2.74%	1	94	1.06%	-0.38685	0	-2	-72	-0.01%	0	0	0.00%	0.06984	0
PR-4-01-3530	0	23	0.00%						0	11	0.00%						0	-12	0.00%					
PR-4-02-2100	127	39	3.256	15107	3597	4.200	0.24379	0	128	40	3.200	15107	3597	4.200	0.26165	0	1	1	-0.056	0	0	0.000	0.01786	0
PR-4-02-2200				24	7	3.429						24	7	3.429						0	0	0.000		
PR-4-02-2341				64	21	3.048						64	21	3.048						0	0	0.000		
PR-4-02-3100	194	97	2.000	15107	3597	4.200	0.88942	0	194	97	2.000	15107	3597	4.200	0.88945	0	0	0	0.000	0	0	0.000	0.00003	0
PR-4-02-3200	5	3	1.667	24	7	3.429			3	2	1.500	24	7	3.429			-2	-1	-0.167	0	0	0.000		
PR-4-02-3341	15	2	7.500	45	17	2.647			15	2	7.500	64	21	3.048			0	0	0.000	19	4	0.401		
PR-4-02-3342	5	4	1.250						5	4	1.250	14	5	2.800			0	0	0.000					
PR-4-02-3343				482	336	1.435						482	336	1.435						0	0	0.000		
PR-4-02-3345				482	336	1.435						482	336	1.435						0	0	0.000		
PR-4-02-3510	22	6	3.667	2	1	2.000			17	4	4.250	2	1	2.000			-5	-2	0.583	0	0	0.000		
PR-4-02-3530				2	1	2.000																		
PR-4-02-5000																								
PR-4-03-2100	33	1720	1.92%						34	1923	1.77%						1	203	-0.15%					
PR-4-03-2200	4	19	21.05%						4	19	21.05%						0	0	0.00%					
PR-4-03-2341	1	16	6.25%						1	17	5.88%						0	1	-0.37%					
PR-4-03-3100	206	64771	0.32%						206	64996	0.32%						0	225	0.00%					
PR-4-03-3200	10	160	6.25%						11	164	6.71%						1	4	0.46%					
PR-4-03-3341	14	103	13.59%						14	102	13.73%						0	-1	0.13%					
PR-4-03-3342	23	504	4.56%						23	506	4.55%						0	2	-0.02%					
PR-4-03-3343									3	631	0.48%													
PR-4-03-3345	0	1	0.00%						0	1	0.00%						0	0	0.00%					
PR-4-03-3510	8	218	3.67%						3	146	2.05%						-5	-72	-1.61%					
PR-4-03-3530	3	23	13.04%						1	11	9.09%						-2	-12	-3.95%					
PR-4-03-5000	8208	18672	43.96%						8208	18672	43.96%						0	0	0.00%					
PR-4-04-2100	37	335	11.04%	3062	25568	11.98%	0.59302	0	38	338	11.24%	3062	25568	11.98%	0.48105	0	1	3	0.20%	0	0	0.00%	-0.11197	0
PR-4-04-2341	0	7	0.00%	10	394	2.54%	0.42321	0	0	7	0.00%	10	394	2.54%	5.00000	0	0	0	0.00%	0	0	0.00%	4.57679	0
PR-4-04-3113	40	930	4.30%	3062	25568	11.98%	7.08104	0	40	932	4.29%	3062	25568	11.98%	5.00000	0	0	2	-0.01%	0	0	0.00%	-2.08104	0
PR-4-04-3140	46	728	6.32%	3062	25568	11.98%	4.63573	0	46	728	6.32%	3062	25568	11.98%	5.00000	0	0	0	0.00%	0	0	0.00%	0.36427	0
PR-4-04-3341	0	100	0.00%	7	348	2.01%	1.26276	0	0	100	0.00%	10	394	2.54%	5.00000	0	0	0	0.00%	3	46	0.53%	3.73724	0
PR-4-04-3342	2	473	0.42%					-2	2	475	0.42%					-2	0	2	0.00%					
PR-4-04-3343	0	32	0.00%	36	463	7.78%	1.58855	0	0	32	0.00%	30	456	6.58%	5.00000	0	0	0	0.00%	-6	-7	-1.20%	3.41145	0
PR-4-04-3345				36	463	7.78%						30	456	6.58%						-6	-7	-1.20%		

Table C-17 – PR-4 Percent Missed Appointments – April 2003

April 2003	DCI calculation								Verizon C2C Reported Results								Discrepancy								
	CLEC			Retail			Stat. Score	Comp liance	CLEC			Retail			Stat. Score	Comp liance	CLEC			Retail			Stat. Score	Comp liance
Submetric ID	Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt		
PR-4-05-2100	2	1385	0.14%	535	195106	0.27%	1.24004	0	2	1585	0.13%	536	195106	0.27%	1.48095	0	0	200	-0.02%	1	0	0.00%	0.24091	0
PR-4-05-2341	0	9	0.00%	0	319	0.00%		0	0	10	0.00%	0	319	0.00%	0.00005	0	0	1	0.00%	0	0	0.00%		
PR-4-05-3140	11	62606	0.02%	535	195106	0.27%	10.68451	0	11	62829	0.02%	536	195106	0.27%	5.00000	0	0	223	0.00%	1	0	0.00%	-5.68451	0
PR-4-05-3341				0	319	0.00%						0	319	0.00%						0	0	0.00%		
PR-4-05-3343	0	598	0.00%	300	10539	2.85%	4.07191	0	0	599	0.00%	300	10539	2.85%	5.00000	0	0	1	0.00%	0	0	0.00%	0.92809	0
PR-4-05-3345	0	1	0.00%	300	10539	2.85%			0	1	0.00%	300	10539	2.85%			0	0	0.00%	0	0	0.00%		
PR-4-07-3540	5950	6112	97.35%					0	1159	1176	98.55%					0	-4791	-4936	1.20%					
PR-4-08-2200	0	19	0.00%						0	19	0.00%						0	0	0.00%					
PR-4-08-2341	0	16	0.00%						0	17	0.00%						0	1	0.00%					
PR-4-08-3200	0	284	0.00%						2	310	0.65%						2	26	0.65%					
PR-4-08-3341	0	100	0.00%						0	102	0.00%						0	2	0.00%					
PR-4-08-3342	0	501	0.00%						0	506	0.00%						0	5	0.00%					
PR-4-14-3342									453	456	99.34%													
PR-4-15-5000	10464	18672	56.04%					-2	18672	18672	100.00%					0	8208	0	43.96%					

Table C-18 – PR-4 Percent Missed Appointments – May 2003

May 2003	DCI calculation								Verizon C2C Reported Results								Discrepancy								
	CLEC			Retail			Stat. Score	Comp liance	CLEC			Retail			Stat. Score	Comp liance	CLEC			Retail			Stat. Score	Comp liance
Submetric ID	Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt		
PR-4-01-2210	0	12	0.00%	5	248	2.02%	0.48530	0	0	12	0.00%	5	248	2.02%	5.00000	0	0	0	0.00%	0	0	0.00%	4.51470	0
PR-4-01-2211	0	2	0.00%	2	94	2.13%			0	2	0.00%	2	94	2.13%			0	0	0.00%	0	0	0.00%		
PR-4-01-2213																								
PR-4-01-2214	0	3	0.00%	0	6	0.00%			0	3	0.00%	0	6	0.00%			0	0	0.00%	0	0	0.00%		
PR-4-01-3210	0	38	0.00%	5	248	2.02%	0.82341	0	0	38	0.00%	5	248	2.02%	5.00000	0	0	0	0.00%	0	0	0.00%	4.17659	0
PR-4-01-3211	4	145	2.76%	2	90	2.22%	0.20180	0	4	135	2.96%	2	90	2.22%	0.11135	0	0	-10	0.20%	0	0	0.00%	-0.09045	0
PR-4-01-3213	0	1	0.00%						0	1	0.00%						0	0	0.00%					
PR-4-01-3214	0	4	0.00%	0	6	0.00%			0	4	0.00%	0	6	0.00%			0	0	0.00%	0	0	0.00%		
PR-4-01-3510	6	290	2.07%	2	90	2.22%	0.55960	0	4	184	2.17%	2	90	2.22%	0.49945	0	-2	-106	0.10%	0	0	0.00%	-0.06015	0
PR-4-01-3530	1	38	2.63%						1	21	4.76%						0	-17	2.13%					
PR-4-02-2100	67	24	2.792	10899	3023	3.605	0.20527	0	67	24	2.792	10899	3023	3.605		0	0	0	0.000	0	0	0.000		
PR-4-02-2200		26	7	3.714						26	7	3.714								0	0	0.000		
PR-4-02-2341	3	1	3.000	89	19	4.684			3	1	3.000	89	19	4.684			0	0	0.000					
PR-4-02-3100	255	106	2.406	10899	3023	3.605	0.62764	0	256	107	2.393	10899	3023	3.605	0.63745	0	1	1	-0.013	0	0	0.000	0.00981	0
PR-4-02-3200	6	4	1.500	26	7	3.714			6	4	1.500	26	7	3.714			0	0	0.000	0	0	0.000		
PR-4-02-3341	1	1	1.000	44	16	2.750			1	1	1.000	89	19	4.684			0	0	0.000	45	3	1.934		
PR-4-02-3342	5	2	2.500						5	2	2.500	17	5	3.400			0	0	0.000					
PR-4-02-3343	1	1	1.000	267	212	1.259			1	1	1.000	267	212	1.259			0	0	0.000	0	0	0.000		

Table C-18 – PR-4 Percent Missed Appointments – April 2003

May 2003 (Submetric ID)	DCI calculation CLEC Num	CLEC Den	CLEC Rslt	Retail Num	Retail Den	Retail Rslt	Stat. Score	Comp liance	Verizon C2C CLEC Num	CLEC Den	CLEC Rslt	Retail Num	Retail Den	Retail Rslt	Stat. Score	Comp liance	Discrepancy CLEC Num	CLEC Den	CLEC Rslt	Retail Num	Retail Den	Retail Rslt	Stat. Score	Comp liance
PR-4-02-3345				267	212	1.259						267	212	1.259			0	0	0.000					
PR-4-02-3510	6	6	1.000	9	2	4.500			4	4	1.000	9	2	4.500			-2	-2	0.000	0	0	0.000		
PR-4-02-3530	1	1	1.000	27	3	9.000			1	1	1.000						0	0	0.000					
PR-4-02-5000																								
PR-4-03-2100	40	1518	2.64%						41	1804	2.27%						1	286	-0.36%					
PR-4-03-2200	0	17	0.00%						0	17	0.00%						0	0	0.00%					
PR-4-03-2341	0	21	0.00%						0	27	0.00%						0	6	0.00%					
PR-4-03-3100	271	46972	0.58%						273	47209	0.58%						2	237	0.00%					
PR-4-03-3200	9	188	4.79%						9	199	4.52%						0	11	-0.26%					
PR-4-03-3341	1	68	1.47%						1	68	1.47%						0	0	0.00%					
PR-4-03-3342	31	483	6.42%						31	487	6.37%						0	4	-0.05%					
PR-4-03-3343									16	875	1.83%													
PR-4-03-3345	0	4	0.00%						0	4	0.00%						0	0	0.00%					
PR-4-03-3510	5	290	1.72%						3	184	1.63%						-2	-106	-0.09%					
PR-4-03-3530	2	38	5.26%						0	21	0.00%						-2	-17	-5.26%					
PR-4-03-5000	2532	12864	19.68%						2532	12864	19.68%						0	0	0.00%					
PR-4-04-2100	21	361	5.82%	2563	24886	10.30%	3.08627	0	21	363	5.79%	2563	24886	10.30%	3.11815	0	0	2	-0.03%	0	0	0.00%	0.03188	0
PR-4-04-2341	1	6	16.67%	5	350	1.43%	-1.29525	-1	1	7	14.29%	5	350	1.43%	-1.21175	-1	0	1	-2.38%	0	0	0.00%	0.08350	0
PR-4-04-3113	38	995	3.82%	2563	24886	10.30%	6.59431	0	39	998	3.91%	2563	24886	10.30%	5.00000	0	1	3	0.09%	0	0	0.00%	-1.59431	0
PR-4-04-3140	43	792	5.43%	2563	24886	10.30%	4.43878	0	43	792	5.43%	2563	24886	10.30%	5.00000	0	0	0	0.00%	0	0	0.00%	0.56122	0
PR-4-04-3341	0	65	0.00%	5	309	1.62%	0.93983	0	0	65	0.00%	5	350	1.43%	5.00000	0	0	0	0.00%	0	41	-0.19%	4.06017	0
PR-4-04-3342	1	437	0.23%					-2	1	441	0.23%					-2	0	4	0.00%					
PR-4-04-3343	0	36	0.00%	42	463	9.07%	1.82547	0	0	36	0.00%	33	453	7.28%	5.00000	0	0	0	0.00%	-9	-10	-1.79%	3.17453	0
PR-4-04-3345				42	463	9.07%						33	453	7.28%						-9	-10	-1.79%		
PR-4-05-2100	3	1157	0.26%	460	179909	0.26%	0.17239	0	3	1441	0.21%	460	179909	0.26%	0.55675	0	0	284	-0.05%	0	0	0.00%	0.38436	0
PR-4-05-2341	0	15	0.00%	1	181	0.55%	0.27741	0	0	20	0.00%	1	181	0.55%	5.00000	0	0	5	0.00%	0	0	0.00%	4.72259	0
PR-4-05-3140	25	44760	0.06%	460	179909	0.26%	7.49147	0	25	44993	0.06%	460	179909	0.26%	5.00000	0	0	233	0.00%	0	0	0.00%	-2.49147	0
PR-4-05-3341	0	2	0.00%	0	180	0.00%			0	2	0.00%	1	181	0.55%			0	0	0.00%	1	1	0.55%		
PR-4-05-3343	0	834	0.00%	170	10815	1.57%	3.51644	0	0	838	0.00%	170	10815	1.57%	5.00000	0	0	4	0.00%	0	0	0.00%	1.48356	0
PR-4-05-3345	0	4	0.00%	170	10815	1.57%			0	4	0.00%	170	10815	1.57%			0	0	0.00%	0	0	0.00%		
PR-4-07-3540	3452	3581	96.40%					0	1067	1085	98.34%					0	-2385	-2496	1.94%					
PR-4-08-2200	0	17	0.00%						0	17	0.00%						0	0	0.00%					
PR-4-08-2341	0	21	0.00%						0	27	0.00%						0	6	0.00%					
PR-4-08-3200	0	392	0.00%						0	383	0.00%						0	-9	0.00%					
PR-4-08-3341	0	67	0.00%						0	68	0.00%						0	1	0.00%					
PR-4-08-3342	0	482	0.00%						0	487	0.00%						0	5	0.00%					
PR-4-14-3342									411	416	98.80%													
PR-4-15-5000	10332	12864	80.32%					-2	12864	12864	100.00%					0	2532	0	19.68%					

Table C-19 – PR-4 Percent Missed Appointments – April 2003

June 2003	DCI calculation								Verizon C2C Reported Results								Discrepancy							
	CLEC			Retail			Stat. Score	Compliance	CLEC			Retail			Stat. Score	Compliance	CLEC			Retail			Stat. Score	Compliance
Submetric ID	Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt		
PR-4-01-2210	0	11	0.00%	13	201	6.47%	0.84922	0	0	11	0.00%	13	201	6.47%	5.00000	0	0	0	0.00%	0	0	0.00%	4.15078	0
PR-4-01-2211	0	2	0.00%	3	90	3.33%			0	2	0.00%	3	90	3.33%			0	0	0.00%	0	0	0.00%		
PR-4-01-2213				0	2	0.00%						0	2	0.00%			0	0	0.00%	0	0	0.00%		
PR-4-01-2214				2	16	12.50%						2	16	12.50%			0	0	0.00%	0	0	0.00%		
PR-4-01-3210	0	16	0.00%	13	201	6.47%	1.01233	0	0	16	0.00%	13	201	6.47%	5.00000	0	0	0	0.00%	0	0	0.00%	3.98767	0
PR-4-01-3211	3	154	1.95%	3	86	3.49%	1.15624	0	3	140	2.14%	3	86	3.49%			0	-14	0.19%	0	0	0.00%		
PR-4-01-3213	0	2	0.00%	0	2	0.00%			0	2	0.00%	0	2	0.00%			0	0	0.00%	0	0	0.00%		
PR-4-01-3214	0	2	0.00%	2	16	12.50%			0	2	0.00%	2	16	12.50%			0	0	0.00%	0	0	0.00%		
PR-4-01-3510	6	258	2.33%	3	86	3.49%	0.98237	0	5	173	2.89%	3	86	3.49%			-1	-85	0.56%	0	0	0.00%		
PR-4-01-3530	0	30	0.00%	0	2	0.00%			0	16	0.00%	0	2	0.00%			0	-14	0.00%	0	0	0.00%		
PR-4-02-2100	109	41	2.659	13776	4751	2.900	0.10754	0	118	42	2.810	13776	4751	2.900		0	9	1	0.151	0	0	0.000		0
PR-4-02-2200				104	18	5.778						104	18	5.778						0	0	0.000		
PR-4-02-2341	5	1	5.000	268	24	11.167			5	1	5.000	268	24	11.167			0	0	0.000	0	0	0.000		
PR-4-02-3100	357	169	2.112	13776	4751	2.900	0.70360	0	357	169	2.112	13776	4751	2.900		0	0	0	0.000	0	0	0.000		0
PR-4-02-3200	7	3	2.333	104	18	5.778			7	3	2.333	104	18	5.778			0	0	0.000	0	0	0.000		
PR-4-02-3341	6	2	3.000	250	18	13.889			6	2	3.000	268	24	11.167			0	0	0.000	18	6	-2.722		
PR-4-02-3342	10	7	1.429						10	7	1.429	92	13	7.077			0	0	0.000					
PR-4-02-3343	1	1	1.000	537	398	1.349			1	1	1.000	537	398	1.349			0	0	0.000	0	0	0.000		
PR-4-02-3345				537	398	1.349						537	398	1.349						0	0	0.000		
PR-4-02-3510	16	6	2.667	9	3	3.000			15	5	3.000	9	3	3.000			-1	-1	0.333	0	0	0.000		
PR-4-02-3530				42	4	10.500																		
PR-4-02-5000																								
PR-4-03-2100	39	1756	2.22%						39	2048	1.90%						0	292	-0.32%					
PR-4-03-2200	0	13	0.00%						0	13	0.00%						0	0	0.00%					
PR-4-03-2341	0	16	0.00%						0	19	0.00%						0	3	0.00%					
PR-4-03-3100	234	52456	0.45%						235	52705	0.45%						1	249	0.00%					
PR-4-03-3200	11	174	6.32%						9	176	5.11%						-2	2	-1.21%					
PR-4-03-3341	4	53	7.55%						4	53	7.55%						0	0	0.00%					
PR-4-03-3342	53	546	9.71%						54	551	9.80%						1	5	0.09%					
PR-4-03-3343									20	1095	1.83%													
PR-4-03-3345	0	15	0.00%						0	15	0.00%						0	0	0.00%					
PR-4-03-3510	7	258	2.71%						2	173	1.16%						-5	-85	-1.56%					
PR-4-03-3530	1	30	3.33%						0	16	0.00%						-1	-14	-3.33%					
PR-4-03-5000	2976	11808	25.20%						2976	11808	25.20%						0	0	0.00%					
PR-4-04-2100	24	330	7.27%	4107	24430	16.81%	4.60250	0	24	331	7.25%	4107	24430	16.81%	5.00000	0	0	1	-0.02%	0	0	0.00%	0.39750	0
PR-4-04-2341	1	3	33.33%	15	344	4.36%			1	3	33.33%	15	344	4.36%			0	0	0.00%	0	0	0.00%		
PR-4-04-3113	64	1047	6.11%	4107	24430	16.81%	9.06473	0	64	1049	6.10%	4107	24430	16.81%	5.00000	0	0	2	-0.01%	0	0	0.00%	-4.06473	0
PR-4-04-3140	59	833	7.08%	4107	24430	16.81%	7.38335	0	59	833	7.08%	4107	24430	16.81%	5.00000	0	0	0	0.00%	0	0	0.00%	-2.38335	0
PR-4-04-3341	1	48	2.08%	11	302	3.64%	0.97342	0	1	48	2.08%	15	344	4.36%			0	0	0.00%	4	42	0.72%		
PR-4-04-3342	2	477	0.42%					-2	2	482	0.41%					-2	0	5	0.00%					
PR-4-04-3343	0	30	0.00%	95	505	18.81%	2.56153	0	0	30	0.00%	78	487	16.02%	5.00000	0	0	0	0.00%	-17	-18	-2.80%	2.43847	0
PR-4-04-3345				95	505	18.81%						78	487	16.02%						-17	-18	-2.80%		

Table C-19 – PR-4 Percent Missed Appointments – April 2003

June 2003	DCI calculation								Verizon C2C Reported Results								Discrepancy							
	CLEC			Retail			Stat. Score	Compliance	CLEC			Retail			Stat. Score	Compliance	CLEC			Retail			Stat. Score	Compliance
Submetric ID	Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt		
PR-4-05-2100	17	1426	1.19%	644	175732	0.37%	-3.96469	-2	18	1717	1.05%	644	175732	0.37%			1	291	-0.14%	0	0	0.00%		
PR-4-05-2341	0	13	0.00%	0	209	0.00%			0	16	0.00%	0	209	0.00%	5.00000	0	0	3	0.00%	0	0	0.00%		
PR-4-05-3140	45	50201	0.09%	644	175732	0.37%	9.05275	0	45	50448	0.09%	644	175732	0.37%	5.00000	0	0	247	0.00%	0	0	0.00%	-4.05275	0
PR-4-05-3341	0	4	0.00%	0	209	0.00%			0	4	0.00%	0	209	0.00%			0	0	0.00%	0	0	0.00%		
PR-4-05-3343	1	1050	0.10%	303	12048	2.51%	4.80263	0	1	1065	0.09%	303	12048	2.51%	5.00000	0	0	15	0.00%	0	0	0.00%	0.19737	0
PR-4-05-3345	0	15	0.00%	303	12048	2.51%	0.62168	0	0	15	0.00%	303	12048	2.51%	5.00000	0	0	0	0.00%	0	0	0.00%	4.37832	0
PR-4-07-3540	6470	6614	97.82%					0	1134	1145	99.04%					0	-5336	-5469	1.22%					0
PR-4-08-2200	0	13	0.00%						0	13	0.00%						0	0	0.00%					
PR-4-08-2341	0	16	0.00%						0	19	0.00%						0	3	0.00%					
PR-4-08-3200	0	376	0.00%						0	350	0.00%						0	-26	0.00%					
PR-4-08-3341	0	52	0.00%						0	53	0.00%						0	1	0.00%					
PR-4-08-3342	0	541	0.00%						0	551	0.00%						0	10	0.00%					
PR-4-14-3342									478	482	99.17%													
PR-4-15-5000	8832	11808	74.80%					-2	11808	11808	100.00%					0	2976	0	25.20%					

PR-5: PERCENT FACILITY MISSED ORDERS

Definition

This metric measures the Percent of Dispatched Orders completed (or cancelled) after the commitment date due to lack of facilities.

LSR Orders

From the LSR Provisioning Data Mart, records for those dispatched completed orders which are not globally excluded and meet the criteria for a reportable product disaggregation (see the product code table at the end of the LSR Provisioning Data Mart section above), will be counted to obtain the PR-5 denominators.   For PR-5-04, cancelled dispatched orders are eligible just as completed dispatched orders.

Such records will also be counted in the PR-5 numerators if the following additional sub-metric specific conditions are met:

- **PR-5-01:**

    – Provisioning Completion date (COMPL_DATE) is later than Original Due Date (ORG_DUE_DATE).
    – The number of calendar days by which the Order was missed due to company reasons (CAL_COMP_MAC_DAYS) is greater than 0.
    – The FACILITY_MISS_IND field has a 'Y' value.

- **PR-5-02:**

    – Provisioning Completion date (COMPL_DATE) is more than 15 days later than Original Due Date (ORG_DUE_DATE).
    – The number of calendar days by which the Order was missed due to company reasons (CAL_COMP_MAC_DAYS) is greater than 15.
    – The FACILITY_MISS_IND field has a 'Y' value.

- **PR-5-04:**

    – Status of the order is Cancelled.
    – Customer Record Information System (CRIS) Completion Date (CRIS_COMPL_DATE) is more than 5 days later than Original Due Date (ORG_DUE_DATE).
    – Neither the first or last Customer Missed Appointment Code has any of the values: 'SA','SO','SR','SL', or 'SC'. (These are all the documented Subscriber missed appointment codes except SP and SE which both mean the Subscriber requested an earlier appointment. Any of these values (except SP and SE) would indicate that the delay is due to the subscriber, and this condition is identified using the derived field SUB_DELAY_IND.)

ASR Orders

From the ASR Provisioning Data Mart, records for those dispatched completed orders which are not globally excluded and meet the criteria for a reportable product disaggregation (see the product code table at the end of the ASR Provisioning Data Mart section above), will be counted to obtain the PR-5 denominators.   For PR-5-04, cancelled dispatched orders are eligible just as completed dispatched orders.

Such records will also be counted in the PR-5 numerators if the following additional sub-metric specific conditions are met:

- **PR-5-01:**

  – Provisioning Completion date (ACTUAL_CMPL_DATE) is later than Provisioning Due Date (PRV_DUE_DATE).
  – The FACL_IND field has a 'Y' value.

- **PR-5-02:**

  – Provisioning Completion date (ACTUAL_CMPL _DATE) is more than 15 days later than Provisioning Due Date (PRV_DUE_DATE).
  – The FACL_IND field has a 'Y' value.

- **PR-5-03:**

  – Provisioning Completion date (ACTUAL_CMPL _DATE) is more than 60 days later than Provisioning Due Date (PRV_DUE_DATE).
  – The FACL_IND field has a 'Y' value.

- **PR-5-04:**

  – Status of the order is Cancelled.
  – Provisioning Completion date (ACTUAL_CMPL _DATE) is more than 5 days later than Provisioning Due Date (PRV_DUE_DATE).
  – The FACL_IND field has a 'Y' value.

DCI Recalculation Process

DCI developed an SAS macro to calculate metric results based on a clear specification of the metrics definitions. DCI then implemented the information described in the pages immediately above into three SAS macro invocations, one for all LSR PR-5 submetrics, and one for all ASRs except Trunks, and one for all ASRs. DCI then pooled these results to obtain its metric numerators, denominators, and results. Using these values, DCI calculated its own statistical scores to determine compliance. DCI also automatically extracted Verizon PA's C2C report

results to obtain Verizon PA's calculated numerators[4], denominators, results, and statistical scores. DCI's recalculation program then combines and compares DCI's results and Verizon PA's C2C reported results in an Excel spreadsheet.

DCI presents below the 3 SAS macro invocations which are completely sufficient to calculate all the PR-5 results. The first of these calculates the PR-5 results for all LSRs:

```
%pm_pr(   tbl=pr_dm_svc_ordv, yearmm=&report_month, metric=PR-5
                    , glblcond= global_exclusion eq 'N'
                                            and test_seller_ind eq 'N'
                                            and exclusion_ind eq 'N'
                                            and report_period eq &report_month
                                            and c_disconnect eq 'N'
                                            and svc_order_type in('N','C','T')
                                            and ord_seg_num in('00','01')
                                            and c2c_project_ind eq 'N'
                                            and not(substr(ron,1,1) eq 'S' and substr(sale_code,1,4) in('915T','916T'))
                                            and rbc_fl in('R','B')
                    , submetrics=01 02 04
                    , sbpm_typ=Count Count Count
                    , eligvars=PR_5_01_elig PR_5_02_elig PR_5_04_elig
                    , valuvars=late0 late15 late5
                    , valucond= facility_miss_ind eq 'Y' and (datepart(compl_date) gt datepart(org_due_date))  and cal_comp_mac_days gt 0
                                            :facility_miss_ind eq 'Y'  and  (datepart(compl_date)  gt  sum(15,datepart(org_due_date)))  and
cal_comp_mac_days gt 15
                                            :datepart(cris_compl_date) - datepart(org_due_date) gt 5 and status eq 'CAN'  and sub_delay_ind
eq 'N'
                    , eligcond=           org_appt_code in('M','W','R','X','C','S') and c2c_vadi_ind eq 'N' and pr_vadi_ind eq 'N' and status eq
'55B'
                            and dispatch_ind eq 'Y'
                                            :org_appt_code in('M','W','R','X','C','S') and c2c_vadi_ind eq 'N' and pr_vadi_ind eq 'N' and
status eq '55B'
                            and dispatch_ind eq 'Y'
                                            :org_appt_code in('M','W','R','X','C','S') and c2c_vadi_ind eq 'N' and pr_vadi_ind eq 'N' and
status in('55B','CAN')
                    , eligcmpr=           provider eq '1' and status eq '55B' and dispatch_ind eq 'Y'
                                            :provider eq '1' and status eq '55B' and dispatch_ind eq 'Y'
                                            :provider eq '1' and status in('55B','CAN')
                    , sm_catgs=           2100:2200:2341:3112:3140:3200:3341:3342:3343:3345
                                          |2100:2200:2341:3112:3140:3200:3341:3342:3343:3345
                                          |3112:3200:3341:3342
                    , sm_cmprs=  org_appt_code in('M','W','R','X','C','S') and c2c_service_ind eq 'P' and complexity_ind eq 'S' and c2c_vadi_ind eq
'N'
                                            :(org_appt_code in('M','W','R','X','C','S') or cabs_rt_special eq 'Y') and c2c_service_ind eq
'S'  and c2c_vadi_ind eq 'N'
                                            :org_appt_code in('M','W','R','X','C','S') and product_ind eq '3' and c2c_vadi_ind eq 'N'
                                            :org_appt_code in('M','W','R','X','C','S') and c2c_service_ind eq 'P' and complexity_ind eq
'S' and c2c_vadi_ind eq 'N'
                                            :org_appt_code in('M','W','R','X','C','S') and c2c_service_ind eq 'P' and complexity_ind eq
'S' and c2c_vadi_ind eq 'N'
                                            :(org_appt_code in('M','W','R','X','C','S') or cabs_rt_special eq 'Y')
                            and (c2c_service_ind eq 'S' or product_ind in('6','7','8')) and c2c_vadi_ind eq 'N'
                                            :org_appt_code in('M','W','R','X','C','S') and c2c_service_ind eq 'P' and product_ind eq '3'
and c2c_vadi_ind eq 'N'
                                            :org_appt_code in('M','W','R','X','C','S') and product_ind eq '1' and pr_vadi_ind eq 'Y'
                                            :org_appt_code in('M','W','R','X','C','S') and product_ind eq '1' and pr_vadi_ind eq 'Y'
                                            :org_appt_code in('M','W','R','X','C','S') and product_ind eq '1' and pr_vadi_ind eq 'Y'
                                            | org_appt_code in('M','W','R','X','C','S') and c2c_service_ind eq 'P' and complexity_ind eq
'S' and c2c_vadi_ind eq 'N'
                                            :(org_appt_code in('M','W','R','X','C','S') or cabs_rt_special eq 'Y') and c2c_service_ind eq
'S'  and c2c_vadi_ind eq 'N'
                                            :org_appt_code in('M','W','R','X','C','S') and product_ind eq '3' and c2c_vadi_ind eq 'N'
                                            :org_appt_code in('M','W','R','X','C','S') and c2c_service_ind eq 'P' and complexity_ind eq
'S' and c2c_vadi_ind eq 'N'
                                            :org_appt_code in('M','W','R','X','C','S') and c2c_service_ind eq 'P' and complexity_ind eq
'S' and c2c_vadi_ind eq 'N'
                                            :(org_appt_code in('M','W','R','X','C','S') or cabs_rt_special eq 'Y')
                            and (c2c_service_ind eq 'S' or product_ind in('6','7','8')) and c2c_vadi_ind eq 'N'
                                            :org_appt_code in('M','W','R','X','C','S') and c2c_service_ind eq 'P' and product_ind eq '3'
and c2c_vadi_ind eq 'N'
                                            :org_appt_code in('M','W','R','X','C','S') and product_ind eq '1' and pr_vadi_ind eq 'Y'
                                            :org_appt_code in('M','W','R','X','C','S') and product_ind eq '1' and pr_vadi_ind eq 'Y'
                                            :org_appt_code in('M','W','R','X','C','S') and product_ind eq '1' and pr_vadi_ind eq 'Y'
                                            | org_appt_code in('M','W','R','X','C','S') and c2c_service_ind eq 'P' and complexity_ind eq
'S' and c2c_vadi_ind eq 'N'
                                            :(org_appt_code in('M','W','R','X','C','S') or cabs_rt_special eq 'Y')
                            and (c2c_service_ind eq 'S' or product_ind in('6','7','8')) and c2c_vadi_ind eq 'N'
                                            :org_appt_code in('M','W','R','X','C','S') and c2c_service_ind eq 'P' and product_ind eq '3'
and c2c_vadi_ind eq 'N'
                                            :org_appt_code in('M','W','R','X','C','S') and product_ind eq '1' and pr_vadi_ind eq 'Y'
                        , sm_conds=  provider eq 'R' and c2c_service_ind eq 'P' and complexity_ind eq 'S' and unn1_in_data eq ' '
                                            :provider eq 'R' and c2c_service_ind eq 'S' and unn1_in_data eq ' '
                                            :provider eq 'R' and product_ind eq '3' and unn1_in_data eq ' '
                                            :provider eq 'U' and c2c_service_ind eq 'P' and complexity_ind eq 'S' and hot_cut_ind eq 'N'
and loop_ind eq '1'
                                            :provider eq 'U' and c2c_service_ind eq 'P' and complexity_ind eq 'S' and hot_cut_ind eq 'N'
and product_ind eq '5'
                                            :provider eq 'U' and (c2c_service_ind eq 'S' or product_ind in('6','7','8'))
                                            :provider eq 'U' and c2c_service_ind eq 'P' and product_ind eq '3'
                                            :provider eq 'U' and product_ind eq '2' and loop_ind eq '2'
                                            :provider eq '1' and product_ind eq '1' and unn1_in_data ne 'OUT'
```

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[4] Verizon does not provide numerators on the C2C reports. DCI back-calculated what Verizon's numerators would have been based on Verizon's reported C2C results and denominators. DCI analysis determined that Verizon truncates all its results and standard deviations at 5 decimal places, (before dividing by 100% to obtain percentage results), rather than rounding them. DCI therefore added .000005 to Verizon's non-percentage results and .0005 to Verizon's percentage results before multiplying them by the denominator, then rounded the product to the nearest integer to obtain DCI's estimate of the numerator Verizon used in its calculations. This procedure is guaranteed to obtain the exact numerator used by Verizon when the denominator is 10000 or less. When the denominator is over 10000, this procedure will provide the best possible approximation available given the C2C reports, but may be slightly different from the actual numerator used by Verizon.

```
                                         :provider eq 'U' and product_ind eq '4' and unn1_in_data ne 'OUT'
                                         | provider eq 'R' and c2c_service_ind eq 'P' and complexity_ind eq 'S' and unn1_in_data eq ' '
                                         :provider eq 'R' and c2c_service_ind eq 'S'  and unn1_in_data eq ' '
                                         :provider eq 'R' and product_ind eq '3' and unn1_in_data eq ' '
                                         :provider eq 'U' and c2c_service_ind eq 'P' and complexity_ind eq 'S' and hot_cut_ind eq 'N'
and loop_ind eq '1'                      :provider eq 'U' and c2c_service_ind eq 'P' and complexity_ind eq 'S' and hot_cut_ind eq 'N'
and product_ind eq '5'
                                         :provider eq 'U' and (c2c_service_ind eq 'S' or product_ind in('6','7','8'))
                                         :provider eq 'U' and c2c_service_ind eq 'P' and product_ind eq '3'
                                         :provider eq 'U' and product_ind eq '2' and loop_ind eq '2'
                                         :provider eq '1' and product_ind eq '1' and unn1_in_data ne 'OUT'
                                         :provider eq 'U' and product_ind eq '4' and unn1_in_data ne 'OUT'
                                         |:provider eq 'U' and c2c_service_ind eq 'P' and complexity_ind eq 'S' and hot_cut_ind eq 'N'
and loop_ind eq '1'
                                         :provider eq 'U' and (c2c_service_ind eq 'S' or product_ind in('6','7','8'))
                                         :provider eq 'U' and c2c_service_ind eq 'P' and product_ind eq '3'
                                         :provider eq 'U' and product_ind eq '2' and loop_ind eq '2'

                          )
run;
```

The second DCI-developed PR-5 SAS macro invocation calculates the PR-5 results for all the non-Trunk ASRs:

```
%pm_pr(    tbl=pr_dm_gen, yearmm=&report_month, metric=PR-5
              , glblcond=actv_typ in('C','N') and fba_fgte_ind eq 'BA'
                  and excl_ind eq 'N' and rep_typ eq 'C2C'
              , submetrics=01 02 04
              , sbpm_typ=Count Count Count
              , eligvars=PR_5_01_elig PR_5_02_elig PR_5_04_elig
              , valuvars=late_01 late_02 late_04
              , valucond= datepart(actual_cmpl_dt) gt datepart(prv_due_dt) and facl_ind eq 'Y'
                                        :datepart(actual_cmpl_dt)  gt  datepart(prv_due_dt)+15  and
facl_ind eq 'Y'
                                        :datepart(actual_cmpl_dt)  gt  datepart(prv_due_dt)+5  and
facl_ind eq 'Y'
                    and ord_stat eq 'K'
              , eligcond= not(prod_typ in('DF','TR')) and ord_stat eq 'C'
                  and put(datepart(ord_stat_dt),yymmn6.) eq "&report_month" and dsp_ind eq 'Y'
                                        :not(prod_typ in('DF','TR')) and ord_stat eq 'C'
                  and put(datepart(ord_stat_dt),yymmn6.) eq "&report_month" and dsp_ind eq 'Y'
                                        :not(prod_typ in('DF','TR')) and ord_stat in('C','K') and
cnr_ind ne 'Y'
                  and put(datepart(ord_stat_dt),yymmn6.) eq "&report_month" and dsp_ind eq 'Y'
              , eligcmpr= 0:0:0
              , sm_catgs= 3200|3200|3200
              , sm_cmprs= 0|0|0
              , sm_conds= 1|1|1
              )
run;
```

The third DCI-developed PR-5 SAS macro invocation calculates PR-5 results for Trunk ASRs:

```
%pm_pr(    tbl=pr_dm_gen, yearmm=&report_month, metric=PR-5
              , glblcond=actv_typ in('C','N') and fba_fgte_ind eq 'BA'
                  and rep_typ eq 'C2C' and excl_ind eq 'N'
              , submetrics=01 02 03
              , sbpm_typ=Count Count Count
              , eligvars=PR_5_01_elig PR_5_02_elig PR_5_03_elig
              , valuvars=delay_01 delay_02 delay_03
              , wt_var=prv_qty
              , valucond=datepart(actual_cmpl_dt) gt datepart(prv_due_dt) and facl_ind eq 'Y'
                                        :datepart(actual_cmpl_dt)  gt  datepart(prv_due_dt)+15  and
facl_ind eq 'Y'
                                        :datepart(actual_cmpl_dt)  gt  datepart(prv_due_dt)+60  and
facl_ind eq 'Y'
         , eligcond= prod_typ eq 'TR' and prv_stat eq 'C'" and trnk_serv_typ in('T')
                  and put(datepart(prv_stat_dt),yymmn6.) eq "&report_month
                                        :prod_typ eq 'TR' and prv_stat eq 'C' and trnk_serv_typ
in('T')
                  and put(datepart(prv_stat_dt),yymmn6.) eq "&report_month"
                                        :prod_typ eq 'TR' and prv_stat eq 'C' and trnk_serv_typ
in('T')
                  and put(datepart(prv_stat_dt),yymmn6.) eq "&report_month"
              , eligcmpr= prod_typ eq 'TR' and prv_stat eq 'C' and trnk_serv_typ in('I','W')
                  and put(datepart(prv_stat_dt),yymmn6.) eq "&report_month"
                                        :prod_typ eq 'TR' and prv_stat eq 'C' and trnk_serv_typ
in('I','W')
                  and put(datepart(prv_stat_dt),yymmn6.) eq "&report_month"
                                        :prod_typ eq 'TR' and prv_stat eq 'C' and trnk_serv_typ
in('I','W')
                  and put(datepart(prv_stat_dt),yymmn6.) eq "&report_month"
```

```
                , sm_catgs= 5000|5000|5000
                , sm_cmprs= 1|1|1
                , sm_conds= 1|1|1
              )
run;
```

DCI Recalculation Results

Table C-20 provides the results of DCI's PR-5 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of April 2003.

Table C-21 provides the results of DCI's PR-5 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of May 2003.

Table C-22 provides the results of DCI's PR-5 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of June 2003.

Table C-20 – PR-5 Percent Facility Missed Orders – April 2003

April 2003	DCI calculation								Verizon C2C Reported Results								Discrepancy							
	CLEC			Retail			Stat. Score	Compliance	CLEC			Retail			Stat. Score	Compliance	CLEC			Retail			Stat. Score	Compliance
Submetric ID	Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt		
PR-5-01-2100	24	335	7.16%	1105	25568	4.32%	-2.24856	-2	24	338	7.10%	1105	25568	4.32%	-2.21025	-2	0	3	-0.06%	0	0	0.00%	0.03831	0
PR-5-01-2200	0	13	0.00%	2	271	0.74%	0.30369	0	0	13	0.00%	2	271	0.74%	5.00000	0	0	0	0.00%	0	0	0.00%	4.69631	0
PR-5-01-2341	0	7	0.00%	11	405	2.72%	0.43830	0	0	7	0.00%	11	405	2.72%	5.00000	0	0	0	0.00%	0	0	0.00%	4.56170	0
PR-5-01-3112	27	935	2.89%	1105	25568	4.32%	2.32155	0	27	937	2.88%	1105	25568	4.32%	2.33425	0	0	2	-0.01%	0	0	0.00%	0.01270	0
PR-5-01-3140	27	728	3.71%	1105	25568	4.32%	0.89146	0	27	728	3.71%	1105	25568	4.32%	0.89145	0	0	0	0.00%	0	0	0.00%	-0.00001	0
PR-5-01-3200	8	340	2.35%	2	272	0.74%	-1.25930	-1	6	332	1.81%	2	271	0.74%	-0.77385	0	-2	-8	-0.55%	0	-1	0.00%	0.48545	1
PR-5-01-3341	2	102	1.96%	10	358	2.79%	0.79120	0	2	102	1.96%	11	405	2.72%	0.74955	0	0	0	0.00%	1	47	-0.08%	-0.04165	0
PR-5-01-3342	2	476	0.42%	6	463	1.30%	1.85669	0	2	478	0.42%	6	463	1.30%	1.86265	0	0	2	0.00%	0	0	0.00%	0.00596	0
PR-5-01-3343	0	32	0.00%	6	463	1.30%	0.62687	0	0	32	0.00%	6	463	1.30%	5.00000	0	0	0	0.00%	0	0	0.00%	4.37313	0
PR-5-01-3345				6	463	1.30%						6	463	1.30%						0	0	0.00%		
PR-5-01-5000	0	4704	0.00%	0	12096	0.00%			0	4704	0.00%	0	14554	0.00%	0.00005	0	0	0	0.00%	0	2458	0.00%		
PR-5-02-2100	2	335	0.60%	44	25568	0.17%	-1.17884	-1	2	338	0.59%	44	25568	0.17%	-1.17015	-1	0	3	-0.01%	0	0	0.00%	0.00869	0
PR-5-02-2200	0	13	0.00%	0	271	0.00%			0	13	0.00%	0	271	0.00%	0.00005	0	0	0	0.00%	0	0	0.00%		
PR-5-02-2341	0	7	0.00%	0	405	0.00%			0	7	0.00%	0	405	0.00%	0.00005	0	0	0	0.00%	0	0	0.00%		
PR-5-02-3112	0	935	0.00%	44	25568	0.17%	1.24698	0	0	937	0.00%	44	25568	0.17%	5.00000	0	0	2	0.00%	0	0	0.00%	3.75302	0
PR-5-02-3140	1	728	0.14%	44	25568	0.17%	0.57575	0	1	728	0.14%	44	25568	0.17%	0.57575	0	0	0	0.00%	0	0	0.00%	0.00000	0
PR-5-02-3200	1	340	0.29%	0	272	0.00%	0.13971	0	1	332	0.30%	0	271	0.00%	0.12715	0	0	-8	0.01%	0	-1	0.00%	-0.01256	0
PR-5-02-3341	1	102	0.98%	0	358	0.00%	-0.76633	0	1	102	0.98%	0	405	0.00%	-0.83735	-1	0	0	0.00%	0	47	0.00%	-0.07102	-1
PR-5-02-3342	0	476	0.00%	0	463	0.00%			0	478	0.00%	0	463	0.00%	0.00005	0	0	2	0.00%	0	0	0.00%		
PR-5-02-3343	0	32	0.00%	0	463	0.00%			0	32	0.00%	0	463	0.00%	0.00005	0	0	0	0.00%	0	0	0.00%		
PR-5-02-3345				0	463	0.00%						0	463	0.00%						0	0	0.00%		
PR-5-02-5000	0	4704	0.00%	0	12096	0.00%			0	4704	0.00%	0	14554	0.00%	0.00005	0	0	0	0.00%	0	2458	0.00%		
PR-5-03-5000	0	4704	0.00%	0	12096	0.00%			0	4704	0.00%	0	14554	0.00%	0.00005	0	0	0	0.00%	0	2458	0.00%		
PR-5-04-3112	5	1694	0.30%	786	228948	0.34%	0.33756	0	2	1515	0.13%						-3	-179	-0.16%					
PR-5-04-3200	4	422	0.95%	9	406	2.22%	1.23975	0	0	234	0.00%						-4	-188	-0.95%					
PR-5-04-3341	0	126	0.00%	15	730	2.05%	1.50142	0	1	101	0.99%						1	-25	0.99%					
PR-5-04-3342	1	542	0.18%	7	12354	0.06%	-1.22411	-1	0	458	0.00%						-1	-84	-0.18%					

Table C-21 – PR-5 Percent Facility Missed Orders – May 2003

May 2003	DCI calculation								Verizon C2C Reported Results								Discrepancy							
Submetric ID	CLEC			Retail			Stat. Score	Comp liance	CLEC			Retail			Stat. Score	Comp liance	CLEC			Retail			Stat. Score	Comp liance
	Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt		
PR-5-01-2100	10	361	2.77%	987	24886	3.97%	1.33024	0	10	363	2.75%	987	24886	3.97%	1.35015	0	0	2	-0.02%	0	0	0.00%	0.01991	0
PR-5-01-2200	0	13	0.00%	2	264	0.76%	0.30754	0	0	13	0.00%	2	264	0.76%	5.00000	0	0	0	0.00%	0	0	0.00%	4.69246	0
PR-5-01-2341	0	6	0.00%	13	363	3.58%	0.46822	0	0	7	0.00%	13	363	3.58%	5.00000	0	0	1	0.00%	0	0	0.00%	4.53178	0
PR-5-01-3112	15	1002	1.50%	987	24886	3.97%	3.92648	0	16	1005	1.59%	987	24886	3.97%	4.39585	0	1	3	0.10%	0	0	0.00%	0.46937	0
PR-5-01-3140	15	792	1.89%	987	24886	3.97%	3.36063	0	15	792	1.89%	987	24886	3.97%	3.36065	0	0	0	0.00%	0	0	0.00%	0.00002	0
PR-5-01-3200	7	432	1.62%	2	266	0.75%	-0.62047	0	6	418	1.44%	2	264	0.76%	-0.40745	0	-1	-14	-0.18%	0	-2	0.01%	0.21302	0
PR-5-01-3341	1	66	1.52%	11	320	3.44%	1.27223	0	1	66	1.52%	13	363	3.58%	1.32425	0	0	0	0.00%	2	43	0.14%	0.05202	0
PR-5-01-3342	1	438	0.23%	9	463	1.94%	3.02966	0	1	442	0.23%	9	463	1.94%	3.04315	0	0	4	0.00%	0	0	0.00%	0.01349	0
PR-5-01-3343	1	37	2.70%	9	463	1.94%	0.09994	0	1	37	2.70%	9	463	1.94%	0.09995	0	0	0	0.00%	0	0	0.00%	0.00001	0
PR-5-01-3345				9	463	1.94%						9	463	1.94%						0	0	0.00%		
PR-5-01-5000	0	2521	0.00%	0	8458	0.00%			0	2521	0.00%	0	11125	0.00%	0.00005	0	0	0	0.00%	0	2667	0.00%		
PR-5-02-2100	2	361	0.55%	33	24886	0.13%	-1.34614	-1	2	363	0.55%	33	24886	0.13%	-1.34095	-1	0	2	0.00%	0	0	0.00%	0.00519	0
PR-5-02-2200	0	13	0.00%	0	264	0.00%			0	13	0.00%	0	264	0.00%	0.00005	0	0	0	0.00%	0	0	0.00%		
PR-5-02-2341	0	6	0.00%	0	363	0.00%			0	7	0.00%	0	363	0.00%	0.00005	0	0	1	0.00%	0	0	0.00%		
PR-5-02-3112	0	1002	0.00%	33	24886	0.13%	1.13091	0	0	1005	0.00%	33	24886	0.13%	5.00000	0	0	3	0.00%	0	0	0.00%	3.86909	0
PR-5-02-3140	0	792	0.00%	33	24886	0.13%	1.00955	0	0	792	0.00%	33	24886	0.13%	5.00000	0	0	0	0.00%	0	0	0.00%	3.99045	0
PR-5-02-3200	0	432	0.00%	0	266	0.00%			0	418	0.00%	0	264	0.00%	0.00005	0	0	-14	0.00%	0	-2	0.00%		
PR-5-02-3341	0	66	0.00%	0	320	0.00%			0	66	0.00%	0	363	0.00%	0.00005	0	0	0	0.00%	0	43	0.00%		
PR-5-02-3342	0	438	0.00%	0	463	0.00%			0	442	0.00%	0	463	0.00%	0.00005	0	0	4	0.00%	0	0	0.00%		
PR-5-02-3343	0	37	0.00%	0	463	0.00%			0	37	0.00%	0	463	0.00%	0.00005	0	0	0	0.00%	0	0	0.00%		
PR-5-02-3345				0	463	0.00%						0	463	0.00%						0	0	0.00%		
PR-5-02-5000	0	2521	0.00%	0	8458	0.00%			0	2521	0.00%	0	11125	0.00%	0.00005	0	0	0	0.00%	0	2667	0.00%		
PR-5-03-5000	0	2521	0.00%	0	8458	0.00%			0	2521	0.00%	0	11125	0.00%	0.00005	0	0	0	0.00%	0	2667	0.00%		
PR-5-04-3112	30	1761	1.70%	1183	213613	0.55%	-6.47495	-2	6	1565	0.38%						-24	-196	-1.32%					
PR-5-04-3200	2	499	0.40%	38	454	8.37%	4.43676	0	0	280	0.00%						-2	-219	-0.40%					
PR-5-04-3341	7	102	6.86%	35	597	5.86%	-0.39734	0	1	94	1.06%						-6	-8	-5.80%					
PR-5-04-3342	15	537	2.79%	53	12431	0.43%	-8.24203	-2	1	452	0.22%						-14	-85	-2.57%					

Table C-22 – PR-5 Percent Facility Missed Orders – June 2003

June 2003	DCI calculation								Verizon C2C Reported Results								Discrepancy							
	CLEC			Retail			Stat. Score	Compliance	CLEC			Retail			Stat. Score	Compliance	CLEC			Retail			Stat. Score	Compliance
Submetric ID	Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt		
PR-5-01-2100	11	330	3.33%	1128	24430	4.62%	1.26531	0	11	331	3.32%	1128	24430	4.62%			0	1	-0.01%	0	0	0.00%		
PR-5-01-2200	0	7	0.00%	6	228	2.63%	0.42843	0	0	7	0.00%	6	228	2.63%	5.00000	0	0	0	0.00%	0	0	0.00%	4.57157	0
PR-5-01-2341	0	3	0.00%	9	353	2.55%			0	3	0.00%	9	353	2.55%			0	0	0.00%	0	0	0.00%		
PR-5-01-3112	36	1052	3.42%	1128	24430	4.62%	1.95609	0	36	1054	3.42%	1128	24430	4.62%			0	2	-0.01%	0	0	0.00%		
PR-5-01-3140	28	833	3.36%	1128	24430	4.62%	1.85189	0	28	833	3.36%	1128	24430	4.62%			0	0	0.00%	0	0	0.00%		
PR-5-01-3200	5	413	1.21%	6	228	2.63%	1.61593	0	5	399	1.25%	6	228	2.63%			0	-14	0.04%	0	0	0.00%		
PR-5-01-3341	1	49	2.04%	7	309	2.27%	0.51241	0	1	49	2.04%	9	353	2.55%			0	0	0.00%	2	44	0.28%		
PR-5-01-3342	5	482	1.04%	17	505	3.37%	2.77467	0	5	487	1.03%	17	505	3.37%			0	5	-0.01%	0	0	0.00%		
PR-5-01-3343	0	30	0.00%	17	505	3.37%	0.99322	0	0	30	0.00%	17	505	3.37%	5.00000	0	0	0	0.00%	0	0	0.00%	4.00678	0
PR-5-01-3345				17	505	3.37%						17	505	3.37%			0	0	0.00%					
PR-5-01-5000	0	4248	0.00%	0	3956	0.00%			0	4248	0.00%	0	4436	0.00%	5.00000	0	0	0	0.00%	0	480	0.00%		
PR-5-02-2100	1	330	0.30%	23	24430	0.09%	-0.59648	0	1	331	0.30%	23	24430	0.09%			0	1	0.00%	0	0	0.00%		
PR-5-02-2200	0	7	0.00%	1	228	0.44%	0.17297	0	0	7	0.00%	1	228	0.44%	5.00000	0	0	0	0.00%	0	0	0.00%	4.82703	0
PR-5-02-2341	0	3	0.00%	1	353	0.28%			0	3	0.00%	1	353	0.28%			0	0	0.00%	0	0	0.00%		
PR-5-02-3112	0	1052	0.00%	23	24430	0.09%	0.97490	0	0	1054	0.00%	23	24430	0.09%	5.00000	0	0	2	0.00%	0	0	0.00%	4.02510	0
PR-5-02-3140	0	833	0.00%	23	24430	0.09%	0.87126	0	0	833	0.00%	23	24430	0.09%	5.00000	0	0	0	0.00%	0	0	0.00%	4.12874	0
PR-5-02-3200	0	413	0.00%	1	228	0.44%	0.80445	0	0	399	0.00%	1	228	0.44%	5.00000	0	0	-14	0.00%	0	0	0.00%	4.19555	0
PR-5-02-3341	0	49	0.00%	1	309	0.32%	0.37056	0	0	49	0.00%	1	353	0.28%	5.00000	0	0	0	0.00%	0	44	-0.04%	4.62944	0
PR-5-02-3342	0	482	0.00%	0	505	0.00%			0	487	0.00%	0	505	0.00%	5.00000	0	0	5	0.00%	0	0	0.00%		
PR-5-02-3343	0	30	0.00%	0	505	0.00%			0	30	0.00%	0	505	0.00%	5.00000	0	0	0	0.00%	0	0	0.00%		
PR-5-02-3345				0	505	0.00%						0	505	0.00%			0	0	0.00%					
PR-5-02-5000	0	4248	0.00%	0	3956	0.00%			0	4248	0.00%	0	4436	0.00%	5.00000	0	0	0	0.00%	0	480	0.00%		
PR-5-03-5000	0	4248	0.00%	0	3956	0.00%			0	4248	0.00%	0	4436	0.00%	5.00000	0	0	0	0.00%	0	480	0.00%		
PR-5-04-3112	7	1681	0.42%	522	208569	0.25%	-1.35786	-1	2	1471	0.14%						-5	-210	-0.28%					
PR-5-04-3200	2	439	0.46%	6	346	1.73%	1.36240	0	0	249	0.00%						-2	-190	-0.46%					
PR-5-04-3341	1	74	1.35%	10	556	1.80%	0.27194	0	1	65	1.54%						0	-9	0.19%					
PR-5-04-3342	0	577	0.00%	40	13495	0.30%	1.28258	0	0	474	0.00%						0	-103	0.00%					

PR-6: INSTALLATION QUALITY

Definition

This metric measures the percent of lines/circuits/trunks installed where a reported trouble was found in the network within 30 days of order completion (seven days for POTS Services).

LSR Orders

From the LSR Provisioning Data Mart, records for those completed orders which are not globally excluded and meet the criteria for a reportable product disaggregation (see the product code table at the end of the LSR Provisioning Data Mart section above), will have the values of the DCI derived field PR6_LINES summed to obtain the PR-6 denominators. The following code indicates DCI's derivation of the PR6_LINES field:

```
data pa.pr_dm_svc_ordv_&report_month;
      set pa.pr_dm_svc_ordv_&report_month;
          if c2c_service_ind='P' and complexity_ind='S' then pr6_lines = tot_line_no;
      else if c2c_service_ind='S'
              then if feed_sys='SCABS'
                              then  if  sum(ckl_i_cnt,ckl_t_cnt)  >  0   then   pr6_lines  =
sum(ckl_i_cnt,ckl_t_cnt);

else pr6_lines = facl_i_cnt;
                              else if lines_number > 0 then pr6_lines = lines_number;
                                                                else   pr6_lines   =
facl_i_cnt;
      else if product_ind in('1','2','3','4')
              then if lines_number > 0 then pr6_lines = lines_number;
                                              else pr6_lines = facl_i_cnt;
      else pr6_lines=max(0,lines_number,facl_i_cnt,sum(ckl_i_cnt,ckl_t_cnt),tot_line_no);
run;
```

ASR Orders

From the ASR Provisioning Data Mart, records for those completed orders which are not globally excluded and meet the criteria for a reportable product disaggregation (see the product code table at the end of the ASR Provisioning Data Mart section above), will have the values of their ORD_QTY field (for Specials), or PRV_QTY field (for Trunks) summed to obtain the PR-6 denominators.

POTS Troubles

From the POTS Troubles Data Mart, those trouble records which are not globally excluded and meet the criteria for a reportable product disaggregation (see the product code table at the end of the POTS Troubles Data Mart section in Appendix D), and occurred within seven days of a POTS service installation or 30 days of a non-POTS service installation, and were not a repeat trouble, will be counted to obtain the PR-6 numerators, with the exception that records whose CLEC_ID field has the value "RTL9" are excluded from the CLEC results. If their DISPOSITION_CD is a '03', '04', or '05' (Loop or Central Office Trouble) then they are counted in the PR-6-01 and PR-6-02 numerators. If their DISPOSITION_CD is a '07', '08', '09', '12' or '13' (Found OK, Test OK, Customer Premises Equipment) then they are counted in the PR-6-03 numerators.

Specials Troubles

From the Specials and Trunks Troubles Data Mart, those trouble records which are not globally excluded, occur within 30 days of an installation on the affected circuit, are not repeat troubles, have a value of 'FAC' (Facility) or 'CO' (Central Office) in the TROUBLE_CD field, and meet the criteria for a reportable product disaggregation (see the product code table at the end of the POTS Troubles Data Mart section above), will be counted to obtain the PR-6-01 numerators, with the exception that records whose CLEC_ID field has the value "RTL9" are excluded from the CLEC results. Troubles meeting all these conditions except that they have a value other than 'FAC' or 'CO' in the TROUBLE_CD field will be counted in the PR-6-03 denominators.

DCI Recalculation Process

DCI developed a SAS macro to calculate metric results based on a clear specification of the metrics definitions. DCI then implemented the information described in the pages immediately above into four SAS macro invocations, one for LSR Hot Cut Loops (PR-6-02), one for all other LSR PR-6 submetrics, one for ASR Specials, and one for ASR Trunks. DCI then pooled these results to obtain its metric numerators, denominators, and results. Using these values, DCI calculated its own statistical scores to determine compliance. DCI also automatically extracted Verizon PA's C2C report results to obtain Verizon PA's calculated numerators[5], denominators, results, and statistical scores. DCI's recalculation program then combines and compares DCI's results and Verizon PA's C2C reported results in an Excel spreadsheet.

DCI presents below the four SAS macro invocations which are completely sufficient to calculate all the PR-6 results.

The first of these calculates the PR-6 results for Hot Cut Loops ordered via LSRs:

```
%pm_2tbl( tbl_num=mr_dm_trbl_gen, yearmm=&report_month, metric=PR-6
            , tbl_dnm=pr_dm_svc_ordv
            , glblcond_num=exclude_by_fst_ind in(0,.)
                                and corp_tel_ind eq 'N'
                                and admin_repeat_flag in('N', ' ')
                                and fGTE_ind eq 'N'
                                and report_category eq '1'
                                and service_level_cd eq 'P'
                                and pr6_pon_excl_ind eq 'N'
                                and inst_rpt_30day_ind eq 'Y'
                                and rpr_rpt_30day_ind eq 'N'
                                and res_bus_pub_ind in('R','B')
            , glblcond_dnm=status in('55B')
                                and global_exclusion eq 'N'
                                and test_seller_ind eq 'N'
                                and exclusion_ind eq 'N'
                                and report_period eq &report_month
                                and c_disconnect eq 'N'
                                and purchase_order_number ne ' '
                                and ord_seg_num in('00','01')
```

---

[5] Verizon does not provide numerators on the C2C reports. DCI back-calculated what Verizon's numerators would have been based on Verizon's reported C2C results and denominators. DCI analysis determined that Verizon truncates all its results and standard dev iations at 5 decimal places, (before dividing by 100% to obtain percentage results), rather than rounding them. DCI therefore added .000005 to Verizon's non-percentage results and .0005 to Verizon's percentage results before multiplying them by the denominator, then rounded the product to the nearest integer to obtain DCI's estimate of the numerator Verizon used in its calculations. This procedure is guaranteed to obtain the exact numerator used by Verizon when the denominator is 10000 or less. When the denominator is over 10000, this procedure will provide the best possible approximation available given the C2C reports, but may be slightly different from the actual numerator used by Verizon.

```
                                           and c2c_project_ind eq 'N'
                                           and  not(substr(ron,1,1)  eq  'S'  and  substr(sale_code,1,4)
in('915T','916T'))
                                           and sub_delay_ind eq 'N'
                                           and rbc_fl in('R','B')
                                           and admin_ind in('N',' ')
                                           and c2c_vadi_ind eq 'N'
                    , submetrics=02
                    , sbpm_typ=Count
                    , eligvars=PR_6_02_elig
                    , valucond= disposition_cd in('03','04','05')
                    , valuvars= loop_co_troubles
                    , wt_var_dnm = pr6_lines
                    , eligcond= clec_id ne 'RTL9'
                    , eligcmpr= 0
                    , sm_catgs= 3520
                    , sm_conds_dnm=  c2c_service_ind eq 'P' and complexity_ind eq 'S' and provider eq
'U'
                                           and  pr_vadi_ind  eq  'N'  and  svc_order_type
in('N','C','T')
                            and org_appt_code in('M','R','W','X','C','S')
                            and loop_ind eq '1' and hot_cut_ind eq 'Y'
                    , sm_cmprs_dnm=   0
                    , sm_conds_num= product_ind eq 'LOOP' and provider_ind eq 'U'
                          and test_acc_ind eq 'N' and hotcut_ind eq 'Y'
                    , sm_cmprs_num=   0
            )
run;
```

The second DCI-developed PR-6 SAS macro invocation calculates the PR-6 denominators for all CLEC LSRs other than Hot Cut Loops and all Retail orders other than Trunks. It also calculates PR-6 numerators for all POTS Troubles:

```
%pm_2tbl( tbl_num=mr_dm_trbl_gen, yearmm=&report_month, metric=PR-6
                , tbl_dnm=pr_dm_svc_ordv
                , glblcond_num=exclude_by_fst_ind in(0,.)
                                           and corp_tel_ind eq 'N'
                                           and admin_repeat_flag in('N', ' ')
                                           and fGTE_ind eq 'N'
                                           and report_category eq '1'
                                           and service_level_cd eq 'P'
                                           and pr6_pon_excl_ind eq 'N'
                                           and inst_rpt_30day_ind eq 'Y'
                                           and rpr_rpt_30day_ind eq 'N'
                                           and res_bus_pub_ind in('R','B')
                , glblcond_dnm=status in('55B')
                                           and global_exclusion eq 'N'
                                           and test_seller_ind eq 'N'
                                           and report_period eq &report_month
                                           and rbc_fl in('R','B')
                                           and admin_ind in('N',' ')
                                           and c2c_vadi_ind eq 'N'
                , submetrics=01 03
                , sbpm_typ=Count Count
                , eligvars=PR_6_01_elig PR_6_03_elig
                , valucond= disposition_cd in('03','04','05')
                                           :disposition_cd in('07','08','09','12','13')
                , valuvars= loop_co_troubles cpe_tok_fok_troubles
                , wt_var_dnm = pr6_lines
                , eligcond= clec_id ne 'RTL9' and purchase_order_number ne ' '
                                           :clec_id ne 'RTL9' and purchase_order_number ne ' '
                , eligcmpr= provider eq '1' and not(product_ind eq '1' and pr_vadi_ind eq 'N')
                                           :provider eq '1' and not(product_ind eq '1' and pr_vadi_ind eq 'N')
                , sm_catgs= 2100:2200:2341:3112:3121:3200:3341:3342:3343:3345
                             |2100:2200:2341:3112:3121:3200:3341:3342:3343:3345
                , sm_conds_dnm=  c2c_service_ind eq 'P' and complexity_ind eq 'S' and provider eq 'R' and pr_vadi_ind eq 'N'
                                           and  (svc_order_type  in('N','C','T')  and  org_appt_code
in('M','R','W','X','C','S')
                            or resale_migr_no_appintv eq 'Y' and org_appt_code ne 'Y')
                                           :c2c_service_ind eq 'S' and provider eq 'R' and pr_vadi_ind eq 'N'
                            and (svc_order_type in('N','C','T') or resale_migr_no_appintv eq 'Y')
                                           :product_ind eq '3'  and provider eq 'R' and pr_VADI_IND EQ 'N'
                            and (svc_order_type in('N','C','T') or resale_migr_no_appintv eq 'Y')
                                           :loop_ind eq '1' and provider eq 'U' and c2c_service_ind eq 'P'
                        and complexity_ind eq 'S' and pr_vadi_ind eq 'N'
                                           and   svc_order_type   in('N','C','T')   and   org_appt_code
in('M','R','W','X','C','S')
                                           :product_ind   in('5','9')   and   c2c_service_ind   eq   'P'   and
complexity_ind eq 'S'
                        and provider eq 'U' and pr_vadi_ind eq 'N' and hot_cut_ind eq 'N'
                        and svc_order_type in('N','C','T') and org_appt_code in('M','R','W','X','C','S')
                                           :(c2c_service_ind  eq  'S'  and  not(product_ind in('6','7','8')))  and
provider eq 'U'
                                           and   svc_order_type   in('N','C','T')   and   org_appt_code
in('M','R','W','X','C','S')
                                           :provider eq 'U' and product_ind eq '3' and c2c_service_ind eq 'P'
and pr_vadi_ind eq 'N'
                                           and   svc_order_type   in('N','C','T')   and   org_appt_code
in('M','R','W','X','C','S')
                                           :provider eq 'U' and product_ind eq '2' and loop_ind eq '2' and
pr_vadi_ind eq 'N'
```

```
in('M','R','W','X','C','S')                                    and    svc_order_type   in('N','C','T')   and   org_appt_code
                                                   :((provider eq '1' and product_ind eq '1')
pr_vadi_ind eq 'N'                                           or (provider eq 'U' and product_ind eq '4' and 0)) and
in('M','R','W','X','C','S')                                    and    svc_order_type   in('N','C','T')   and    org_appt_code
                                                   :provider eq 'U' and product_ind eq '4' and pon_qual_ind eq 'N'
in('M','R','W','X','C','S')                                    and    svc_order_type   in('N','C','T')   and    org_appt_code
and pr_vadi_ind eq 'N'                             |c2c_service_ind eq 'P' and complexity_ind eq 'S' and provider eq 'R'
in('M','R','W','X','C','S')                                    and   (svc_order_type  in('N','C','T')   and  org_appt_code
                                or resale_migr_no_appintv eq 'Y' and org_appt_code ne 'Y')
                                               :c2c_service_ind eq 'S' and provider eq 'R' and pr_vadi_ind eq 'N'
                                and (svc_order_type in('N','C','T') or resale_migr_no_appintv eq 'Y')
                                               :product_ind eq '3'  and provider eq 'R' and pr_VADI_IND EQ 'N'
                                and (svc_order_type in('N','C','T') or resale_migr_no_appintv eq 'Y')
                                               :loop_ind eq '1' and provider eq 'U' and c2c_service_ind eq 'P'
                                and complexity_ind eq 'S' and pr_vadi_ind eq 'N'
                                                              and    svc_order_type   in('N','C','T')   and    org_appt_code
in('M','R','W','X','C','S')                        :product_ind   in('5','9')   and   c2c_service_ind   eq   'P'   and
complexity_ind eq 'S'                              and provider eq 'U' and pr_vadi_ind eq 'N' and hot_cut_ind eq 'N'
                                and svc_order_type in('N','C','T') and org_appt_code in('M','R','W','X','C','S')
                                               :(c2c_service_ind 'S' and not(product_ind in('6','7','8'))) and
provider eq 'U'                                                and    svc_order_type   in('N','C','T')   and    org_appt_code
in('M','R','W','X','C','S')                        :provider eq 'U' and product_ind eq '3' and c2c_service_ind eq 'P'
and pr_vadi_ind eq 'N'                                         and    svc_order_type   in('N','C','T')   and    org_appt_code
in('M','R','W','X','C','S')                        :provider eq 'U' and product_ind eq '2' and loop_ind eq '2' and
pr_vadi_ind eq 'N'                                            and    svc_order_type   in('N','C','T')   and    org_appt_code
in('M','R','W','X','C','S')                        :((provider eq '1' and product_ind eq '1')
                                                            or (provider eq 'U' and product_ind eq '4' and 0)) and
pr_vadi_ind eq 'N'                                            and    svc_order_type   in('N','C','T')   and    org_appt_code
in('M','R','W','X','C','S')                        :provider eq 'U' and product_ind eq '4' and pon_qual_ind eq 'N'
                                                              and    svc_order_type   in('N','C','T')   and    org_appt_code
in('M','R','W','X','C','S')
                           , sm_cmprs_dnm=  c2c_service_ind eq 'P' and complexity_ind eq 'S' and provider eq '1'
in('M','R','W','X','C','S')                                   and    svc_order_type   in('N','C','T')   and    org_appt_code
not(substr(scm,1,2) in('AR','AQ','IB'))            :c2c_service_ind   eq   'S'   and   actual_rec_iss_date   ne   .   and
                                                        and provider eq '1'
in('M','R','W','X','C','S')                                   and    svc_order_type   in('N','C','T')   and    org_appt_code
'ZZZ'                                              and (feed_sys ne 'SCABS' or feed_sys eq 'SCABS' and acna eq
not(product_ind in('6','7','8'))                              and    not(substr(scm,1,2)    in('DO','DI','TK')))    and
in('N','C','T')                                    :product_ind   eq   '3'   and   provider   eq   '1'   and   svc_order_type
                                and org_appt_code in('M','R','W','X','C','S')
'1'                                                :c2c_service_ind eq 'P' and complexity_ind eq 'S' and provider eq
                                and ("&report_month" ne "200306" or dispatch_ind eq "Y")
'1'                                                           and    svc_order_type   in('N','C','T')   and    org_appt_code
in('M','R','W','X','C','S')                        :c2c_service_ind eq 'P' and complexity_ind eq 'S' and provider eq
'1'                                                           and    svc_order_type   in('N','C','T')   and    org_appt_code
in('M','R','W','X','C','S')                        :c2c_service_ind   eq   'S'   and   actual_rec_iss_date   ne   .   and
not(substr(scm,1,2) in('AR','AQ','IB'))                 and provider eq '1'
                                                              and    svc_order_type   in('N','C','T')   and    org_appt_code
in('M','R','W','X','C','S')                        and (feed_sys ne 'SCABS' or feed_sys eq 'SCABS' and acna eq
'ZZZ'                                                         and    not(substr(scm,1,2)    in('DO','DI','TK')))    and
not(product_ind in('6','7','8'))                   :c2c_service_ind eq 'P' and complexity_ind eq 'S' and provider eq
'1' and dispatch_ind eq 'Y'                                   and    svc_order_type   in('N','C','T')   and    org_appt_code
in('M','R','W','X','C','S')                        :c2c_service_ind eq 'P' and complexity_ind eq 'S' and provider eq
'1' and dispatch_ind eq 'Y'                                   and    svc_order_type   in('N','C','T')   and    org_appt_code
in('M','R','W','X','C','S')                        :provider eq '1' and product_ind eq '1' and pr_vadi_ind eq 'Y'
                                                              and    svc_order_type   in('N','C','T')   and    org_appt_code
in('M','R','W','X','C','S')                        :provider eq '1' and product_ind eq '1' and pr_vadi_ind eq 'Y'
                                                              and    svc_order_type   in('N','C','T')   and    org_appt_code
in('M','R','W','X','C','S')                        | c2c_service_ind eq 'P' and complexity_ind eq 'S' and provider eq
'1'                                                           and    svc_order_type   in('N','C','T')   and    org_appt_code
in('M','R','W','X','C','S')                        :c2c_service_ind   eq   'S'   and   actual_rec_iss_date   ne   .   and
not(substr(scm,1,2) in('AR','AQ','IB'))                 and provider eq '1'
                                                              and    svc_order_type   in('N','C','T')   and    org_appt_code
in('M','R','W','X','C','S')                        and (feed_sys ne 'SCABS' or feed_sys eq 'SCABS' and acna eq
'ZZZ'                                                         and    not(substr(scm,1,2)    in('DO','DI','TK')))    and
not(product_ind in('6','7','8'))
```

```
                                                     :product_ind  eq  '3'  and  provider  eq  '1'  and  svc_order_type
in('N','C','T')
                           and org_appt_code in('M','R','W','X','C','S')
                                                     :c2c_service_ind eq 'P' and complexity_ind eq 'S' and provider eq
'1'
                           and ("&report_month" ne "200306" or dispatch_ind eq "Y")
                                                     and    svc_order_type   in('N','C','T')    and    org_appt_code
in('M','R','W','X','C','S')
                                                     :c2c_service_ind eq 'P' and complexity_ind eq 'S' and provider eq
'1'
                                                     and   svc_order_type   in('N','C','T')    and    org_appt_code
in('M','R','W','X','C','S')
                                                     :c2c_service_ind   eq   'S'   and  actual_rec_iss_date  ne   .   and
not(substr(scm,1,2) in('AR','AQ','IB'))
                                                     and provider eq '1'
                                                     and   svc_order_type   in('N','C','T')    and    org_appt_code
in('M','R','W','X','C','S')
                                                     and  (feed_sys  ne  'SCABS'  or  feed_sys  eq  'SCABS' and  acna  eq
'ZZZ'
                                                     and   not(substr(scm,1,2)   in('DO','DI','TK')))   and
not(product_ind in('6','7','8'))
                                                     :c2c_service_ind eq 'P' and complexity_ind eq 'S' and provider eq
'1' and dispatch_ind eq 'Y'
                                                     and   svc_order_type   in('N','C','T')    and    org_appt_code
in('M','R','W','X','C','S')
                                                     :c2c_service_ind eq 'P' and complexity_ind eq 'S' and provider eq
'1' and dispatch_ind eq 'Y'
                                                     and   svc_order_type   in('N','C','T')    and    org_appt_code
in('M','R','W','X','C','S')
                                                     :provider eq '1' and product_ind eq '1' and pr_vadi_ind eq 'Y'
                                                     and   svc_order_type   in('N','C','T')    and    org_appt_code
in('M','R','W','X','C','S')
                                                     :provider eq '1' and product_ind eq '1' and pr_vadi_ind eq 'Y'
                                                     and   svc_order_type   in('N','C','T')    and    org_appt_code
in('M','R','W','X','C','S')
                           ,  sm_conds_num=  product_ind  eq  'SIMPLE'  and  provider_ind  eq  'R'  and  test_acc_ind  eq  'N'  and
inst_rpt_7day_ind eq 'Y'
                                                     :0
                                                     :product_ind eq 'DIGITAL' and provider_ind eq 'R' and test_acc_ind eq 'N'
                                                     :product_ind eq 'LOOP' and provider_ind eq 'U' and test_acc_ind eq 'N' and
inst_rpt_7day_ind eq 'Y'
                                                     :product_ind eq 'PLATFORM' and provider_ind eq 'U' and test_acc_ind eq 'N' and
inst_rpt_7day_ind eq 'Y'
                                                     :0
                                                     :product_ind eq 'DIGITAL' and provider_ind eq 'U' and test_acc_ind eq 'N'
                                                     :product_ind eq 'LOOP XDSL' and provider_ind eq 'U' and test_acc_ind eq 'N'
                                                     :product_ind eq 'LINESHARE' and provider_ind eq 'U' and test_acc_ind eq 'N'
                                                     :product_ind eq 'LINESPLITTING' and provider_ind eq 'U' and test_acc_ind eq
'N'
                                                     |product_ind eq 'SIMPLE' and provider_ind eq 'R' and test_acc_ind eq 'N' and
inst_rpt_7day_ind eq 'Y'
                                                     :0
                                                     :product_ind eq 'DIGITAL' and provider_ind eq 'R' and test_acc_ind eq 'N'
                                                     :product_ind eq 'LOOP' and provider_ind eq 'U' and test_acc_ind eq 'N' and
inst_rpt_7day_ind eq 'Y'
                                                     :product_ind eq 'PLATFORM' and provider_ind eq 'U' and test_acc_ind eq 'N' and
inst_rpt_7day_ind eq 'Y'
                                                     :0
                                                     :product_ind eq 'DIGITAL' and provider_ind eq 'U' and test_acc_ind eq 'N'
                                                     :product_ind eq 'LOOP XDSL' and provider_ind eq 'U' and test_acc_ind eq 'N'
                                                     :product_ind eq 'LINESHARE' and provider_ind eq 'U' and test_acc_ind eq 'N'
                                                     :product_ind eq 'LINESPLITTING' and provider_ind eq 'U' and test_acc_ind eq
'N'
                           ,  sm_cmprs_num=    product_ind  eq  'SIMPLE'  and  provider_ind  eq  'L'  and  test_acc_ind  eq  'N'  and
inst_rpt_7day_ind eq 'Y'
                                                     :0
                                                     :product_ind eq 'DIGITAL' and provider_ind eq 'L' and test_acc_ind eq 'N'
                                                     :product_ind  eq  'SIMPLE'  and  provider_ind  eq  'L'  and  ("&report_month"  ne
"200306" or wfa_do_cnt gt 0)
                                                     and test_acc_ind eq 'N' and inst_rpt_7day_ind eq 'Y'
                                                     :product_ind eq 'SIMPLE' and provider_ind eq 'L' and test_acc_ind eq 'N' and
inst_rpt_7day_ind eq 'Y'
                                                     :0
                                                     :product_ind eq 'SIMPLE' and provider_ind eq 'L' and wfa_do_cnt gt 0 and
test_acc_ind eq 'N'
                           and inst_rpt_7day_ind eq 'Y'
                                                     :product_ind eq 'SIMPLE' and provider_ind eq 'L' and wfa_do_cnt gt 0 and
test_acc_ind eq 'N'
                           and inst_rpt_7day_ind eq 'Y'
                                                     :product_ind eq 'LINESHARE' and provider_ind eq 'V' and test_acc_ind eq 'V'
                                                     :product_ind eq 'LINESHARE' and provider_ind eq 'V' and test_acc_ind eq 'V'
                                                     |  product_ind eq 'SIMPLE' and provider_ind eq 'L' and test_acc_ind eq 'N' and
inst_rpt_7day_ind eq 'Y'
                                                     :0
                                                     :product_ind eq 'DIGITAL' and provider_ind eq 'L' and test_acc_ind eq 'N'
                                                     :product_ind eq 'SIMPLE' and provider_ind eq 'L' and wfa_do_cnt gt 0 and
test_acc_ind eq 'N'
                           and inst_rpt_7day_ind eq 'Y'
                                                     :product_ind eq 'SIMPLE' and provider_ind eq 'L' and test_acc_ind eq 'N' and
inst_rpt_7day_ind eq 'Y'
                                                     :0
                                                     :product_ind eq 'SIMPLE' and provider_ind eq 'L' and wfa_do_cnt gt 0 and
test_acc_ind eq 'N'
                           and inst_rpt_7day_ind eq 'Y'
                                                     :product_ind eq 'SIMPLE' and provider_ind eq 'L' and wfa_do_cnt gt 0 and
test_acc_ind eq 'N'
                           and inst_rpt_7day_ind eq 'Y'
                                                     :product_ind eq 'LINESHARE' and provider_ind eq 'V' and test_acc_ind eq 'V'
                                                     :product_ind eq 'LINESHARE' and provider_ind eq 'V' and test_acc_ind eq 'V'
              )
run;
```

The third DCI-developed PR-6 SAS macro invocation calculates the PR-6 denominators for all CLEC ASRs other than Trunks. It also calculates PR-6 numerators for all Specials Troubles:

```
%pm_2tbl( tbl_num=mr_dm_trbl_spc, yearmm=&report_month, metric=PR-6
              ,tbl_dnm=pr_dm_gen
          , glblcond_num=exclude_by_fst_ind in(0,.)
                                and corp_tel_ind eq 'N'
                                and admin_repeat_flag in('N', ' ')
                                and fGTE_ind eq 'N'
                                and report_category eq '1'
                                and service_level_cd eq 'S'
                                and test_acc_ind eq 'N'
                                and access_excl_ind in('B','N')
                                and inst_rpt_30day_ind eq 'Y'
                                and rpr_rpt_30day_ind eq 'N'
          , glblcond_dnm=ord_stat eq 'C'
                                and prod_typ in('DS0','DS1','DS3','OTH')
                                and actv_typ in('N','M','C')
          , submetrics=01 03
          , sbpm_typ=Count Count
          , eligvars=PR_6_01_elig PR_6_03_elig
          , valucond=      trouble_cd in('FAC','CO')
                                :not(trouble_cd in('FAC','CO'))
          , valuvars= loop_co_troubles cpe_tok_fok_troubles
          , wt_var_dnm = ord_qty
          , eligcond= clec_id ne 'RTL9':clec_id ne 'RTL9'
          , eligcmpr= 1:1
          , sm_catgs= 2200:3200
                                |2200:3200
          , sm_conds_dnm=0:1|0:1
          , sm_cmprs_dnm=0:0|0:0
          , sm_conds_num= provider_ind eq 'R':provider_ind eq 'U'
                |provider_ind eq 'R':provider_ind eq 'U'
          , sm_cmprs_num= provider_ind eq 'L':provider_ind eq 'L'
                |provider_ind eq 'L':provider_ind eq 'L'
          )
run;
```

The fourth DCI-developed PR-6 SAS macro invocation calculates the PR-6 denominators for all Trunk ASRs. It also calculates PR-6 numerators for all Trunks troubles:

```
%pm_2tbl( tbl_num=mr_dm_trbl_spc, yearmm=&report_month, metric=PR-6
              ,tbl_dnm=pr_dm_gen
          , glblcond_num=exclude_by_fst_ind in(0,.)
                                and corp_tel_ind eq 'N'
                                and admin_repeat_flag in('N', ' ')
                                and fGTE_ind eq 'N'
                                and report_category eq '1'
                                and service_level_cd eq 'M'
                                and test_acc_ind eq 'N'
                                and access_excl_ind in('B','N')
                                and inst_rpt_30day_ind eq 'Y'
                                and rpr_rpt_30day_ind eq 'N'
          , glblcond_dnm=prv_stat eq 'C'
                                and prod_typ in('TR')
                                and actv_typ in('N','M','C')
          , submetrics=01 03
          , sbpm_typ=Count Count
          , eligvars=PR_6_01_elig PR_6_03_elig
          , valucond=      trouble_cd in('FAC','CO')
                                :not(trouble_cd in('FAC','CO'))
          , valuvars= loop_co_troubles cpe_tok_fok_troubles
          , wt_var_dnm = prv_qty
          , eligcond= clec_id ne 'RTL9':clec_id ne 'RTL9'
          , eligcmpr= 1:1
          , sm_catgs= 5000|5000
          , sm_conds_num=provider_ind eq 'U'|provider_ind eq 'U'
          , sm_cmprs_num=provider_ind eq 'L'|provider_ind eq 'L'
          , sm_conds_dnm=trnk_serv_typ in('T','R')|trnk_serv_typ in('T','R')
          , sm_cmprs_dnm=trnk_serv_typ in('I','W')|trnk_serv_typ in('I','W')

          )
run;
```

DCI Recalculation Results

Table C-23 provides the results of DCI's PR-6 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of April 2003.

Table C-24 provides the results of DCI's PR-6 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of May 2003.

Table C-25 provides the results of DCI's PR-6 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of June 2003.

Table C-23 – PR-6 Installation Quality – April 2003

April 2003	DCI calculation								Verizon C2C Reported Results								Discrepancy							
	CLEC			Retail			Stat. Score	Comp liance	CLEC			Retail			Stat. Score	Comp liance	CLEC			Retail			Stat. Score	Comp liance
Submetric ID	Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt		
PR-6-01-2100	71	2747	2.58%	4782	224119	2.13%	-1.53100	-1	109	2734	3.99%	7603	224119	3.39%	-1.62755	-1	38	-13	1.40%	2821	0	1.26%	-0.09655	0
PR-6-01-2200	4	38	10.53%	20	608	3.29%	-1.68307	-2	4	38	10.53%	20	838	2.39%	-2.11695	-2	0	0	0.00%	0	230	-0.90%	-0.43388	0
PR-6-01-2341	0	16	0.00%	7	821	0.85%	0.36737	0	0	10	0.00%	7	413	1.69%	5.00000	0	0	-6	0.00%	0	-408	0.84%	4.63263	0
PR-6-01-3112	90	5712	1.58%	4782	224119	2.13%	3.06052	0	144	5712	2.52%	2004	32833	6.10%	5.00000	0	54	0	0.95%	-2778	-191286	3.97%	1.93948	0
PR-6-01-3121	435	81529	0.53%	4782	224119	2.13%	27.07443	0	1163	81510	1.43%	7603	224119	3.39%	5.00000	0	728	-19	0.89%	2821	0	1.26%	-22.07443	0
PR-6-01-3200	10	439	2.28%	20	608	3.29%	1.16019	0	10	595	1.68%	20	838	2.39%	1.11005	0	0	156	-0.60%	0	230	-0.90%	-0.05014	0
PR-6-01-3341	0	103	0.00%	1348	32833	4.11%	2.09668	0	0	103	0.00%	2004	32833	6.10%	5.00000	0	0	0	0.00%	656	0	2.00%	2.90332	0
PR-6-01-3342	1	569	0.18%	1348	32833	4.11%	4.68401	0	1	565	0.18%	2004	32833	6.10%	5.00000	0	0	-4	0.00%	656	0	2.00%	0.31599	0
PR-6-01-3343	4	619	0.65%	106	11006	0.96%	1.01222	0	4	631	0.63%	106	11006	0.96%	1.05505	0	0	12	-0.01%	0	0	0.00%	0.04283	0
PR-6-01-3345	0	1	0.00%	106	11006	0.96%			0	1	0.00%	106	11006	0.96%			0	0	0.00%	0	0	0.00%		
PR-6-01-5000	0	18672	0.00%	0	14554	0.00%			0	18672	0.00%	0	14554	0.00%	0.00005	0	0	0	0.00%	0	0	0.00%		
PR-6-02-3520	17	2665	0.64%	0	0			0	17	2212	0.77%					0	0	-453	0.13%					
PR-6-03-2100	47	2747	1.71%	3170	224119	1.41%	-1.30815	-1	71	2734	2.60%						24	-13	0.89%					
PR-6-03-2200	0	38	0.00%	47	608	7.73%	1.73099	0	0	38	0.00%						0	0	0.00%					
PR-6-03-2341	0	16	0.00%	9	821	1.10%	0.41707	0	0	10	0.00%						0	-6	0.00%					
PR-6-03-3112	86	5712	1.51%	1074	224119	0.48%	-11.09233	-2	148	6398	2.31%						62	686	0.81%					
PR-6-03-3121	420	81529	0.52%	3170	224119	1.41%	18.61998	0	1050	81510	1.29%						630	-19	0.77%					
PR-6-03-3200	11	439	2.51%	47	608	7.73%	3.12345	0	11	595	1.85%						0	156	-0.66%					
PR-6-03-3341	0	103	0.00%	1074	32833	3.27%	1.86340	0	0	103	0.00%						0	0	0.00%					
PR-6-03-3342	0	569	0.00%	1074	32833	3.27%	4.34905	0	0	565	0.00%						0	-4	0.00%					
PR-6-03-3343	12	619	1.94%	591	11006	5.37%	3.68480	0	12	631	1.90%						0	12	-0.04%					
PR-6-03-3345	2	1	200 %	591	11006	5.37%			2	1	200.%						0	0	0.00%					
PR-6-03-5000	0	18672	0.00%	0	14554	0.00%			0	18672	0.00%						0	0	0.00%					

Table C-24 – PR-6 Installation Quality – May 2003

May 2003	DCI calculation								Verizon C2C Reported Results								Discrepancy							
	CLEC			Retail			Stat. Score	Comp liance	CLEC			Retail			Stat. Score	Comp liance	CLEC			Retail			Stat. Score	Comp liance
Submetric ID	Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt		
PR-6-01-2100	56	726	7.71%	4880	54555	8.95%	1.23131	0	90	2916	3.09%	7810	205710	3.80%	2.09405	0	34	2190	-4.63%	2930	151155	-5.15%	0.86274	0
PR-6-01-2200	0	1	0.00%	21	136	15.44%			0	12	0.00%	21	967	2.17%			0	11	0.00%	0	831	-13.27%		
PR-6-01-2341	2	9	22.22%	7	92	7.61%	-0.90458	-1	2	29	6.90%	7	363	1.93%	-1.09105	-1	0	20	-15.33%	0	271	-5.68%	-0.18647	0
PR-6-01-3112	108	1279	8.44%	4880	54555	8.95%	0.66337	0	162	4972	3.26%	2040	32143	6.35%	5.00000	0	54	3693	-5.19%	-2840	-22412	-2.60%	4.33663	0
PR-6-01-3121	319	13124	2.43%	4880	54555	8.95%	23.47774	0	759	50595	1.50%	7810	205710	3.80%	5.00000	0	440	37471	-0.93%	2930	151155	-5.15%	-18.47774	0
PR-6-01-3200	11	180	6.11%	21	136	15.44%	2.90433	0	11	659	1.67%	21	967	2.17%	0.89525	0	0	479	-4.44%	0	831	-13.27%	-2.00908	0
PR-6-01-3341	0	12	0.00%	1283	6751	19.00%	1.67650	0	0	72	0.00%	2040	32143	6.35%	5.00000	0	0	60	0.00%	757	25392	-12.66%	3.32350	0
PR-6-01-3342	1	131	0.76%	1283	6751	19.00%	5.27056	0	1	542	0.18%	2040	32143	6.35%	5.00000	0	0	411	-0.58%	757	25392	-12.66%	-0.27056	0
PR-6-01-3343	8	654	1.22%	107	3424	3.13%	3.09776	0	8	875	0.91%	107	11283	0.95%	0.23305	0	0	221	-0.31%	0	7859	-2.18%	-2.86471	0
PR-6-01-3345	0	1	0.00%	107	3424	3.13%			0	4	0.00%	107	11283	0.95%			0	3	0.00%	0	7859	-2.18%		
PR-6-01-5000	0	12864	0.00%	0	11296	0.00%			0	12864	0.00%	0	11125	0.00%	0.00005	0	0	0	0.00%	0	-171	0.00%		
PR-6-02-3520	18	552	3.26%	0	0			-2	17	1669	1.02%					0	-1	1117	-2.24%					
PR-6-03-2100	40	726	5.51%	3254	54555	5.96%	0.51423	0	67	2916	2.30%						27	2190	-3.21%					
PR-6-03-2200	0	1	0.00%	36	136	26.47%			0	12	0.00%						0	11	0.00%					
PR-6-03-2341	2	9	22.22%	5	92	5.43%	-2.12023	-2	2	29	6.90%						0	20	-15.33%					
PR-6-03-3112	74	1279	5.79%	1034	54555	1.90%	-10.08587	-2	139	5591	2.49%						65	4312	-3.30%					
PR-6-03-3121	316	13124	2.41%	3254	54555	5.96%	15.44715	0	760	50595	1.50%						444	37471	-0.91%					
PR-6-03-3200	10	180	5.56%	36	136	26.47%	4.17262	0	10	659	1.52%						0	479	-4.04%					
PR-6-03-3341	0	12	0.00%	1034	6751	15.32%	1.47191	0	0	72	0.00%						0	60	0.00%					
PR-6-03-3342	0	131	0.00%	1034	6751	15.32%	4.82102	0	0	542	0.00%						0	411	0.00%					
PR-6-03-3343	18	654	2.75%	620	3424	18.11%	9.34407	0	18	875	2.06%						0	221	-0.70%					
PR-6-03-3345	0	1	0.00%	620	3424	18.11%			0	4	0.00%						0	3	0.00%					
PR-6-03-5000	0	12864	0.00%	0	11296	0.00%			0	12864	0.00%						0	0	0.00%					

Table C-25 – PR-6 Installation Quality – June 2003

June 2003	DCI calculation								Verizon C2C Reported Results								Discrepancy							
	CLEC			Retail			Stat. Score	Comp liance	CLEC			Retail			Stat. Score	Comp liance	CLEC			Retail			Stat. Score	Comp liance
Submetric ID	Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt		
PR-6-01-2100	48	2795	1.72%	5568	203264	2.74%	3.57714	0	69	2790	2.47%	8623	203264	4.24%	5.00000	0	21	-5	0.76%	3055	0	1.50%	1.42286	0
PR-6-01-2200	0	78	0.00%	14	629	2.23%	1.25687	0	0	78	0.00%	14	794	1.76%	5.00000	0	0	0	0.00%	0	165	-0.46%	3.74313	0
PR-6-01-2341	0	30	0.00%	6	544	1.10%	0.56310	0	0	27	0.00%	6	366	1.64%	5.00000	0	0	-3	0.00%	0	-178	0.54%	4.43690	0
PR-6-01-3112	118	4686	2.52%	1422	31325	4.54%	6.19952	0	214	4686	4.57%	2120	31325	6.77%	5.00000	0	96	0	2.05%	698	0	2.23%	-1.19952	0
PR-6-01-3121	318	47336	0.67%	5568	203264	2.74%	24.81951	0	772	47333	1.63%	8623	203264	4.24%	5.00000	0	454	-3	0.96%	3055	0	1.50%	-19.81951	0
PR-6-01-3200	6	387	1.55%	14	629	2.23%	0.98427	0	6	568	1.06%	14	794	1.76%			0	181	-0.49%	0	165	-0.46%		
PR-6-01-3341	0	48	0.00%	1422	31325	4.54%	1.50966	0	0	52	0.00%	2120	31325	6.77%	5.00000	0	0	4	0.00%	698	0	2.23%	3.49034	0
PR-6-01-3342	0	670	0.00%	1422	31325	4.54%	5.58514	0	0	668	0.00%	2120	31325	6.77%	5.00000	0	0	-2	0.00%	698	0	2.23%	-0.58514	0
PR-6-01-3343	9	1045	0.86%	151	12563	1.20%	1.14733	0	9	1095	0.82%	151	12563	1.20%			0	50	-0.04%	0	0	0.00%		
PR-6-01-3345	1	15	6.67%	151	12563	1.20%	-0.96691	-1	1	15	6.67%	151	12563	1.20%			0	0	0.00%	0	0	0.00%		
PR-6-01-5000	0	11808	0.00%	0	4436	0.00%			0	11808	0.00%	0	4436	0.00%	5.00000	0	0	0	0.00%	0	0	0.00%		
PR-6-02-3520	22	2228	0.99%	0	0			0	24	1860	1.29%					0	2	-368	0.30%					
PR-6-03-2100	36	2795	1.29%	3610	203264	1.78%	1.94005	0	56	2790	2.01%						20	-5	0.72%					
PR-6-03-2200	0	78	0.00%	41	629	6.52%	2.19971	0	0	78	0.00%						0	0	0.00%					
PR-6-03-2341	1	30	3.33%	5	544	0.92%	-1.34896	-1	1	27	3.70%						0	-3	0.37%					
PR-6-03-3112	85	4686	1.81%	1132	31325	3.61%	6.15703	0	188	5410	3.48%						103	724	1.66%					
PR-6-03-3121	367	47336	0.78%	3610	203264	1.78%	14.84603	0	806	47333	1.70%						439	-3	0.93%					
PR-6-03-3200	12	387	3.10%	41	629	6.52%	2.14296	0	12	568	2.11%						0	181	-0.99%					
PR-6-03-3341	0	48	0.00%	1132	31325	3.61%	1.34047	0	0	52	0.00%						0	4	0.00%					
PR-6-03-3342	0	670	0.00%	1132	31325	3.61%	4.95920	0	0	668	0.00%						0	-2	0.00%					
PR-6-03-3343	34	1045	3.25%	727	12563	5.79%	3.36984	0	34	1095	3.11%						0	50	-0.15%					
PR-6-03-3345	3	15	20.00%	727	12563	5.79%	-2.35614	-2	3	15	20.00%						0	0	0.00%					
PR-6-03-5000	0	11808	0.00%	0	4436	0.00%			0	11808	0.00%						0	0	0.00%					

PR-8: RATE OF OPEN ORDERS IN A HOLD STATUS

Definition

This metric measures the number of open orders that at the close of the reporting period have been in a hold status for more than 30 or 90 calendar days, as a percentage of orders completed in the reporting period.

LSR Orders

From the LSR Provisioning Data Mart, records for those orders completed in the report month which are not globally excluded and meet the criteria for a reportable product disaggregation (see the product code table at the end of the LSR Provisioning Data Mart section above), will be counted in the PR-6 denominators.

Those orders in the LSR Provisioning Data Mart which are not globally excluded, meet the criteria for a reportable product disaggregation, have been neither completed nor cancelled, have passed the due date and missed the commitment due to Verizon PA reasons, will be counted in the numerator of PR-8-01 if they have been held for more than 30 days, and in the numerator of PR-8-02 if they have been held for more than 90 days.

ASR Orders

From the ASR Provisioning Data Mart, records for those orders completed in the report month which are not globally excluded and meet the criteria for a reportable product disaggregation (see the product code table at the end of the ASR Provisioning Data Mart section above), will be counted in the PR-6 denominators.

Those orders in the ASR Provisioning Data Mart which are not globally excluded, meet the criteria for a reportable product disaggregation, have been neither completed nor cancelled, have passed the due date and missed the commitment due to Verizon PA reasons, will be counted in the numerator of PR-8-01 if they have been held for more than 30 days, and in the numerator of PR-8-02 if they have been held for more than 90 days.

DCI Recalculation Process

DCI developed a SAS macro to calculate metric results based on a clear specification of the metrics definitions. DCI then implemented the information described in the pages immediately above into two SAS macro invocations, one for LSRs, and one for ASRs. DCI then pooled these results to obtain its metric numerators, denominators, and results. Using these values, DCI calculated its own statistical scores to determine compliance. DCI also automatically extracted Verizon PA's C2C report results to obtain Verizon PA's calculated numerators[6], denominators,

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[6] Verizon PA does not provide numerators on the C2C reports. DCI back-calculated what Verizon PA's numerators would have been based on Verizon PA's reported C2C results and denominators. DCI analysis determined that Verizon PA truncates all its results and standard deviations at 5 decimal places, (before dividing by 100% to obtain percentage results), rather than rounding them. DCI therefore added .000005 to Verizon PA's non-percentage results and .0005 to Verizon PA's percentage results before multiplying them by the denominator, then rounded the product to the nearest integer to obtain DCI's estimate of the numerator

results, and statistical scores. DCI's recalculation program then combines and compares DCI's results and Verizon PA's C2C reported results in an Excel spreadsheet.

DCI presents below the 2 SAS macro invocations which are completely sufficient to calculate all the PR-8 results. The first of these calculates the PR-8 results for LSRs:

```
%pm_2tb1(   tbl_dnm=pr_dm_svc_ordv, yearmm=&report_month, metric=PR-8
                    , tbl_num=pr_dm_pending
                    , glblcond_dnm=status in('55B')
                                        and global_exclusion eq 'N'
                                        and test_seller_ind eq 'N'
                                        and exclusion_ind eq 'N'
                                        and report_period eq &report_month
                                        and c2c_project_ind eq 'N'
                                        and not(substr(ron,1,1) eq 'S' and substr(sale_code,1,4) in('915T','916T'))
                                        and rbc_fl in('R','B')
                                        and c2c_vadi_ind eq 'N'
                    , glblcond_num=global_exclusion eq 'N'
                                        and test_seller_ind eq 'N'
                                        and exclusion_ind eq 'N'
                                        and c2c_project_ind eq 'N'
                                        and not(substr(ron,1,1) eq 'S' and substr(sale_code,1,4) in('915T','916T'))
                                        and rbc_fl in('R','B')
                                        and c2c_vadi_ind eq 'N'
                    , submetrics=01 02
                    , sbpm_typ=Count Count
                    , eligvars=PR_8_01_elig PR_8_02_elig
                    , valuvars=held30 held90
                    , valucond= substr(cisr_mac,1,1) eq 'C' and sub_delay_ind eq 'N'
                        and intnx('month',input("&report_month",yymmn6.),0,'end')-datepart(org_due_date) gt 30
                                        :substr(cisr_mac,1,1) eq 'C' and sub_delay_ind eq 'N'
                        and intnx('month',input("&report_month",yymmn6.),0,'end')-datepart(org_due_date) gt 90
                    , eligcond=  pr_vadi_ind eq 'N'
                                        : pr_vadi_ind eq 'N'
                    , eligcmpr= provider eq '1' and c2c_vadi_ind eq 'N' and org_appt_code in('M','W','R','X','C','S')
                                        and svc_order_type in('N','T','C') and c_disconnect eq 'N'
                                        :provider   eq   '1'   and   c2c_vadi_ind   eq   'N'   and   org_appt_code
in('M','W','R','X','C','S')
                                        and svc_order_type in('N','T','C') and c_disconnect eq 'N'

                    , sm_catgs= 2100:2200:2341:3100:3200:3341:3342:3343:3345:3510:3530
                                        |2100:2200:2341:3100:3200:3341:3342:3343:3345:3510:3530

                    , sm_cmprs_dnm=  provider eq '1' and c2c_service_ind eq 'P' and complexity_ind eq 'S'
                                        :provider eq '1' and c2c_service_ind eq 'S'
                                        :provider eq '1' and product_ind eq '3'
                                        :provider eq '1' and c2c_service_ind eq 'P' and complexity_ind eq
'S'
                                        :provider eq '1' and c2c_service_ind eq 'S'
                                        :provider eq '1' and product_ind eq '3'
                                        :provider eq '1' and c2c_service_ind eq 'S' and ds_level_ind eq 'O'
                                        :provider eq '1' and product_ind eq '1' and pr_vadi_ind eq 'Y'
                                        :provider eq '1' and product_ind eq '1' and pr_vadi_ind eq 'Y'
                                        :provider eq '1' and c2c_service_ind eq 'S' and ds_level_ind eq '1'
                        and not(isdn_pri_feature_ind eq 'Y' and dispatch_ind eq 'N')
                                        :provider eq '1' and c2c_service_ind eq 'S' and ds_level_ind eq '3'
                                        | provider eq '1' and c2c_service_ind eq 'P' and complexity_ind eq
'S'
                                        :provider eq '1' and c2c_service_ind eq 'S'
                                        :provider eq '1' and product_ind eq '3'
                                        :provider eq '1' and c2c_service_ind eq 'P' and complexity_ind eq
'S'
                                        :provider eq '1' and c2c_service_ind eq 'S'
                                        :provider eq '1' and product_ind eq '3'
                                        :provider eq '1' and c2c_service_ind eq 'S' and ds_level_ind eq 'O'
                                        :provider eq '1' and product_ind eq '1' and pr_vadi_ind eq 'Y'
                                        :provider eq '1' and product_ind eq '1' and pr_vadi_ind eq 'Y'
                                        :provider eq '1' and c2c_service_ind eq 'S' and ds_level_ind eq '1'
                        and not(isdn_pri_feature_ind eq 'Y' and dispatch_ind eq 'N')
                                        :provider eq '1' and c2c_service_ind eq 'S' and ds_level_ind eq '3'

                    , sm_conds_dnm=  provider eq 'R'
                        and (c_disconnect eq'N' and svc_order_type in('N','C','T') or resale_migr_no_appintv eq 'Y')
                                        and c2c_service_ind eq 'P' and complexity_ind eq 'S' and
unn1_in_data eq ' '
                                        :provider eq 'R'
                        and (c_disconnect eq'N' and svc_order_type in('N','C','T') or resale_migr_no_appintv eq 'Y')
                                        and   c2c_service_ind   eq   'S'      and   org_appt_code
in('M','W','R','X','C','S')
                                        :provider eq 'R'
                        and (c_disconnect eq'N' and svc_order_type in('N','C','T') or resale_migr_no_appintv eq 'Y')
                                        and product_ind eq '3'
                                        :provider eq 'U' and svc_order_type in('N','T','C') and c_disconnect
eq 'N'
                        and org_appt_code in('M','W','R','X','C','S')
                                        and c2c_service_ind eq 'P' and complexity_ind eq 'S' and
hot_cut_ind eq 'N'
                                        :provider eq 'U' and svc_order_type in('N','T','C') and c_disconnect
eq 'N'
                        and org_appt_code in('M','W','R','X','C','S')
                                        and c2c_service_ind eq 'S'
```

Verizon PA used in its calculations. This procedure is guaranteed to obtain the exact numerator used by Verizon when the denominator is 10000 or less. When the denominator is over 10000, this procedure will provide the best possible approximation available given the C2C reports, but may be slightly different from the actual numerator used by Verizon.

```
                                                     :provider eq 'U' and svc_order_type in('N','T','C') and c_disconnect
eq 'N'
                     and org_appt_code in('M','W','R','X','C','S')
                                                     and c2c_service_ind eq 'P' and product_ind eq '3'
                                                     :provider eq 'U' and svc_order_type in('N','T','C') and c_disconnect
eq 'N'
                                          and org_appt_code in('M','W','R','X','C','S')
                                          and product_ind eq '2' and loop_ind eq '2'
                                                     :provider eq '1' and svc_order_type in('N','T','C') and c_disconnect
eq 'N'
                      and org_appt_code in('M','W','R','X','C','S')
                                          and product_ind eq '1'
                                                     :provider eq 'U' and svc_order_type in('N','T','C') and c_disconnect
eq 'N'
                     and org_appt_code in('M','W','R','X','C','S')
                                          and product_ind eq '4'
                                          :0
                                          :0
                                          | provider eq 'R' and
                     (c_disconnect eq'N' and svc_order_type in('N','C','T') or resale_migr_no_appintv eq 'Y')
                                          and c2c_service_ind eq 'P' and complexity_ind eq 'S' and
unn1_in_data eq ' '
                                          :provider eq 'R'
                     and (c_disconnect eq'N' and svc_order_type in('N','C','T') or resale_migr_no_appintv eq 'Y')
                                          and   c2c_service_ind   eq   'S'       and   org_appt_code
in('M','W','R','X','C','S')
                                          :provider eq 'R'
                     and (c_disconnect eq'N' and svc_order_type in('N','C','T') or resale_migr_no_appintv eq 'Y')
                                          and product_ind eq '3'
                                                     :provider eq 'U' and svc_order_type in('N','T','C') and c_disconnect
eq 'N'
                     and org_appt_code in('M','W','R','X','C','S')
                                          and c2c_service_ind eq 'P' and complexity_ind eq 'S' and
hot_cut_ind eq 'N'
                                                     :provider eq 'U' and svc_order_type in('N','T','C') and c_disconnect
eq 'N'
                     and org_appt_code in('M','W','R','X','C','S')
                                          and c2c_service_ind eq 'S'
                                                     :provider eq 'U' and svc_order_type in('N','T','C') and c_disconnect
eq 'N'
                     and org_appt_code in('M','W','R','X','C','S')
                                          and c2c_service_ind eq 'P' and product_ind eq '3'
                                                     :provider eq 'U' and svc_order_type in('N','T','C') and c_disconnect
eq 'N'
                     and org_appt_code in('M','W','R','X','C','S')
                                          and product_ind eq '2' and loop_ind eq '2'
                                                     :provider eq '1' and svc_order_type in('N','T','C') and c_disconnect
eq 'N'
                     and org_appt_code in('M','W','R','X','C','S')
                                          and product_ind eq '1'
                                                     :provider eq 'U' and svc_order_type in('N','T','C') and c_disconnect
eq 'N'
                     and org_appt_code in('M','W','R','X','C','S')
                                          and product_ind eq '4'
                                          :0
                                          :0
               , sm_cmprs_num=   provider eq '1' and c2c_service_ind eq 'P' and complexity_ind eq 'S' and c_disconnect eq
'N'
                                          and    org_appt_code    in('M','W','R','X','C','S')     and
svc_order_type in('N','T','C')
:provider eq '1' and c2c_service_ind eq 'S' and c_disconnect eq 'N'
                                          and    org_appt_code    in('M','W','R','X','C','S')     and
svc_order_type in('N','T','C')
                                          :provider eq '1' and product_ind eq '3' and c_disconnect eq 'N'
                                          and    org_appt_code    in('M','W','R','X','C','S')     and
svc_order_type in('N','T','C')
                                          :provider eq '1' and c2c_service_ind eq 'P' and complexity_ind eq
'S' and c_disconnect eq 'N'
                                          and    org_appt_code    in('M','W','R','X','C','S')     and
svc_order_type in('N','T','C')
                                          :provider eq '1' and c2c_service_ind eq 'S' and c_disconnect eq 'N'
                                          and    org_appt_code    in('M','W','R','X','C','S')     and
svc_order_type in('N','T','C')
                                          :provider eq '1' and product_ind eq '3' and c_disconnect eq 'N'
                                          and    org_appt_code    in('M','W','R','X','C','S')     and
svc_order_type in('N','T','C')
                                          :provider eq '1' and c2c_service_ind eq 'S' and ds_level_ind eq '0'
and c_disconnect eq 'N'
                                          and    org_appt_code    in('M','W','R','X','C','S')     and
svc_order_type in('N','T','C')
                                          :provider eq '1' and product_ind eq '1' and pr_vadi_ind eq 'Y' and
c_disconnect eq 'N'
                                          and    org_appt_code    in('M','W','R','X','C','S')     and
svc_order_type in('N','T','C')
                                          :provider eq '1' and product_ind eq '1' and pr_vadi_ind eq 'Y' and
c_disconnect eq 'N'
                                          and    org_appt_code    in('M','W','R','X','C','S')     and
svc_order_type in('N','T','C')
                                          :provider eq '1' and c2c_service_ind eq 'S' and ds_level_ind eq '1'
               and not(isdn_pri_feature_ind eq 'Y' and dispatch_ind eq 'N') and c_disconnect eq 'N'
                                          and    org_appt_code    in('M','W','R','X','C','S')     and
svc_order_type in('N','T','C')
                                          :provider eq '1' and c2c_service_ind eq 'S' and ds_level_ind eq '3'
and c_disconnect eq 'N'
                                          and    org_appt_code    in('M','W','R','X','C','S')     and
svc_order_type in('N','T','C')
                                          | provider eq '1' and c2c_service_ind eq 'P' and complexity_ind eq
'S' and c_disconnect eq 'N'
                                          and    org_appt_code    in('M','W','R','X','C','S')     and
svc_order_type in('N','T','C')
                                          :provider eq '1' and c2c_service_ind eq 'S' and c_disconnect eq 'N'
                                          and    org_appt_code    in('M','W','R','X','C','S')     and
svc_order_type in('N','T','C')
                                          :provider eq '1' and product_ind eq '3' and c_disconnect eq 'N'
                                          and    org_appt_code    in('M','W','R','X','C','S')     and
svc_order_type in('N','T','C')
                                          :provider eq '1' and c2c_service_ind eq 'P' and complexity_ind eq
'S' and c_disconnect eq 'N'
```

```
                                                                         and      org_appt_code      in('M','W','R','X','C','S')      and
svc_order_type in('N','T','C')                              :provider eq '1' and c2c_service_ind eq 'S' and c_disconnect eq 'N'
                                                                         and      org_appt_code      in('M','W','R','X','C','S')      and
svc_order_type in('N','T','C')                              :provider eq '1' and product_ind eq '3' and c_disconnect eq 'N'
                                                                         and      org_appt_code      in('M','W','R','X','C','S')      and
svc_order_type in('N','T','C')                              :provider eq '1' and c2c_service_ind eq 'S' and ds_level_ind eq '0'
and c_disconnect eq 'N'                                              and      org_appt_code      in('M','W','R','X','C','S')      and
svc_order_type in('N','T','C')                              :provider eq '1' and product_ind eq '1' and pr_vadi_ind eq 'Y' and
c_disconnect eq 'N'                                                 and      org_appt_code      in('M','W','R','X','C','S')      and
svc_order_type in('N','T','C')                              :provider eq '1' and product_ind eq '1' and pr_vadi_ind eq 'Y' and
c_disconnect eq 'N'                                                 and      org_appt_code      in('M','W','R','X','C','S')      and
svc_order_type in('N','T','C')                              :provider eq '1' and c2c_service_ind eq 'S' and ds_level_ind eq '1'
                                    and not(isdn_pri_feature_ind eq 'Y' and dispatch_ind eq 'N') and c_disconnect eq 'N'
                                                                         and      org_appt_code      in('M','W','R','X','C','S')      and
svc_order_type in('N','T','C')                              :provider eq '1' and c2c_service_ind eq 'S' and ds_level_ind eq '3'
and c_disconnect eq 'N'                                              and      org_appt_code      in('M','W','R','X','C','S')      and
svc_order_type in('N','T','C')
                           , sm_conds_num=  provider eq 'R' and pr_vadi_ind eq 'N'
                                   and (c_disconnect eq'N' and svc_order_type in('N','C','T') or resale_migr_no_appintv eq 'Y')
                                                    and c2c_service_ind eq 'P' and complexity_ind eq 'S' and
unn1_in_data eq ' '                                         :provider eq 'R' and pr_vadi_ind eq 'N'
                                   and (c_disconnect eq'N' and svc_order_type in('N','C','T') or resale_migr_no_appintv eq 'Y')
                                                    and   c2c_service_ind   eq   'S'      and   org_appt_code
in('M','W','R','X','C','S')                                 :provider eq 'R' and pr_vadi_ind eq 'N'
                                   and (c_disconnect eq'N' and svc_order_type in('N','C','T') or resale_migr_no_appintv eq 'Y')
                                                    and product_ind eq '3'
                                                            :provider eq 'U' and svc_order_type in('N','T','C') and c_disconnect
eq 'N'                             and org_appt_code in('M','W','R','X','C','S') and pr_vadi_ind eq 'N'
                                                    and c2c_service_ind eq 'P' and complexity_ind eq 'S' and
hot_cut_ind eq 'N'                                          :provider eq 'U' and svc_order_type in('N','T','C') and c_disconnect
eq 'N'                             and org_appt_code in('M','W','R','X','C','S') and pr_vadi_ind eq 'N'
                                                    and c2c_service_ind eq 'S'
                                                            :provider eq 'U' and svc_order_type in('N','T','C') and c_disconnect
eq 'N'                             and org_appt_code in('M','W','R','X','C','S') and pr_vadi_ind eq 'N'
                                                    and c2c_service_ind eq 'P' and product_ind eq '3'
                                                            :provider eq 'U' and svc_order_type in('N','T','C') and c_disconnect
eq 'N'                             and org_appt_code in('M','W','R','X','C','S') and pr_vadi_ind eq 'N'
                                                    and product_ind eq '2' and loop_ind eq '2'
                                                            :provider eq '1' and svc_order_type in('N','T','C') and c_disconnect
eq 'N'                             and org_appt_code in('M','W','R','X','C','S') and pr_vadi_ind eq 'N'
                                                    and product_ind eq '1'
                                                            :provider eq 'U' and svc_order_type in('N','T','C') and c_disconnect
eq 'N'                             and org_appt_code in('M','W','R','X','C','S') and pr_vadi_ind eq 'N'
                                                    and product_ind eq '4'
                                                            :0
                                                            :0
                           | provider eq 'R' and pr_vadi_ind eq 'N'
                                   and (c_disconnect eq'N' and svc_order_type in('N','C','T') or resale_migr_no_appintv eq 'Y')
                                                    and c2c_service_ind eq 'P' and complexity_ind eq 'S' and
unn1_in_data eq ' '                                         :provider eq 'R' and pr_vadi_ind eq 'N'
                                   and (c_disconnect eq'N' and svc_order_type in('N','C','T') or resale_migr_no_appintv eq 'Y')
                                                    and   c2c_service_ind   eq   'S'      and   org_appt_code
in('M','W','R','X','C','S')                                 :provider eq 'R' and pr_vadi_ind eq 'N'
                                   and (c_disconnect eq'N' and svc_order_type in('N','C','T') or resale_migr_no_appintv eq 'Y')
                                                    and product_ind eq '3'
                                                            :provider eq 'U' and svc_order_type in('N','T','C') and c_disconnect
eq 'N'                             and org_appt_code in('M','W','R','X','C','S') and pr_vadi_ind eq 'N'
                                                    and c2c_service_ind eq 'P' and complexity_ind eq 'S' and
hot_cut_ind eq 'N'                                          :provider eq 'U' and svc_order_type in('N','T','C') and c_disconnect
eq 'N'                             and org_appt_code in('M','W','R','X','C','S') and pr_vadi_ind eq 'N'
                                                    and c2c_service_ind eq 'S'
                                                            :provider eq 'U' and svc_order_type in('N','T','C') and c_disconnect
eq 'N'                             and org_appt_code in('M','W','R','X','C','S') and pr_vadi_ind eq 'N'
                                                    and c2c_service_ind eq 'P' and product_ind eq '3'
                                                            :provider eq 'U' and svc_order_type in('N','T','C') and c_disconnect
eq 'N'                             and org_appt_code in('M','W','R','X','C','S') and pr_vadi_ind eq 'N'
                                                    and product_ind eq '2' and loop_ind eq '2'
                                                            :provider eq '1' and svc_order_type in('N','T','C') and c_disconnect
eq 'N'                             and org_appt_code in('M','W','R','X','C','S') and pr_vadi_ind eq 'N'
                                                    and product_ind eq '1'
                                                            :provider eq 'U' and svc_order_type in('N','T','C') and c_disconnect
eq 'N'                             and org_appt_code in('M','W','R','X','C','S') and pr_vadi_ind eq 'N'
                                                    and product_ind eq '4'
                                                            :0
                                                            :0
                     )
run;
```

The second DCI-developed PR-8 SAS macro invocation calculates the PR-8 results for all ASRs:

```
%pm_2tbl(   tbl_dnm=pr_dm_gen, yearmm=&report_month, metric=PR-8
            , tbl_num=pr_dm_gen
            , glblcond_dnm=ord_stat in('C') and actv_typ in('N','M','C') and fba_fgte_ind eq 'BA'
                                              and    put(datepart(ord_stat_dt),yymmn6.)      eq
"&report_month"
            , glblcond_num=ord_stat eq 'P' and cnr_ind eq 'N'
                    and actv_typ in('N','M','C') and fba_fgte_ind eq 'BA'
                                              and    put(datepart(ord_stat_dt),yymmn6.)      eq
"&report_month"
            , submetrics=01 02
            , sbpm_typ=Count Count
            , eligvars=PR_8_01_elig PR_8_02_elig
            , valuvars=held30 held90
            , valucond=   intnx('month',input("&report_month",yymmn6.),0,'end')-datepart(prv_due_dt) gt
30
                                :intnx('month',input("&report_month",yymmn6.),0,'end')-
datepart(prv_due_dt) gt 90
            , eligcond= 1:1
            , eligcmpr= 1:1
            , sm_catgs=  3200:3510:3530:5000
                              |3200:3510:3530:5000
            , sm_cmprs_dnm=   0:0:0:prod_typ in('TR') and trnk_serv_typ in('I','W')
                              |0:0:0:prod_typ in('TR') and trnk_serv_typ in('I','W')
            , sm_conds_dnm=  prod_typ in('DS1','DS3')
                    :prod_typ in('EEL')
                    :prod_typ in('IOF')
                    :prod_typ in('TR') and trnk_serv_typ in('T','R')
                                    | prod_typ in('DS1','DS3')
                    :prod_typ in('EEL')
                    :prod_typ in('IOF')
                    :prod_typ in('TR') and trnk_serv_typ in('T','R')
            , sm_cmprs_num=  0:0:0:prod_typ in('TR') and trnk_serv_typ in('I','W')
                              |0:0:0:prod_typ in('TR') and trnk_serv_typ in('I','W')
            , sm_conds_num=  prod_typ in('DS1','DS3')
                    :prod_typ in('EEL')
                    :prod_typ in('IOF')
                    :prod_typ in('TR') and trnk_serv_typ in('T','R')
                                    | prod_typ in('DS1','DS3')
                    :prod_typ in('EEL')
                    :prod_typ in('IOF')
                    :prod_typ in('TR') and trnk_serv_typ in('T','R')
            )

run;
```

DCI Recalculation Results

Table C-26 provides the results of DCI's PR-8 metric recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of April 2003.

Just prior to preparing this report DCI discovered a problem with the data used for its pending orders, which invalidated the DCI calculated numerators and results in Table C-26. DCI has not corrected these results.

Table C-27 provides the results of DCI's PR-8 metric recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of May 2003.

Just prior to preparing this report DCI discovered a problem with the data used for its pending orders, which invalidated the DCI calculated numerators and results in Table C-27. DCI has not corrected these results.

Table C-28 provides the results of DCI's PR-8 metric recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of June 2003.

Just prior to preparing this report DCI discovered a problem with the data used for its pending orders, which invalidated the DCI calculated numerators and results in Table C-28 DCI has not corrected these results.

Table C-26 – PR-8 Rate of Open Orders in a Hold Status – April 2003

April 2003	DCI calculation								Verizon C2C Reported Results								Discrepancy							
	CLEC			Retail			Stat. Score	Compliance	CLEC			Retail			Stat. Score	Compliance	CLEC			Retail			Stat. Score	Compliance
Submetric ID	Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt		
PR-8-01-2100	23	1882	1.22%	213	220674	0.10%	-15.65807	-2	8	1923	0.42%	1632	220674	0.74%	1.91035	0	-15	41	-0.81%	1419	0	0.64%	17.56842	2
PR-8-01-2200	0	19	0.00%	0	345	0.00%			0	19	0.00%	8	345	2.32%	5.00000	0	0	0	0.00%	8	0	2.32%		
PR-8-01-2341	0	16	0.00%	4	724	0.55%	0.29490	0	0	17	0.00%	7	724	0.97%	5.00000	0	0	1	0.00%	3	0	0.41%	4.70510	0
PR-8-01-3100	13	64771	0.02%	213	220674	0.10%	5.50919	0	26	64996	0.04%	1632	220674	0.74%	5.00000	0	13	225	0.02%	1419	0	0.64%	-0.50919	0
PR-8-01-3200	0	160	0.00%	0	345	0.00%			4	153	2.61%	8	345	2.32%	0.07735	0	4	-7	2.61%	8	0	2.32%		
PR-8-01-3341	0	102	0.00%	4	724	0.55%	0.70476	0	2	102	1.96%	7	724	0.97%	-0.50315	0	2	0	1.96%	3	0	0.41%	-1.20791	0
PR-8-01-3342	0	504	0.00%	0	240	0.00%			5	506	0.99%	7	240	2.92%	2.19005	0	5	2	0.99%	7	0	2.92%		
PR-8-01-3343	0	630	0.00%	3	11002	0.03%	0.40315	0	0	631	0.00%	0	11002	0.00%	0.00005	0	0	1	0.00%	-3	0	-0.03%	-0.40310	0
PR-8-01-3345	0	1	0.00%	3	11002	0.03%			0	1	0.00%	0	11002	0.00%			0	0	0.00%	-3	0	-0.03%		
PR-8-01-3510	0	159	0.00%	0	94	0.00%			0	146	0.00%	0	94	0.00%	0.00005	0	0	-13	0.00%	0	0	0.00%		
PR-8-01-3530	0	30	0.00%	0	0				0	11	0.00%						0	-19	0.00%					
PR-8-01-5000	0	18672	0.00%	0	14263	0.00%			0	329	0.00%	0	278	0.00%	0.00005	0	0	-18343	0.00%	0	-13985	0.00%		
PR-8-02-2100	20	1882	1.06%	153	220674	0.07%	-16.30255	-2	7	1923	0.36%	981	220674	0.44%	0.66945	0	-13	41	-0.70%	828	0	0.38%	16.97200	2
PR-8-02-2200	0	19	0.00%	0	345	0.00%			0	19	0.00%	7	345	2.03%	5.00000	0	0	0	0.00%	7	0	2.03%		
PR-8-02-2341	0	16	0.00%	3	724	0.41%	0.25522	0	0	17	0.00%	5	724	0.69%	5.00000	0	0	1	0.00%	2	0	0.28%	4.74478	0
PR-8-02-3100	8	64771	0.01%	153	220674	0.07%	4.84419	0	21	64996	0.03%	981	220674	0.44%	5.00000	0	13	225	0.02%	828	0	0.38%	0.15581	0
PR-8-02-3200	0	160	0.00%	0	345	0.00%			4	153	2.61%	7	345	2.03%	-0.12085	0	4	-7	2.61%	7	0	2.03%		
PR-8-02-3341	0	102	0.00%	3	724	0.41%	0.60992	0	2	102	1.96%	5	724	0.69%	-0.80595	0	2	0	1.96%	2	0	0.28%	-1.41587	0
PR-8-02-3342	0	504	0.00%	0	240	0.00%			5	506	0.99%	6	240	2.50%	1.86855	0	5	2	0.99%	6	0	2.50%		
PR-8-02-3343	0	630	0.00%	0	11002	0.00%			0	631	0.00%	0	11002	0.00%	0.00005	0	0	1	0.00%	0	0	0.00%		
PR-8-02-3345	0	1	0.00%	0	11002	0.00%			0	1	0.00%	0	11002	0.00%			0	0	0.00%	0	0	0.00%		
PR-8-02-3510	0	159	0.00%	0	94	0.00%			0	146	0.00%	0	94	0.00%	0.00005	0	0	-13	0.00%	0	0	0.00%		
PR-8-02-3530	0	30	0.00%	0	0				0	11	0.00%						0	-19	0.00%					
PR-8-02-5000	0	18672	0.00%	0	14263	0.00%			0	329	0.00%	0	278	0.00%	0.00005	0	0	-18343	0.00%	0	-13985	0.00%		

Table C-27 – PR-8 Rate of Open Orders in a Hold Status – May 2003

May 2003	DCI calculation								Verizon C2C Reported Results								Discrepancy							
Submetric ID	CLEC			Retail			Stat. Score	Compliance	CLEC			Retail			Stat. Score	Compliance	CLEC			Retail			Stat. Score	Compliance
	Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt		
PR-8-01-2100	23	487	4.72%	213	55391	0.38%	-15.40086	-2	9	1804	0.50%	1869	204795	0.91%	2.11965	0	-14	1317	-4.22%	1656	149404	0.53%	17.52051	2
PR-8-01-2200	0	2	0.00%	0	109	0.00%			1	17	5.88%	7	348	2.01%	-0.46815		1	15	5.88%	7	239	2.01%		
PR-8-01-2341	0	4	0.00%	4	97	4.12%			1	27	3.70%	7	544	1.29%	-0.45945		1	23	3.70%	3	447	-2.84%		
PR-8-01-3100	13	12407	0.10%	213	55391	0.38%	4.55088	0	29	47209	0.06%	1869	204795	0.91%	5.00000	0	16	34802	-0.04%	1656	149404	0.53%	0.44912	0
PR-8-01-3200	0	150	0.00%	0	109	0.00%			4	178	2.25%	7	348	2.01%	0.10785	0	4	28	2.25%	7	239	2.01%		
PR-8-01-3341	0	12	0.00%	4	97	4.12%	0.67772	0	2	68	2.94%	7	544	1.29%	-0.63255	0	2	56	2.94%	3	447	-2.84%	-1.31027	0
PR-8-01-3342	0	115	0.00%	0	78	0.00%			4	487	0.82%	6	248	2.42%	2.04615	0	4	372	0.82%	6	170	2.42%		
PR-8-01-3343	0	665	0.00%	3	3424	0.09%	0.69880	0	0	875	0.00%	0	11278	0.00%	0.00005	0	0	210	0.00%	-3	7854	-0.09%	-0.69875	0
PR-8-01-3345	0	1	0.00%	3	3424	0.09%			0	4	0.00%	0	11278	0.00%			0	3	0.00%	-3	7854	-0.09%		
PR-8-01-3510	0	225	0.00%	0	30	0.00%			0	184	0.00%	0	90	0.00%	0.00005	0	0	-41	0.00%	0	60	0.00%		
PR-8-01-3530	0	28	0.00%	0	0				0	21	0.00%						0	-7	0.00%					
PR-8-01-5000	0	12792	0.00%	0	11176	0.00%			0	224	0.00%	0	253	0.00%	0.00005	0	0	-12568	0.00%	0	-10923	0.00%		
PR-8-02-2100	20	487	4.11%	159	55391	0.29%	-15.68704	-2	7	1804	0.39%	1359	204795	0.66%	1.67745	0	-13	1317	-3.72%	1200	149404	0.38%	17.36449	2
PR-8-02-2200	0	2	0.00%	0	109	0.00%			0	17	0.00%	7	348	2.01%			0	15	0.00%	7	239	2.01%		
PR-8-02-2341	0	4	0.00%	3	97	3.09%			0	27	0.00%	5	544	0.92%			0	23	0.00%	2	447	-2.17%		
PR-8-02-3100	8	12407	0.06%	159	55391	0.29%	4.18849	0	24	47209	0.05%	1359	204795	0.66%	5.00000	0	16	34802	-0.01%	1200	149404	0.38%	0.81151	0
PR-8-02-3200	0	150	0.00%	0	109	0.00%			4	178	2.25%	7	348	2.01%	0.10785	0	4	28	2.25%	7	239	2.01%		
PR-8-02-3341	0	12	0.00%	3	97	3.09%	0.58379	0	2	68	2.94%	5	544	0.92%	-0.92615	-1	2	56	2.94%	2	447	-2.17%	-1.50994	-1
PR-8-02-3342	0	115	0.00%	0	78	0.00%			4	487	0.82%	6	248	2.42%	2.04615	0	4	372	0.82%	6	170	2.42%		
PR-8-02-3343	0	665	0.00%	0	3424	0.00%			0	875	0.00%	0	11278	0.00%	0.00005	0	0	210	0.00%	0	7854	0.00%		
PR-8-02-3345	0	1	0.00%	0	3424	0.00%			0	4	0.00%	0	11278	0.00%			0	3	0.00%	0	7854	0.00%		
PR-8-02-3510	0	225	0.00%	0	30	0.00%			0	184	0.00%	0	90	0.00%	0.00005	0	0	-41	0.00%	0	60	0.00%		
PR-8-02-3530	0	28	0.00%	0	0				0	21	0.00%						0	-7	0.00%					
PR-8-02-5000	0	12792	0.00%	0	11176	0.00%			0	224	0.00%	0	253	0.00%	0.00005	0	0	-12568	0.00%	0	-10923	0.00%		

Table C-28 – PR-8 Rate of Open Orders in a Hold Status – June 2003

June 2003	DCI calculation								Verizon C2C Reported Results								Discrepancy							
	CLEC			Retail			Stat. Score	Compliance	CLEC			Retail			Stat. Score	Compliance	CLEC			Retail			Stat. Score	Compliance
Submetric ID	Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt			Num	Den	Rslt	Num	Den	Rslt		
PR-8-01-2100	23	1987	1.16%	366	200162	0.18%	-10.11953	-2	10	2048	0.49%	2091	200162	1.04%			-13	61	-0.67%	1725	0	0.86%		
PR-8-01-2200	0	13	0.00%	0	309	0.00%			2	13	15.38%	10	309	3.24%			2	0	15.38%	10	0	3.24%		
PR-8-01-2341	0	16	0.00%	4	562	0.71%	0.33395	0	1	19	5.26%	11	562	1.96%			1	3	5.26%	7	0	1.25%		
PR-8-01-3100	24	52456	0.05%	366	200162	0.18%	6.54243	0	37	52705	0.07%	2091	200162	1.04%	5.00000	0	13	249	0.02%	1725	0	0.86%	-1.54243	0
PR-8-01-3200	0	174	0.00%	0	309	0.00%			4	160	2.50%	10	309	3.24%			4	-14	2.50%	10	0	3.24%		
PR-8-01-3341	1	53	1.89%	4	562	0.71%	-0.34849	0	2	53	3.77%	11	562	1.96%			1	0	1.89%	7	0	1.25%		
PR-8-01-3342	0	546	0.00%	0	201	0.00%			4	551	0.73%	8	201	3.98%			4	5	0.73%	8	0	3.98%		
PR-8-01-3343	0	1080	0.00%	29	12553	0.23%	1.51746	0	0	1095	0.00%	1	12553	0.01%	5.00000	0	0	15	0.00%	-28	0	-0.22%	3.48254	0
PR-8-01-3345	0	15	0.00%	29	12553	0.23%	0.18626	0	0	15	0.00%	1	12553	0.01%	5.00000	0	0	0	0.00%	-28	0	-0.22%	4.81374	0
PR-8-01-3510	0	204	0.00%	0	86	0.00%			0	173	0.00%	1	86	1.16%	5.00000	0	0	-31	0.00%	1	0	1.16%		
PR-8-01-3530	0	24	0.00%	0	2	0.00%			0	16	0.00%	0	2	0.00%			0	-8	0.00%	0	0	0.00%		
PR-8-01-5000	0	11808	0.00%	0	4433	0.00%			0	198	0.00%	0	89	0.00%	5.00000	0	0	-11610	0.00%	0	-4344	0.00%		
PR-8-02-2100	23	1987	1.16%	216	200162	0.11%	-14.18015	-2	8	2048	0.39%	1600	200162	0.80%			-15	61	-0.77%	1384	0	0.69%		
PR-8-02-2200	0	13	0.00%	0	309	0.00%			0	13	0.00%	7	309	2.27%	5.00200	0	0	0	0.00%	7	0	2.27%		
PR-8-02-2341	0	16	0.00%	4	562	0.71%	0.33395	0	0	19	0.00%	6	562	1.07%	5.00000	0	0	3	0.00%	2	0	0.36%		
PR-8-02-3100	13	52456	0.02%	216	200162	0.11%	5.16193	0	24	52705	0.05%	1600	200162	0.80%	5.00000	0	11	249	0.02%	1384	0	0.69%	-0.16193	0
PR-8-02-3200	0	174	0.00%	0	309	0.00%			4	160	2.50%	7	309	2.27%			4	-14	2.50%	7	0	2.27%		
PR-8-02-3341	0	53	0.00%	4	562	0.71%	0.58923	0	2	53	3.77%	6	562	1.07%			2	0	3.77%	2	0	0.36%		
PR-8-02-3342	0	546	0.00%	0	201	0.00%			4	551	0.73%	6	201	2.99%			4	5	0.73%	6	0	2.99%		
PR-8-02-3343	0	1080	0.00%	3	12553	0.02%	0.48756	0	0	1095	0.00%	0	12553	0.00%	5.00000	0	0	15	0.00%	-3	0	-0.02%	4.51244	0
PR-8-02-3345	0	15	0.00%	3	12553	0.02%	0.05984	0	0	15	0.00%	0	12553	0.00%	5.00000	0	0	0	0.00%	-3	0	-0.02%	4.94016	0
PR-8-02-3510	0	204	0.00%	0	86	0.00%			0	173	0.00%	0	86	0.00%	5.00000	0	0	-31	0.00%	0	0	0.00%		
PR-8-02-3530	0	24	0.00%	0	2	0.00%			0	16	0.00%	0	2	0.00%			0	-8	0.00%	0	0	0.00%		
PR-8-02-5000	0	11808	0.00%	0	4433	0.00%			0	198	0.00%	0	89	0.00%	5.00000	0	0	-11610	0.00%	0	-4344	0.00%		

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PR-9: PERCENT ON-TIME PERFORMANCE FOR UNE HOT CUT LOOPS

Definition

This metric measures the percent on-time performance for UNE Hot Cut Loops.

A Hot Cut is considered complete when the following situation occurs:

Work is done at the appointed Frame Due Time (FDT) as noted on the LSRC or the work is done at a time mutually agreed upon by the Regional CLEC Control Center (RCCC)/CLEC. The time is either within a prescribed interval as noted in the C2C guidelines, or it is a mutually accepted interval agreed upon by Verizon and the CLEC (*e.g. project completes by a certain date*).

Note: If Verizon re-institutes the acceptance testing process, the percent on time measure will include the time it takes to complete acceptance testing.

A Hot Cut is considered missed when one of the following occurs:

Premature disconnect called in to 1-877-HotCuts (otherwise the disconnect would be captured as a Retail trouble).

Work was not done (e.g. work was not turned up to CLEC by some means (e-mail, VMS, direct phone call)) by close of intervals noted under Met Hot Cuts definition due to a Verizon reason (e.g. HFC, late turn-up, due date pushed out due to Verizon action).

Sub-Metrics

PR-9-01 (% On Time Performance – Hot Cut): Percent of all UNE Loop orders completed within the cut-over window. Start time specified on LSR. For UNE Loops, includes both Loop only and Loop & Number Portability. Orders disconnected early, and orders cancelled during or after a defective cut due to Verizon reasons are considered not met.

PR-9-08 (Average Duration of Service Interruptions): The average repair time (Mean Time to Repair – MTTR) for trouble called into the 577-hotcuts line for installation trouble.

Exclusions

The following exclusions apply to this measure:

- Exclusions VZ Test Orders
- Verizon Administrative orders
- Additional segments on orders (parts of a whole order are included in the whole)
- Orders that are not complete. (Orders are included in the month that they are complete)
- If a CLEC cancels an order before the start of a Hot Cut window and VZ performs the Hot Cut, this VZ error will result in a retail trouble report and need not be reflected elsewhere.

Performance Standard

The performance standards for this measure are:

Hot Cuts:

- **PR-9-01:** 95% completed within window
- **PR-9-08:** No standard

Standard for Cut-Over Window: Amount of time from start to completion of physical cut-over of lines:

- one (1) to nine (9) lines: one (1) Hour
- 10 to 49 lines: two (2) Hours
- 50 to 99 lines: three (3) Hours
- 100 to 199 lines: four (4) Hours
- 200 plus lines: eight (8) Hours

Note - If IDLC is involved – Four (4) hour window (8:00AM to 12:00PM (Noon) or 1:00PM to 5:00PM)[7]. Four (4) hour window applies to start time.

Formula

The formulas used for the sub measures are:

PR-9-01:

- **Numerator:** Number of Hot Cut (coordinated loop) orders (with or without number portability) completed within commitment window (as scheduled on order) on DD.

- **Denominator:** Number of Hot Cut (coordinated loop orders) completed.

PR-9-08:

- **Numerator:** The sum of the trouble clear date and time minus the trouble receipt date and time for the central office and loop trouble (disposition codes 03, 04, and 05) for hot cut installation troubles reported within seven days.

- **Denominator:** Number of central office and loop troubles (disposition codes 03, 04 and 05) for hot cut installation troubles reported within seven days.

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[7] Only applicable if Verizon PA notified CLEC by 2:30PM Eastern Time on DD-2 that the service was on IDLC

DCI Derived Metric Statement

DCI obtained the Verizon FACT Table[8] and the detailed description of the fields. From the data, the on time performance will be calculated by dividing the total number of orders worked into the number of orders met, then multiplying by 100 to get the On Time %.

Report Dimension

The metric evaluation will take an April and May 2003 sampling of data required to populate the Network Metric Platform (NMP). The evaluation will compare the informational data supplied from the data request to the formulas used for the calculations. The audit will then re-calculate the measure results for the sampled time frame. Should deficiencies be detected in any of the evaluations, increasing the sample size until a determination can be made related to the efficiency of the calculation process will perform a further study.

Evaluation Process

For PR-9-01, DCI obtained the total number of orders worked (denominator): a filter on column L for "Non-blanks" to capture only the orders worked. Next, column "A" displays the summed amount at the bottom of the spreadsheet. To obtain the number of orders "met"(numerator): a filter on column "L" displays orders marked with a "Y". Column "A" displays the summed amount at the bottom of the spreadsheet. Once the number was determined from the fact table, DCI used the defined formula to produce a value to compare to the reported Verizon results.

For PR-9-08, DCI used loop, Platform hot cuts as a product to determine the amount of outage in seconds and compared that to the Verizon reported results.

Evaluation Results

For PR-9-01, DCI's evaluation process produced the following results:

Table C-32

Results Originator	Study Month	Numerator	Denominator	Results
Verizon PA	April	878	887	.98985
DCI	April	878	887	.98985
Verizon PA	May	713	739	.96482
DCI	May	713	739	.96482

In addition to the matching results shown in the table, a comparison was made on the exclusions found in the source data. For the month of April, no exclusions were found. For the month of May, 42 exclusions were detected. The following is a breakdown of the exclusion types:

- Three records were outside the Customer Not Ready (CNR) code but the comments supported the CLEC postponed the conversion.

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[8] Reference DR D013

- 12 Records were postponed due to no dial tone at the CLEC port.
- 12 Records were postponed due to Verizon PA receiving a supplement to the original LSR.
- Two Records were postponed due to a wrong directory number at the CLEC post.
- 13 Records were canceled by the CLEC.

All exclusion criteria were compared to the associated comments and verified that the CNR code was valid.

For PR-9-08, DCI's evaluation process produced the following similar matching results:

Table C-33

Results Originator	Study Month	Numerator	Denominator	Results
Verizon PA	April	239	14	17.07143
DCI	April	239	14	17.07143
Verizon PA	May	171	13	13.15385
DCI	May	171	13	13.15385

C – FINDINGS

PR-1 FINDINGS

1.   Documentation Provided By Verizon PA Is Extremely Cumbersome.

The Metrics calculation process for PR-1 is completely and clearly described in a few pages of this Appendix. Contrast this clear, concise[9] and complete documentation with the 160 or so separate PR-1 algorithms of the Provisioning CMAs, and several pages each of Guidelines and FACT Table documentation.

As an example of deciphering these CMAs consider the following PR-1-12-2103 retail denominator algorithm:©[10]

```
create table ZZMD0I
tablespace USERPRV_DM01 nologging storage (initial 256k next
256k pctincrease 0 maxextents unlimited) as
select a11.STATE_CODE STATE_CODE,
a11.CLEC_ID ACNA,
count(1) PR112RTPDFDE,
sum(a11.APPINTV) PR112RTPDFNU,
(STDDEV(a11.APPINTV) * 1.0) PR112RTPDFSD
from TB_PRV_DM_SVC_ORD_FACT a11
where (a11.GLOBAL_EXCLUSION = 'N'
and a11.STATE_CODE in ('PA')
and (((((a11.PROVIDER = '1'
or a11.C2C_VADI_IND = 'Y')
and a11.PRODUCT_IND = '2')
or (a11.PROVIDER = '1'
and a11.PRODUCT_IND = '3'
and a11.C2C_VADI_IND = 'N')
or (a11.C2C_VADI_IND = 'Y'
and a11.PRODUCT_IND = '1')
or (a11.PROVIDER = '1'
and a11.C2C_SERVICE_IND = 'P'
and a11.C2C_VADI_IND = 'N'))
and NVL(a11.ORG_APPT_CODE, '*') <> 'Y'
and a11.RBC_FL in ('R', 'B')
and ((a11.REPORT_PERIOD = 200306
and (TO_DATE('07/10/2003','MM/DD/YYYY')) = a11.FILING_DATE
and a11.STATUS in ('CAN', '55B'))
or (a11.REPORT_PERIOD is null
and (TO_DATE('07/10/2003','MM/DD/YYYY')) = a11.FILING_DATE
and a11.STATUS = 'CAN'
and a11.SOCD_DATE_VAL >
TO_DATE('05/31/2003','MM/DD/YYYY')
and a11.SOCD_DATE_VAL <
TO_DATE('07/01/2003','MM/DD/YYYY') ))
and a11.SVC_ORDER_TYPE in ('D', 'F')
and a11.APPINTV between 0 and 200
```

---

[9]   A large portion of these pages discusses DCI analyses, so an objective comparison would contrast 8-9 pages of the DCI documentation versus the 75+ pages Verizon PA uses to document its measurement calculation processes for just PR-1. While the pieces of information required to produce the DCI documentation are (mostly) all contained in the Verizon PA CMA, FACT Table Layouts and C2C Guidelines, it takes substantial work to analyze and extract them.

[10] These data are excerpted and reprinted with permission from Verizon Pennsylvania Carrier-to-Carrier Metric Algorithms (CMAs) which are subject to copyright protection. Copyright ©2003 Verizon. All rights reserved. No compilation, modification, translation, storage in a retrieval system or reproduction (by photocopying or other means) of these data or any other parts of the CMAs is permitted without the separate, express written permission of Verizon. Title to these data, the CMAs and all intellectual property rights therein shall remain with Verizon.

```
                    and a11.TEST_SELLER_IND = 'N'
                    and a11.EXCLUSION_IND = 'N'
                    and (not (SUBSTR(NVL(a11.RON, '*'), 1, 1) = 'S'
                    and SUBSTR(NVL(a11.SALE_CODE, '0'), 1, 4) in ('915T', '916T'))))
                    or (a11.C_DISCONNECT = 'Y'
                    and NVL(a11.ORG_APPT_CODE, '*') <> 'Y'
                    and (((a11.PROVIDER = '1'
                    or a11.C2C_VADI_IND = 'Y')
                    and a11.PRODUCT_IND = '2')
                    or (a11.PROVIDER = '1'
                    and a11.PRODUCT_IND = '3'
                    and a11.C2C_VADI_IND = 'N')
                    or (a11.C2C_VADI_IND = 'Y'
                    and a11.PRODUCT_IND = '1')
                    or (a11.PROVIDER = '1'
                    and a11.C2C_SERVICE_IND = 'P'
                    and a11.C2C_VADI_IND = 'N'))
                    and a11.RBC_FL in ('R', 'B')
                    and ((a11.REPORT_PERIOD = 200306
                    and (TO_DATE('07/10/2003','MM/DD/YYYY')) = a11.FILING_DATE
                    and a11.STATUS in ('CAN', '55B'))
                    or (a11.REPORT_PERIOD is null
                    and (TO_DATE('07/10/2003','MM/DD/YYYY')) = a11.FILING_DATE
                    and a11.STATUS = 'CAN'
                    and a11.SOCD_DATE_VAL >
                    TO_DATE('05/31/2003','MM/DD/YYYY')
                    and a11.SOCD_DATE_VAL <
                    TO_DATE('07/01/2003','MM/DD/YYYY') ))
                    and a11.APPINTV between 0 and 200
                    and a11.TEST_SELLER_IND = 'N'
                    and a11.EXCLUSION_IND = 'N'
                    and a11.ORG_APPT_CODE not in ('S', 'X')
                    and (not (SUBSTR(NVL(a11.RON, '*'), 1, 1) = 'S'
                    and SUBSTR(NVL(a11.SALE_CODE, '0'), 1, 4) in ('915T', '916T'))))))
                    group by a11.STATE_CODE,
                    a11.CLEC_ID
```

In order to understand the logic behind this particular query, DCI first reformatted it by removing the "a11." and supplying the indenting which makes this logically readable:©[11]

```
            where
            (   GLOBAL_EXCLUSION = 'N'
                and STATE_CODE in ('PA')
                and (    (        (      (        (      PROVIDER = '1' or C2C_VADI_IND = 'Y')
                                                        and PRODUCT_IND = '2'
                                                 )
                                  or (   PROVIDER = '1'
                                                        and PRODUCT_IND = '3'
                                                        and C2C_VADI_IND = 'N'
                                         )
                                  or (   C2C_VADI_IND = 'Y' and PRODUCT_IND = '1')
                                  or (   PROVIDER = '1'
                                                        and C2C_SERVICE_IND = 'P'
                                                        and C2C_VADI_IND = 'N'
                                         )
                                  )
                                  and NVL(ORG_APPT_CODE, '*') <> 'Y'
                                  and RBC_FL in ('R', 'B')
                                  and (    (        REPORT_PERIOD = 200306
                                                                and
            (TO_DATE('07/10/2003','MM/DD/YYYY')) = FILING_DATE
                                                                and STATUS in ('CAN', '55B')
                                            )
                                        or (   REPORT_PERIOD is null
```

```
                                                        and
            (TO_DATE('07/10/2003','MM/DD/YYYY')) = FILING_DATE
                                            and STATUS = 'CAN'
                                            and          SOCD_DATE_VAL          >
            TO_DATE('05/31/2003','MM/DD/YYYY')
                                            and          SOCD_DATE_VAL          <
            TO_DATE('07/01/2003','MM/DD/YYYY')
                                        )
                                  )
                      and SVC_ORDER_TYPE in ('D', 'F')
                      and APPINTV between 0 and 200
                      and TEST_SELLER_IND = 'N'
                      and EXCLUSION_IND = 'N'
                      and (not (     SUBSTR(NVL(RON, '*'), 1, 1) = 'S'
                                     and SUBSTR(NVL(SALE_CODE, '0'), 1, 4)
            in ('915T', '916T')
                                  )
                              )
                      )
    or (        C_DISCONNECT = 'Y'
          and NVL(ORG_APPT_CODE, '*') <> 'Y'
          and (    (      (      PROVIDER = '1' or C2C_VADI_IND = 'Y')
                          and PRODUCT_IND = '2'
                      )
               or (   PROVIDER = '1'
                          and PRODUCT_IND = '3'
                          and C2C_VADI_IND = 'N'
                      )
               or (   C2C_VADI_IND = 'Y' and PRODUCT_IND = '1')
               or (   PROVIDER = '1'
                          and C2C_SERVICE_IND = 'P'
                          and C2C_VADI_IND = 'N'
                      )
               )
          and RBC_FL in ('R', 'B')
          and (    (      REPORT_PERIOD = 200306
                          and      (TO_DATE('07/10/2003','MM/DD/YYYY'))      =
            FILING_DATE
                          and STATUS in ('CAN', '55B')
                      )
               or (   REPORT_PERIOD is null
                          and      (TO_DATE('07/10/2003','MM/DD/YYYY'))      =
            FILING_DATE
                          and STATUS = 'CAN'
                          and              SOCD_DATE_VAL              >
            TO_DATE('05/31/2003','MM/DD/YYYY')
                          and              SOCD_DATE_VAL              <
            TO_DATE('07/01/2003','MM/DD/YYYY')
                      )
                  )
          and APPINTV between 0 and 200
          and TEST_SELLER_IND = 'N'
          and EXCLUSION_IND = 'N'
          and ORG_APPT_CODE not in ('S', 'X')
          and (   not (SUBSTR(NVL(RON, '*'), 1, 1) = 'S'
                          and SUBSTR(NVL(SALE_CODE, '0'), 1, 4) in ('915T',
            '916T')
                      )
                  )
              )
      )
  )
)
```

Then DCI applied the distributive property, as Verizon PA's presentation in the CMAs has itemized and repeated the same logic in many separate cases within single algorithms, when a unifying theme would more clearly have illustrated the logical processes used, as illustrated in the following SQL code segment, which is functionally completely equivalent to the where clause in Verizon PA's CMA algorithm presented above: ©[12]

```
where
(       GLOBAL_EXCLUSION = 'N'
        and STATE_CODE in ('PA')
        and NVL(ORG_APPT_CODE, '*') <> 'Y'
        and RBC_FL in ('R', 'B')
        and (   (       REPORT_PERIOD = 200306
                                and      (TO_DATE('07/10/2003','MM/DD/YYYY'))      =
FILING_DATE
                                and STATUS in ('CAN', '55B')
                        )
                or (   REPORT_PERIOD is null
                                and      (TO_DATE('07/10/2003','MM/DD/YYYY'))      =
FILING_DATE
                                and STATUS = 'CAN'
                                and                   SOCD_DATE_VAL                   >
TO_DATE('05/31/2003','MM/DD/YYYY')
                                and                   SOCD_DATE_VAL                   <
TO_DATE('07/01/2003','MM/DD/YYYY')
                        )
                )
        and APPINTV between 0 and 200
        and TEST_SELLER_IND = 'N'
        and EXCLUSION_IND = 'N'
        and (   not (   SUBSTR(NVL(RON, '*'), 1, 1) = 'S'
                                and  SUBSTR(NVL(SALE_CODE, '0'), 1, 4)  in
('915T', '916T')
                        )
                )
        and (   SVC_ORDER_TYPE in ('D', 'F')
                or (   C_DISCONNECT = 'Y'
                                and APPINTV <= 2
                                and ORG_APPT_CODE not in ('S', 'X')
                        )
                )
        and (   PROVIDER = '1'
                        and C2C_VADI_IND = 'N'
                        and (   PRODUCT_IND  in ('2','3')  or C2C_SERVICE_IND = 'P'
                )
                        or      (       C2C_VADI_IND      ='Y'      and      PRODUCT_IND
in('1','2')    )
                )
        )
```

Note that within a single algorithm, for something whose logic flow can be expressed in a reasonably intuitive and readable manner, Verizon PA's CMA presentation expresses it in as nearly a complex, unreadable, and counterintuitive manner as possible. Moreover, this is repeated on a global scale, as the whole Provisioning Domain metric calculation processes contain only a few such simple ideas. Expressing them in clear intuitive and readable form for the entire domain provides much more understanding and usefulness than expressing them as 160 separate algorithms (just for PR-1).

While a CLEC could use the current CMAs, FACT Table Layouts, and C2C Guidelines to recalculate an individual metric result, e.g. PR-1-12-2103, from their data as supplied to them by Verizon PA, this provides very little understanding into Verizon PA's general metric calculation processes. If a CLEC wanted to recalculate all, or most, of its metric results, it would face a daunting task. In addition to the documentation currently provided, Verizon PA should develop and provide documentation of all their metric calculation processes in the form of the above pages of this Appendix C.

2. <u>Certain Provisioning Records Do Not Identify Whether The Provider Is Resale, UNE Or Retail (ER D-002).</u>

DCI found 229 provisioning records which did not identify whether the Provider was Resale, UNE, or Retail. DCI determined that all of these came from the SCABS system feed. Verizon PA responded to ER D-002 indicating that these would not have affected the metric

results, as they are disconnects of trunks. Disconnects are counted only in the PR-1-12 metric, but Feature Group D and Interconnection Trunks are not disaggregations which are reported, so the lack of provider identification on these provisioning records did not affect any metric results.

DCI accepts that metric results were not affected, but recommends that systems be improved so that Provider is always identified on each record in all data mart tables.

3. **Platform Product Designation Is Incorrectly Applied To Many "Retail" Linesharing Orders (ER D-003).**

DCI found 22142 April provisioning records designated as Platform product, yet having a Retail Provider. Verizon PA responded that these are Retail orders relating to Line Sharing product (the Platform product designation is incorrect) which would not have been counted in the metrics because they are administrative orders. Verizon PA indicated that they will issue a process improvement Change Control to correct the product designation on these types of orders. However, none of the Scheduled or Completed change control notifications provided to DCI appear to address this issue.

4. **UNE 2-Wire xDSL Loop Orders Are Not Reported In PR-1-01 (ER D-004).**

Verizon PA's C2C reports indicate there were no data for PR-1-01-3342, UNE 2-wire xDSL Loops. However, DCI found 22 eligible records in April with an average offered interval of 6.41 days, 42 eligible records in May with an average offered interval of 6.00 days, and 43 eligible records in June with an average offered interval of 6.00 days.

In response to ER D-004, Verizon PA indicated that they reviewed their code and found an error which caused all UNE 2-wire xDSL Loops not to be counted in this submetric. Verizon PA indicated that this would be corrected via issuance of a change control.

DCI determined that this error consisted of requiring $LN\_I\_CNT < 1$ on all UNE 2-wire xDSL orders. Verizon PA generally adds this requirement to ensure that orders cancelled before their dispatch status is determined would be considered non-dispatched if $LN\_I\_CNT < 1$, and dispatched if $LN\_I\_CNT > 0$. However in this submetric, Verizon PA mistakenly applied the condition to all orders, including completed orders, which eliminated all the actual orders subject to this submetric.

DCI verified that Verizon PA sent out a change control notification on September 29, 2003 indicating that Change Control (CC) #10318, which targets this issue, was completed, with the corrected code having been implemented beginning with the August data month.

PR-1-01-3342 has no standard and is not a PA PAP penalty metric.

5. **Verizon PA's Use Of The Term "VADI" In Its Documentation And Code Is Inconsistent Within The Provisioning Domain, And Even More So Between Different Domains (ER D-006).**

- Verizon PA uses different definitions and lists which customer is considered a VADI depending on which domain (Ordering, Provisioning, Network Performance, etc). The

reason for lack of consistency is not due to actual business requirements but is rather primarily historic, namely that NMP was developed separately for each domain.

- In most domains, the term VADI is used to include both Verizon PA Affiliates and Retail DSL Linesharing providers.

- In the provisioning domain, VADI means only Retail DSL Line Sharing providers, whereas Verizon PA affiliates are referred to only as Verizon PA affiliates. (An example of a Verizon PA Affiliate is a company which only provides service to multi-unit dwellings).

- However, the provisioning documentation and field naming conventions in the algorithm have not caught up with the actual measurement calculation process, and still describe VADI as referring exclusively to, or including, affiliates.

- The PA C2C Guidelines will be brought up to date (to refer to VADI as "Verizon Advanced Data Incorporated") only after fall 2003 revisions which were approved in NY and are subsequently reviewed and approved in PA.

Verizon PA could establish a clear, consistent and intuitive nomenclature for its various terms and field names, and common usage of the same concepts throughout all domains.

Verizon PA responded to ER D-006 as follows:

"Verizon disagrees with this exception and DCI's recommendation.

Verizon correctly includes or excludes VADI orders and correctly excludes Affiliate orders consistent with the Carrier-to-Carrier Guidelines. Verizon provides field names and complete descriptions and derivations for those fields used in metric calculations. Field descriptions and their derivations are clear and consistent representations of data fields and their contents.

DCI's recommendation to "establish a clear, consistent and intuitive nomenclature" and "common usage of the same concepts throughout all domains" would require a substantial programming effort which provides no benefit in terms of the accuracy of the metrics.

VADI has recently changed its name to DSNO (Data Services Network Operations). The current round of Guideline changes in New York approved by CLECs and Verizon includes a Glossary update to replace VADI with DSNO. Once the changes are ordered by the New York Public Service Commission, the changes will be filed in Pennsylvania per established Commission practices.

This documentation issue has no impact on the reported metric results."

While DCI acknowledges that this issue does not directly impact metric results, it is confusing; inconsistent nomenclature makes internal training and system maintenance more difficult, which can ultimately lead to metrics inaccuracies.

NMP unification of disparate data systems should be carried through to completion to create a unified cohesive system, which has been the stated intent of NMP. When DCI has brought this concern up repeatedly, Verizon PA has indicated that it does not have a planned schedule to implement such a unified cohesive system.

6.   Incorrect Descriptions Are Provided In The NMP Provisioning FACT Table Layout For Short Migration Application Interval Fields (ER D-007).

The Description Field in the NMP Provisioning FACT Table incorrectly describes the fields RESALE_MIGR_APPINTV_LTE1, RESALE_MIGR_APPINTV_LTE2, and UNE_MIGR_ APPINTV_LTE2 as indicating whether the application interval is <1, <2, and <2 respectively for these three fields. These should be <=1, <=2, and <= 2, respectively.

Verizon PA's response to ER D-007 (supplied August 26, 2003) indicates agreement with this exception.   Verizon PA indicated that while the Description field was incorrect, the data derivation field in the FACT Table Layout indicated the correct conditions.   Verizon PA supplied a revised copy of the FACT Table Layout to DCI and indicated that the update would be included in the next version of the LSR Provisioning System Design Document.

DCI notes that the data derivation field was not included in the printed workshop materials. Furthermore, the LSR Provisioning FACT Table Layout provided with the June CMA (September 27, 2003) still contains the incorrect conditions in the Description of these three fields.

7.   S-coded Orders Are Incorrectly Excluded From PR-1-01-2341 (Resale 2-wire Digital Services) (ER D-008).

S-coded orders (customer requested earlier than standard due date) are incorrectly excluded in the PA CMA algorithm for PR-1-01-2341 (Resale 2-wire Digital Services).   If any such otherwise eligible orders existed, they would be incorrectly excluded from the C2C Metrics Results.

In a discussion of DR D-008 on August 14, 2003, and in its response to ER D-008, Verizon PA indicated that this problem stemmed from their failure to update the old code present with the pre-April Guidelines which counted only W-coded orders (customer accepts standard due date). Verizon PA also indicated that this would have had no impact on the CLEC PM results during April, May and June 2003, as no otherwise eligible Resale 2-wire Digital orders were S-coded. Verizon PA issued CC #10346 with implementation targeted for the August 2003 data month, to resolve this issue.

DCI has checked the change control notifications provided by Verizon PA and found a notification sent September 29, 2003 indicating that CC #10346 was completed and implemented in production for the August data month. This change control dealt specifically with PR-1-01-2341 and did not correct code for other submetrics where similar issues occurred.

8. **CLEC Requested Intervals Shorter Than The Standard Are Incorrectly Excluded From UNE 2-Wire Digital Loops, xDSL Loops, Linesharing And LineSplitting - PR-1-01-334x, PR-1-02-334x (ER D-011).**

In many provisioning performance measurement calculations, Verizon PA incorrectly excludes all orders with due dates shorter than the standard offered interval:
- All Provisioning CLEC PM results based on a single, fixed standard interval:

    – PR-1-01-3341, 3342, 3343, 3345
    – PR-1-02-3341, 3342, 3343, 3345

- Retail comparatives for the following PMs:

    – PR-1-01-3341, 3343, 3345
    – PR-1-02-3343, 3345

This has a substantial effect on the provisioning metrics results, both in limiting volumes, (which can result in no statistical parity comparison being made), and in eliminating those eligible records which have the greatest potential to impact a CLEC to retail comparison, because the standard interval was not adhered to. The extent to which the offered interval is shorter than standard may vary both qualitatively (how frequently does this happen) and quantitatively (how much shorter) between CLEC and Retail orders. This has not been captured in the metrics, instead, only orders meeting the standard interval are being compared currently.

Verizon PA's response to ER D-011 agreed with the exception and indicated that the retail comparative for PR-1-01-3341 is the same as that for PR-1-02-2341 which was addressed in CC #10346 (See Finding 7 above, ER D-008). A different correction (CC #10292, targeted implementation September data month) is applied to the CLEC UNE Loop calculations and their other retail comparatives.

DCI found a change control notification (October 30, 2003) indicating that CC #10292 had been completed and implemented for the September data month.

9. **S-Coded Orders Are Incorrectly Excluded From All PR-1-12 Submetric Disaggregations.**

Verizon PA has incorrectly excluded S-coded orders (shorter than standard interval) from all PR-1-12 calculations (both CLEC and Retail comparatives). This is indicated by the code segment

```
and a11.ORG_APPT_CODE not in ('S', 'X')
```

found in all the June PA CMA PR-1-12 algorithms. ©[13]

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10. LN_I_CNT Is A Useless Proxy For Dispatch Status On Cancelled Orders (ER D-009).

Whether an order is dispatched or not determines whether it should be reported under PR-1-01 or PR-1-02. Cancelled orders are included in the PR-1 reporting. Some of these are cancelled before they are flagged in Work Force Administration (WFA) with a dispatch indicator. In these cases, Verizon PA uses the test LN_I_CNT > 0 to determine if the order likely would have been dispatched had it not been cancelled. In this case the order would be counted in the PR-1-02 metric. If on the other hand, LN_I_CNT < 1, Verizon PA assumes the order would likely not have been dispatched had it not been cancelled, and includes it in the PR-1-01 metric.

DCI performed an analysis of the reasonableness of Verizon PA's use of LN_I_CNT to determine dispatched or non-dispatched status for orders cancelled before the DISPATCH_IND field is set by WFA. DCI based its analysis on the extent to which LN_I_CNT correctly predicts DISPATCH_IND among completed orders (for which the DISPATCH_IND is set by WFA). DCI performed its analysis using April 2003 data for Resale and its Retail comparative (2341), and using June 2003 data for UNE and its Retail comparative.

As a result of its analysis, DCI found that Verizon PA's policy of using LN_I_CNT as a surrogate for determining whether an order would have been dispatched had it not been cancelled prior to the DISPATCH_IND being set by WFA, is inaccurate, and leads to a substantially biased parity comparison for PR-1-01 (Non-Dispatched) 2-wire digital services, both for Resale and UNE. This means that disparate service may occasionally be evaluated by Verizon PA's PM calculation procedures as being in parity. There may also be a slight bias in the opposite direction for PR-1-02 (Dispatched), but this is more difficult to detect.

Verizon PA could revise its procedures as follows. Those cancelled orders which it is definitely determinable that WFA did not set the dispatch indicator to either 'Y' or 'N' should be flagged for exclusion from these metrics.

Verizon PA responded to ER D-009, disagreeing with this exception and DCI's recommendation to exclude certain cancelled orders as follows:

> "Verizon is adhering to the Guidelines by including cancelled orders in the PR-1 metrics. Verizon cannot arbitrarily exclude cancelled orders where WFA did not set the dispatch indicator to either Y or N, as recommended by DCI, without first requesting a change to the Carrier-to-Carrier Guidelines through the collaborative and obtaining approval of the Commission.

> The WFA indicator is the best source to identify a dispatchable order. However, orders are frequently cancelled before the dispatch indicator is set in WFA. The next best indicator of a dispatchable order is the inward line activity on the order. When WFA information is not available, Verizon uses this indicator as a surrogate. While not exact, it is the most accurate test Verizon has. The test is applied equally across Retail, Resale, and UNE metrics.

It is also important to note the PR-1 metrics are not included in the Performance Assurance Plan in PA. Furthermore, cancelled orders comprised a mere 3% of the total orders in the April fact table (22,261 / 748,152)."

While DCI agrees that the test is applied equally across Retail, Resale, and UNE metrics, DCI's analysis indicated that use of this proxy has substantially different impacts to Retail, Resale and UNE results, and generates biased parity comparisons. Moreover, saying that this is the most accurate test Verizon PA has does not justify its use when it is wrong more than half of the time, as was indicated in DCI's analysis. In such a situation, exclusion of the record (with a report on the number of records so excluded being incorporated in the C2C report) due to no information in key fields necessary for metric calculation, is much preferable to including the records in the wrong submetric where they will substantially bias the results. For example, 14.4% of the records counted in the retail comparative for PR-1-01-x341 are cancelled orders. Including the records which were canceled before WFA set their dispatch indicator causes the retail comparative to be raised from an estimated 2.71 business days to 3.00 business days. Since only about 25% of completed CLEC orders with LN_I_CNT=0 were dispatched, whereas 60% of completed Retail orders were, the estimated increase to the CLEC Resale and UNE PR-1-01-x341 results (caused by Verizon's use of LN_I_CNT as a proxy to guess whether these cancelled orders were dispatched or not) would have been much smaller than it was for Retail, resulting in a substantial net bias in Verizon PA's favor on parity determinations.

DCI believes that cancelled orders for which WFA did not set the dispatch indicator to either Y or N should be excluded with proper notations. It is DCI's opinion that such a change could be worked unilaterally by Verizon PA. Verizon PA responded that it "cannot arbitrarily exclude cancelled orders where WFA did not set the dispatch indicator to either Y or N without first requesting a change to the Carrier-to-Carrier Guidelines through the collaborative and obtaining approval of the Commission." If the Pennsylvania PUC or the CWG indicate that it is not within Verizon PA's authority to unilaterally implement such an exclusion without CWG or Commission approval, then this issue should be brought up and resolved in the appropriate venue.

11. The LSR Provisioning FACT Table Layout Incorrectly Describes The LN x CNT Fields As ADSL-Specific (ER D-010).

In the Provisioning Systems Documentation provided during the workshops, the following fields are described as referring specifically to ADSL situations. In fact they measure "inward", "outward", and "to" activity on all lines, not just ADSL:

- LN_I_CNT
- LN_O_CNT
- LN_T_CNT

In response to DR D-008 question 6, Verizon PA indicated that the reference to ADSL has now been removed from the documentation.

Verizon PA responded to ER D-010 (on 8/26/03) as follows:

"Verizon agrees with this exception.

The description field in the NMP Provisioning Fact table has been updated. A revised copy of the 'NMP-PRV-LSR-FACT-TABLE – TB_PRV_DM_SVC_ ORDER_FACT was supplied to DCI and the update will be included in the next version of the LSR Provisioning system design document.

This documentation issue has no impact on the reported metric results."

DCI checked the NMP Provisioning FACT Table provided with the June CMAs (September 27, 2003), and found that the incorrect references to ADSL are still in the Description fields.

12. The Retail Comparatives For PR-1-01-3341 And PR-1-02-3341 (UNE 2-Wire Digital Services) Are Inappropriate (ER D-012).

The process for obtaining the CLEC results involves excluding records with PON_APPINTV (customer desired intervals) longer than the (standard) six days. The process for obtaining the Retail comparative results involves excluding X-coded appointments (Customer requested longer than the standard due date). While conceptually the processes seem similar, in fact, the intervals excluded from the PR-1-01-3341 CLEC results were relatively long (in comparison to the non-excluded CLEC intervals), averaging 11.33 days in April. On the other hand, the intervals excluded from the retail comparative result were relatively short (in comparison to the non-excluded Retail intervals), averaging 1.11 days. Excluding the long CLEC intervals and the short Retail intervals makes for a very biased comparison. An apples-to-apples comparison (using PON_APPINTV instead of Appointment code to determine eligibility for the retail comparative) would have resulted in an average of 1.97 business days for the retail comparative result instead of 2.30. It also would have substantially lowered the standard deviation. Using appointment coding instead of PON_APPINTV in the retail comparison therefore biases the results in the direction of masking potential disparities.

A consistent approach to excluding longer than standard could be used for both CLEC and its retail comparison.

Verizon PA's response to ER D-012 stated:

"Verizon disagrees with this exception. Verizon uses the best information available to identify orders where the customer desired due date is less than or equal to the standard interval.

Verizon uses derived fields such as TWO_WIRE_INTV for metrics with a single, fixed, standard interval. These derived fields are more accurate than the appointment type code for single, fixed, standard interval metrics. The ORG_APPT_CODE can be manually populated by Verizon representatives, and therefore, can be subject to occasional human error.

The same logic cannot be used for Retail and Resale 2 Wire Digital Services because they do not have a single, fixed, standard interval like UNE 2 Wire

Digital.   Therefore, Verizon relies on the appointment type code to count orders less than or equal to the standard interval."

DCI understands Verizon PA's stated rationale for calculating Retail and Resale 2-wire Digital Services results using the appointment type coding, and finds Verizon PA's Retail calculation approach to provide an appropriate retail comparative for Resale 2-wire Digital Services. However, for the reasons DCI stated above, this same result does not constitute an appropriate retail comparative for UNE 2-wire Digital Services. DCI stands by its finding that the retail comparative for UNE 2-wire Digital Services should be calculated in the same manner that the UNE 2-wire Digital Services result is, basing the exclusion of orders where the customer desired a longer than standard due date on the same methodology used for the CLEC calculation. Otherwise, DCI finds the retail comparative calculation invalid for this submetric.

13. <u>UNE 2-wire xDSL Line Sharing Metrics Results Incorrectly Include Line Splitting Orders (ER D-013).</u>

The algorithm for the following UNE 2-wire xDSL Line Sharing metrics incorrectly includes Line Splitting orders:

- PR-1-01-3343
- PR-1-02-3343

Verizon PA's response to ER D-013 agreed with this exception, and explained that this is the result of old code consistent with the pre-April PA C2C Guidelines which incuded Line Splitting together with Line Sharing. Verizon PA indicated that they would issue change control #10329 to correct this problem with targeted implementation of the October 2003 data month.

DCI found a October 15, 2003 change control notification indicating that CC #10329 has been scheduled.

14. <u>All UNE DS1's Which Are Received Via ASRs Are Incorrectly Excluded From The PR-1-07-3211 CLEC Results (ER D-021).</u>

Although UNE DS1 Specials are usually identified within Verizon PA's product codes as 3211, Verizon PA did not report PR-1-07-3211 in its C2C reports for April, May, and June.   In response to Replication Request 2, Verizon PA indicated that they had previously reported this metric under the 3200 product code, and in response to a NY order this had been changed to 3211, and this change would be implemented beginning with the June data month in Pennsylvania.

DCI independently determined the following April results for PR-1-07-3211:

CLECs via ASR: 363 / 61 = 5.95
CLECs via LSR: 1 /   1 = 1.00
CLEC total: 364 / 62 = 5.87

Retail (in LSR Fact table only): 740 / 79 = 9.37

Verizon PA's April report for PR-1-07-3200 indicated the following results:

CLEC: 1 / 1 = 1.00
Retail: 714 / 74 = 9.65

Similar results occurred for May and June.

It is clear from these results that Verizon PA has omitted the DS1 orders received via ASRs. This serves to lower the CLEC result reported, as orders submittable via LSRs tend to be quicker and easier to provision than those submitted via ASRs.

In ER D-021, DCI also noted that certain low interval orders were being excluded from the PR-1-07-3211 retail comparative (which were included in the PR-1-07-2200 retail comparative), and that the PA CMA contained no retail comparative algorithm for PR-1-07-3211.

In its response to ER D-021, Verizon PA agreed that the ASRs had been omitted and indicated it would resolve the issue via the change control process. Verizon PA indicated that the retail orders excluded are feature changes on PRI ISDN circuits which are to be excluded from PR-1-07-3211, because such orders are unique to Retail and Resale, and not available to UNE. Verizon PA indicated they would supply the Retail algorithms for PR-1-07-3211 in a future release of the CMA.

DCI found a change control notification dated September 28, 2003 (CC# 10418) indicating that the problem with incorrect exclusion of ASRs in PR-1-07-3211 and PR-1-08-3213 had been corrected.

The June PA CMA contains retail algorithms for PR-1-07-3211, however these algorithms do not exhibit the exclusion of PRI ISDN feature change orders.

15. <u>ASRs Are Incorrectly Excluded From PR-1 Where The Customer Selected A Shorter Than Standard Interval Due Date (ER D-027).</u>

As DCI has previously indicated regarding LSRs, (see ER D-008), Verizon PA has neglected to include orders whose due dates are sooner than the standard interval (S-coded). To the extent that a "Y"- value in the WCODED_IND field indicates a W-coded appointment type and therefore excludes S-coded intervals, Verizon PA has also incorrectly excluded S-coded ASRs from the PR-1 metrics. This issue affects the following metircs:

- PR-1-06-3200/3210
- PR-1-07-3200/3211
- PR-1-08-3200/3213
- PR-1-09-3511
- PR-1-09-3512
- PR-1-09-3530

- PR-1-12-3200

In its response to ER D-027, Verizon PA agreed with this finding and indicated that CC #10287 has been scheduled to resolve this issue, with implementation targeted for the September data month.

DCI has found a change control notification dated November 4, 2003 indicating that CC #10287 has been completed. DCI has not reviewed September data to verify that the problem is resolved.

16. **ASRs Are Incorrectly Excluded From PR-1 Where The Customer Accepted The Standard Interval Due Date (ER D-027).**

The NMP-PRV-ASR_Fact Layout Master Copy v1.2 indicates the following values for the APPT_TYP field:

> W -
> Customer requested date due (DDD) and DD are the standard interval
> Customer requested date due (DDD) is the standard interval and the DD is later due to a facility problem.
> Customer requested date due (DDD) is less than the standard interval and the DD is the standard interval. In other words, and expedite or short interval could not be granted.
>
> X -
> Customer requested dated due (DDD) and DD are later than the standard interval.
> DD is negotiated, including projects
>
> S -
> Customer requested date due (DDD) and DD are shorter than the standard interval.
>
> K -
> Disconnect orders (C or D orders)
> Record orders (R orders)

It provides the following derivation information for the WCODED_IND field:

> WCODED indicator is derived from the APPT_TYP field

Analysis of the April/May 2003 ASR Provisioning FACT Table data provides the following breakdown of WCODED_IND vs APPT_TYP:

Table C-29

	APPT_TYP				
WCODED_IND	Null	K	S	W	X
N	0	9851	534	2366	11622
Y	33674	0	0	0	0

This indicates that the only way WCODED_IND could have been derived from the APPT_TYP field is via code similar to the following:

```
if appt_typ = " "        then wcoded_ind="Y";
                                 else wcoded_ind="N";
```

There are 2900 S-coded and W-coded orders which should not have been excluded from the PR-1 metrics on account of appointment coding, and it is not known what is the real appointment coding of the 33674 orders which have WCODED_IND="Y".

In the context of a specific metric, PR-1-07-3211, after all exclusions other than appointment coding are applied, the breakdown for otherwise eligible orders is as follows:

Table C-30

	APPT_TYP		
WCODED_IND	Null	W	X
N	0	77	4
Y	61	0	0

This indicates that of 81 otherwise eligible orders, four were excluded correctly, and 77 should have been included. It also raises suspicion as to whether the 61 orders which would be counted by Verizon PA's algorithm should legitimately have been included.

It therefore appears that the WCODED_IND has been derived incorrectly, causing the PR-1 metric to be calculated incorrectly for ASR based orders.

Verizon PA's updated response to ER D-027 indicated that Verizon PA agreed that WCODED_IND was being improperly derived and this issue would also be resolved via CC #10287.

DCI has found a change control notification dated November 4, 2003 indicating that CC #10287 has been completed. DCI has not reviewed September 2003 data to verify that the problem is resolved.

17. FACT Table Layout Documentation Does Not Correctly Indicate How WCODED_IND Is Derived (ER D-027).

While the FACT Table Layout derivation indicated for the WCODED_IND field, "WCODED indicator is derived from the APPT_TYP field", may express the intent of the system designers, it incorrectly documents what was actually coded (See Finding 16).

In its response to ER D-027, Verizon PA agreed with this documentation issue and indicated this would be adressed after CC #10287 had been implemented.

The FACT Table provided with the June CMA provides the following updated derivation:

```
Specials C2C:
Var_wcoded_ind_org:
If (APPT_TYP is NULL). Var_wcoded_ind_org = 'Y'
ELSE  Var_wcoded_ind_org = 'N'
If [STATE_CD in ('MD','DC','WV','VA') and (APPT_TYP is null or APPT_TYP='W' or APPT_TYP
= 'S')], WCODED_IND = 'Y'
ELSE  WCODED_IND = 'N'
For all other states WCODED_IND=Var_wcoded_ind_org.
```

For Pennsylvania, this derivation results in WCODED_IND having a "Y" value whenever APPT_TYP is null, and a "N" value whenever APPT_TYP is populated whether with a "S", "W", or "X".

This updated FACT Table Layout correctly documents Verizon PA's current derivation of the WCODED_IND field. (As detailed above in Finding 16, this derivation is incorrect).

18. The Derivation Of The GLOBAL_EXCLUSION Field Is Insufficiently Documented.

The LSR Provisioning FACT Table Layout merely refers to the CHECK_FOR_INCLUSION procedure in the DW-to-Spool procedure. That procedure contains a substantial amount of intricate code with insufficient explanation in plain English of what is being excluded and why it is being excluded.

19. Verizon PA Excludes All Trunks From PR-1-09 Whose Customer Desired Due Interval Is Greater Than 18 Days.

Verizon PA excludes all trunks from PR-1-09 whose Customer Desired Due Interval is greater than 18 days via restricting the DES_DUE_INTV field to a value <= 18. This causes over 99% of the trunk orders to be excluded from both CLEC and Retail, and results in no comparison being made on the C2C report for PR-1-09-5020. Had these orders been included, a disparity determination would have been reached. Although the Guidelines allow the exclusion of orders where customers request a due date beyond the standard interval, the following standard intervals are indicated for trunks in Verizon PA's UNE Intervals spreadsheet (revised Aug 27, 2003):

Table C-34

Unbundled Dedicated Trunk Ports, Extended Dedicated Trunk Ports	
New Trunk Group 1-240 trunks (1-10 DS1s)	60 business days
Add to existing groups 1-96 trunks (1-4 DS1s)	30 business days
Number of trunks exceeds above	Negotiated*
DA Trunks to TOPS Tandem Provisioning Intervals	
If Facilities are available	18 days
If Facilities are not available	Negotiated*
Provisioning of FG C-type Modified Operator Services Signaling Trunks:	
If Facilities are available:	18 days
If Facilities are not available:	Negotiated*
*The term "negotiated" refers to the Internal/VZ negotiating done within various provisioning organizations.	

From the above table it is apparent that 18 days is not a standard interval which applies to all trunk orders, and so it should not be used as such to exclude 99% of the trunk orders from metric results.

20. Verizon PA Excludes Change-Order Disconnects From PR-1-12 Resale And UNE Results If Their Offered Interval Is Greater Than 2 Days, But Does Not Exclude These From The Corresponding Retail Comparative Results.

Change-order Disconnects are excluded in the PR-1-12 Resale and UNE results calculations if the value in the APPINTV field (Offered Interval) is greater than two business days. However, Change order disconnects are included in the corresponding retail comparative results regardless of the value of the APPINTV field. This causes the Retail result to be higher than it should be, making it easier for Verizon PA to report a parity result. The impact is small, and Verizon PA would have achieved a parity result anyway, had they excluded these from the retail comparatives.

PR-3 FINDINGS

1. S-coded Orders Are Incorrectly Excluded From The Retail Comparative For PR-3-10-3341 (UNE 2-Wire Digital Services) (ER D-008).

S-coded orders (customer requested earlier than standard due date) are incorrectly excluded in the PA CMA algorithm for the retail comparative for PR-3-10-3341 (Retail 2-wire Digital Services). If any such otherwise eligible orders existed, they would be incorrectly excluded from the C2C Metrics Results.

In a discussion of DR D-008 on August 14, 2003, and in its response to ER D-008, Verizon PA indicated that this problem stemmed from their failure to update the old code present with the pre-April Guidelines which counted only W-coded orders (customer accepts standard due date). Verizon PA also indicated that this would have had no impact on the CLEC PM results during April, May and June 2003, as no otherwise eligible Resale 2-wire Digital orders were S-coded. Verizon PA issued change control #10346 with implementation targeted for the August 2003 data month, to resolve this issue.

DCI has checked the change control notifications provided by Verizon PA and found a notification sent September 29, 2003 indicating that CC #10346 was completed and implemented in production for the August data month. This change control dealt specifically with PR-1-01-2341 and does not mention the correcting of code for other submetrics where similar issues occurred. However, in its response to ER D-011, Verizon PA indicated that the code for the PR-3-10-3341 retail comparative would be corrected in CC #10346. However, DCI has not checked the August 2003 data to verify this.

2. CLEC Requested Intervals Shorter Than The Standard Are Incorrectly Excluded From UNE 2-Wire Digital Loops, xDSL Loops, Linesharing And LineSplitting - PR-3-03-334x, PR-3-10-334x (ER D-011).

In many provisioning performance measurement calculations, Verizon PA incorrectly excludes all orders with due dates *shorter* than the standard offered interval:

- All Provisioning CLEC PM results based on a single, fixed standard interval:
  - PR-3-03-3343, 3345
  - PR-3-10-3341, 3342

- Retail comparatives for the following PMs:

  - PR-3-03-3343, 3345
  - PR-3-10-3341

This has a substantial effect on the provisioning metrics results, both in limiting volumes, (which can result in no statistical parity comparison being made), and in eliminating those eligible records which have the greatest potential to impact a CLEC to retail comparison, because the standard interval was not adhered to. The extent to which the offered interval is shorter than standard may vary both qualitatively (how frequently does this happen) and quantitatively (how much shorter) between CLEC and Retail orders. This has not been captured in the metrics, instead, only orders meeting the standard interval are being compared currently.

Verizon PA's response to ER D-011 agreed with the exception and indicated that the retail comparative for PR-3-10-3341 was addressed in CC #10346 (See Finding 7 above, ER D-008). A different correction (CC #10292, targeted implementation September data month) is applied to the CLEC UNE Loop calculations and their other retail comparatives.

DCI found a change control notification (October 30, 2003) indicating that CC #10292 had been completed and implemented for the September data month. DCI did not check September 2003 data to verify this.

3. The Retail Comparatives For PR-3-10-3341 (UNE 2-Wire Digital Services) Are Inappropriate (ER D-012).

The process for obtaining the CLEC results involves excluding records with PON_APPINTV (customer desired intervals) longer than the (standard) six days. The process for obtaining the Retail comparative results involves excluding X-coded appointments (Customer requested longer than the standard due date). As indicated in Finding 12 above, this leads to an apples versus oranges comparison, rendering the retail comparative invalid.

A consistent approach to excluding longer than standard could be used for both CLEC and its retail comparison.

Verizon PA's response to ER D-012 stated:

> "Verizon disagrees with this exception. Verizon uses the best information available to identify orders where the customer desired due date is less than or equal to the standard interval.
>
> Verizon uses derived fields such as TWO_WIRE_INTV for metrics with a single, fixed, standard interval. These derived fields are more accurate than

the appointment type code for single, fixed, standard interval metrics. The ORG_APPT_CODE can be manually populated by Verizon representatives, and therefore, can be subject to occasional human error.

The same logic cannot be used for Retail and Resale 2 Wire Digital Services because they do not have a single, fixed, standard interval like UNE 2 Wire Digital. Therefore, Verizon relies on the appointment type code to count orders less than or equal to the standard interval."

DCI understands Verizon PA's stated rationale for calculating Retail and Resale 2-wire Digital Services results using the appointment type coding, and finds Verizon PA's Retail calculation approach to provide an appropriate retail comparative for Resale 2-wire Digital Services. However, for the reasons DCI stated above, this same result does not constitute an appropriate retail comparative for UNE 2-wire Digital Services. DCI stands by its finding that the retail comparative for UNE 2-wire Digital Services be calculated in the same manner that the UNE 2-wire Digital Services result is, basing the exclusion of orders where the customer desired a longer than standard due date on the same methodology used for the CLEC calculation. Otherwise, the retail comparative calculation is invalid for this submetric.

4. The UNE 2-Wire xDSL Line Sharing Metrics Results (PR-3-03-3343) Incorrectly Include Line Splitting Orders. (ER D-013)

The algorithm for the following UNE 2-wire xDSL Line Sharing metrics incorrectly includes Line Splitting orders:

- PR-3-03-3343

Verizon PA's response to ER D-013 agreed with this exception, and explained that this is the result of old code consistent with the pre-April PA C2C Guidelines which incuded Line Splitting together with Line Sharing. Verizon PA indicated that they would issue change control #10329 to correct this problem with targeted implementation of the October 2003 data month.

DCI found a October 15, 2003 change control notification indicating that CC #10329 has been scheduled. DCI has not verified this.

5. PR-3-09 CLEC Numerator And Denominator Algorithms Are Inconsistent (ER D-014).

The PA April/May CMA CLEC algorithms for the denominators for all product disaggregations of the PR-3-09 submetric are inconsistent with those of their corresponding numerators. For instance, the PR-3-09-2100 denominator algorithm does not contain the restrictions on the fields UNN1_IN_DATA, C2C_PROJECT_IND, SUB_DELAY_IND, ORG_APPT_CODE, and LINES_NUMBER. In addition, it allows record orders based on the field RESALE_MIGR_NO_APPINTV instead of the field RESALE_MIGR_APPINTV_LTE2.

Similar issues apply to the other product disaggregations.

Verizon PA responded to ER D-014 agreeing with the finding as it pertains to the PA CMA documentation, and committing to update the CMA with corrected metric algorithms in a future release of the PA CMAs.

DCI has examined the June CMA and found that this issue has been corrected for PR-3-09. One remaining detail is that the retail denominator algorithm explicitly excludes the Line Sharing product (PRODUCT_IND='1') while no corresponding explicit exclusion is present in the retail numerator algorithm. However, this explicit exclusion appears to be superfluous code, as the other conditions present in the code already prevent any Line Sharing product records from being included for each of April, May, and June.

6.   PR-3-09 Retail Denominator Algorithms Are Not Included In The April/May CMA.

No retail denominator algorithms for any of the PR-3-09 product disaggregations are present in the PA April/May CMA.

This has been corrected in the June CMA.

7.   The Derivation Of The GLOBAL_EXCLUSION Field Is Insufficiently Documented.

See text for Finding 18, Metric PR-1, on Page C-79.

8.   June C2C Guideline Modifications To PR-3 Were Implemented Incorrectly.

The June C2C Guideline Modification to the Add 2-Wire Digital to list of orders excluded from PR-3 (when requiring manual loop qualification) was incorrectly implemented in April and May before the C2C Guideline modification had been approved in PA.

The June C2C Guideline Modification to delete PR-3-11 from the metrics reported in PA was incorrectly implemented in April and May before the Guideline Modification had been approved in PA.

PR-4 FINDINGS

1.   The UNE 2-Wire xDSL Line Sharing Metrics Results Incorrectly Include Line Splitting Orders. (ER D-013).

The algorithm for the following UNE 2-wire xDSL Line Sharing metrics incorrectly includes Line Splitting orders:

- PR-4-02-3343
- PR-4-03-3343
- PR-4-04-3343
- PR-4-05-3343

Verizon PA's response to ER D-013 agreed with this exception, and explained that this is the result of old code consistent with the pre-April PA C2C Guidelines which incuded Line Splitting together with Line Sharing. Verizon PA indicated that they would issue change control #10329 to correct this problem with targeted implementation of the October 2003 data month. DCI

found an October 15, 2003 change control notification indicating that CC #10329 has been scheduled. DCI has not verified this.

2. The Derivation Of The GLOBAL_EXCLUSION Field Is Insufficiently Documented.

See text for Finding 18, Metric PR-1, on Page C-79.

3. Verizon PA Incorrectly Allows Non-POTS Orders In The PR-4 Retail Calculations For UNE 2-wire Digital Services, While Such Orders Are Filtered Out Of The CLEC Results.

The filter C2C_SERVICE_IND="P" is applied to the CLEC results for UNE 2-wire Digital Services (PR-5-01-3341 and PR-5-02-3341). However it is not applied to the Retail comparative results.

For PR-4-02-3341, this resulted in 4, 3, and 6 additional non-POTS orders being incorrectly included in the retail comparative denominators for April, May and June, respectively. These incorrectly included retail non-POTS orders which averaged 4.75 days in April, 15 days in May, and 3 days in June. They therefore increased the retail results in April from 2.647 days to 3.048 days, and in May from 2.75 days to 4.684 days, while reducing the Juen retail result from 13.889 days to 11.167 days.

For PR-4-04-3341, this error resulted in 46, 41, and 42 additional non-POTS orders being incorrectly included in the retail comparative denominators for April, May, and June respectively. Of these 3, 0, and 4, were counted in Verizon PA's retail numerator calculation, which increased Verizon PA's reported retail results from 2.01% to 2.54% in April and from 3.64% to 4.36% in June, therefore making it easier for Verizon PA to demonstrate parity than warranted. Verizon PA would have passed anyway in these months. However, this error could cause reported results to indicate parity when disparate service was being provided in future months.

4. CMA Incorrectly Specifies Interexchange And Wireless Trunks Instead Of CLEC And Reciprocal Trunks For PR-4-02-5000 And PR-4-03-5000.

The PA CMA (including June) incorrectly indicates that Interexchange and Wireless Trunks are being counted and CLEC and Reciprocal Trunks are being excluded in the PR-4-02-5000 and PR-4-03-5000 metrics by restricting the TRNK_SERV_TYP field to the values 'I' and 'W'. The correct restriction is to restrict TRNK_SERV_TYP field to the values 'T' and 'R'.

5. CMA Incorrectly Excludes DS0 Specials And Specials Other Than DS0, DS1, DS3 From The PR-4-02-3200 And PR-4-03-3200 Metrics.

The PA CMA (including June) incorrectly excludes DS0 Specials and Specials other than DS0, DS1, DS3 from the PR-4-02-3200 and PR-4-03-3200 metrics, by restricting the PROD_TYP field to the values 'DS1' or 'DS3'. The values 'DS0' and 'OTH' should also be allowed.

6. **C2C Guidelines Are Unclear Regarding Inclusion Of Customer-Not-Ready Missed Appointments In PR-4-15 Numerator.**

The PR-4 Definition section of the Guidelines indicates that PR-4-15 measures the percentage of trunks completed on or before the order due date, (in contrast to the other PR-4 metrics which measure the percentage of orders which were late or the average delay of late orders). This is followed in the Guidelines by the statement:

> "Metric PR-4-15 includes orders that were Customer Not Ready (CNR), and were completed in the report month."

The straightforward interpretation of this statement is that CNR orders are not excluded from being subject to the metric – if provisioned on-time they count as a success, if provisioned late, they count as a failure, even if due to the Customer not being ready.

This interpretation is supported by the PR-4-15 Sub-Metric section, which describes PR-4-15 as The percent of trunks completed on or before the due date. The denominator is "The number of trunks completed within the month" and the numerator is "The number of trunks where the order completion date is less than or equal to the order due date". Nowhere do the Guidelines explicitly state that CNR situations are to be counted as completed on-time.

Verizon PA, however, interprets the Guidelines to mean that CNR situations are counted as if provisioned on time. DCI considers this reasonable because it is not reasonable to hold Verizon PA to a standard of 95% on-time when the delay is due to the customer.

The CWG and/or PA PUC could reconsider whether CNR orders should be included at all in the PR-4-15 metric. DCI considers that they should be excluded entirely. If the CWG and/or PA PUC chooses to include them in both numerator and denominator as Verizon PA has interpreted the C2C Guidelines, then this should be made clear throughout all the abovementioned applicable sections of the C2C Guidelines.

PR-5 FINDINGS

1. **The UNE 2-Wire xDSL Line Sharing Metrics Results Incorrectly Include Line Splitting Orders. (ER D-013)**

The algorithm for the following UNE 2-wire xDSL Line Sharing metrics incorrectly includes Line Splitting orders:
- PR-5-01-3343
- PR-5-02-3343

Verizon PA's response to ER D-013 agreed with this exception, and explained that this is the result of old code consistent with the pre-April PA C2C Guidelines which incuded Line Splitting together with Line Sharing. Verizon PA indicated that they would issue change control #10329 to correct this problem with targeted implementation of the October 2003 data month.

DCI found a October 15, 2003 change control notification indicating that CC #10329 has been scheduled. DCI has not verified this.

2.   PR-5 Numerator And Denominator Algorithms Are Inconsistent (ER D-014).

Several PR-5 PA May CMA algorithms for the denominators are inconsistent with those of their corresponding numerators.   For instance, the PR-5-02-2100 retail denominator algorithm contains restrictions on the fields CISR_MAC, COMP_MAC_LAST, COMP_MAC_DY_CNT. These fields are not similarly restricted in the PR-5-02-2100 retail numerator.

Similar issues apply to the following other PR-5 product disaggregations:

- PR-5-02-3112
- PR-5-02-3140
- PR-5-02-3200
- PR-5-02-3342
- PR-5-02-3343
- PR-5-02-3345
- PR-5-04-3200

Verizon PA responded to ER D-014 agreeing with the finding as it pertains to the PA CMA documentation, and committing to update the CMA with corrected metric algorithms in a future release of the PA CMAs.

DCI has examined the June CMA and found that this issue has not been corrected for PR-5-02-2100 (retail).   In addition, while previously no denominator algorithm had been provided for PR-5-02-2200 (retail), the June CMA contains a denominator algorithm for PR-5-02-2200 which is inconsistent with the numerator algorithm and clearly incorrect, as it concerns xDSL Loops, which are not Resale Specials.

In the April/May CMA no denominator algorithm had been provided for PR-5-02-2341 (CLEC). The June CMA contains a denominator which is inconsistent with the numerator and clearly incorrect, as it relates to orders held longer than 90 days, which is the subject of PR-8, not PR-5.

3.   The PA April/May CMA Contains No Denominator Algorithms For Several PR-5 Sub-Metrics (ER D-015).

The PA CMA documentation contains no denominator algorithm for the following PMs:

- PR-5-02-2100 (CLEC),
- PR-5-02-2200,
- PR-5-02-2341 (CLEC),
- PR-5-04-3112

Verizon PA's (August 27, 2003) response to ER D-015 agreed with this exception and indicated that the denominator algorithms would be supplied in the next release of the PA CMAs.

DCI has examined the June PA CMA (supplied September 27, 2003) and found that while previously missing algorithms have been supplied, several are incorrect, as indicated in Finding 2.

4.   **The Derivation Of The GLOBAL EXCLUSION Field Is Insufficiently Documented.**

See Text for Finding No. 18, Metric PR-1, on Page C-79

5.   **C2C Guidelines Performance Standards For PR-5 xDSL Loops Are Inconsistent With The Retail Analog Compare Table.**

In the individual metric section of the C2C Guidelines for PR-5, the Performance Standard is written as Parity with Retail except for UNE 2-wire xDSL LineSharing and UNE 2-wire xDSL Line Splitting; and Parity with VADI for UNE 2-wire xDSL Line Sharing and UNE 2-wire xDSL Line Splitting. This implies that the retail comparative for 2-wire xDSL Loops is Retail 2-wire xDSL Loops.

However, the Retail Analog Compare Table (included in the PA C2C Guidelines) indicates that VADI Line Sharing is the performance standard for all three product groups UNE 2-wire xDSL Loop, UNE 2-wire xDSL Line Share and UNE 2-wire xDSL Line Splitting, for all provisioning metrics except for PR-4-02 and PR-8, where the retail comparative for UNE 2-wire xDSL Loop is Retail Specials DS0, and PR-6, where the retail comparative for UNE 2-wire xDSL Loop is Retail POTS Dispatched.

DCI's independent recalculations and Verizon PA's C2C results indicate that Verizon PA's actual practice is in accordance with the Retail Analog Compare Table. The individual metric performance standard sections of the Guidelines should be made consistent with the Retail Analog Compare Table (included with PA C2C Guidelines).

6.   **June CMA Algorithms For PR-5-04-3112 (UNE POTS Loop) Are Incorrect.**

These algorithms incorrectly restrict to PRODUCT_IND = '4', which indicates the Line Splitting product. DCI considers the correct product specification for UNE POTS Loop to be:

```
c2c_service_ind eq 'P' and complexity_ind eq 'S' and hot_cut_ind eq 'N' and loop_ind eq '1'
```

7.   **C2C Results For PR-5-04-3112 (UNE POTS Loop) Are Incorrect.**

DCI consistently found many more orders satisfying the conditions for PR-5-04-3112 than were indicated in Verizon PA's C2C reported results, as indicated in the following table:

Table C-35

Month	Metric	DCI			Verizon C2C Results		
		Num	Denom	Result	Num	Denom	Result
April	PR-5-04-3112	5	1694	0.30%	2	1515	0.13%
May	PR-5-04-3112	30	1761	1.70%	6	1565	0.38%
June	PR-5-04-3112	7	1681	0.42%	2	1471	0.14%

8.   The C2C Guidelines Definition Of PR-5-02 Is Internally Inconsistent.

In the PR-5 Definition section, the Guidelines describe PR-5-02 as Facility Missed Orders > 15 Days: The percent of Dispatched orders missed for lack of facilities where the completion date minus the appointment date is greater than 15 calendar days. DCI found many more orders satisfying the numerator conditions than were indicated in Verizon PA's C2C reported results, and many fewer in the denominator. Similarly, in the Sub-Metrics section, PR-5-02, % Orders Held for Facilities > 15 Days is described as the Percent of Dispatched Orders or trunks completed more than 15 days after the commitment date, due to lack of Verizon PA facilities.

However, in the Calculation section, the Numerator formula is described as: Number of dispatched orders or trunks where the completion date minus Due Date (DD) is 15 or more days for Company Facility reasons for product group.

These two approaches are inconsistent with each other for orders where the completion date is exactly 15 days after the due date. The Guidelines should present a consistent approach throughout. (The CMAs indicate the use of > 15 days, however, DCI was unable to replicate Verizon PA results with either approach, but DCI's results using >15 are much closer to Verizon PA's results than DCI's results using >= 15.)

9.   PR-5 Facility Missed Commitments Calculations Contain Inconsistent Conditions Which Filter Out Too Many Orders From The Numerators.

Orders meeting the conditions satisfying the PR-5-01 and PR-5-02 denominators need to satisfy the following conditions in order to be also counted in the numerator:

- Provisioning is Completed after the Due Date (PR-5-01) or more than 15 days after the Due Date (PR-5-02), and
- The due date commitment was missed for Verizon PA Facility reasons.

Verizon PA's algorithms however apply the following three conditions:

- COMPL_DATE > ORG_DUE_DATE for PR-5-01, or
- COMPL_DATE – ORG_DUE_DATE > 15 for PR-5-02
- FACILITY_MISS_IND = "Y"
- CAL_COMP_MAC_DAYS > 0 (for PR-5-01), >15 (for PR-5-02)

While one would expect the CAL_COMP_MAC_DAYS to completely agree with the number of days from ORG_DUE_DATE to COMPL_DATE for all records where FACILITY_MISS_IND="Y", this does not turn out to be the case. Rather, the CAL_COMP_MAC_DAYS excludes records which COMPL_DATE – ORG_DUE_DATE does not, and COMPL_DATE-ORG_DUE_DATE excludes records which CAL_COMP_MAC_ DAYS does not. The result is that the PR-5 numerators (and hence the reported results) are lower than they should be, for both CLEC and Retail.

10. **Verizon PA Incorrectly Allows Non-POTS Orders In The PR-5 Retail Calculations For UNE 2-wire Digital Services, While Such Orders Are Filtered Out Of The CLEC Results.**

See text for Finding 3, Metric PR-3, on Page C-81.

PR-6 FINDINGS

1. **Multi-Line Installation-Related Troubles Are Not Handled Appropriately In The PR-6 Measurement Calculations. The PR-6 Guidelines Definition Needs Clarification.**

How to count troubles for multi-line installations in the numerator and how to weigh multi-line installations in the denominator are important issues to consider when evaluating installation quality. One consistent and reasonable approach to these issues is inherent in the name of the measurement itself and another consistent and reasonable approach is arguably suggested in the first line of the definition. Verizon PA has however used the first approach when computing the numerator and the second approach when computing the denominator. This inconsistent combination of approaches results in Verizon PA's PR-6 metric portraying a higher installation quality result than actually experienced by CLEC and Retail customers. Since CLEC installations have higher average line counts per installation than retail installations, this will impact the CLEC result more than the Retail result, thereby masking potential disparities in performance with results indicating parity of performance.

Four common multi-line installation-related trouble scenarios: To illustrate the issues involved, consider the following four common installation-related trouble scenarios. (In the following discussion, circuits or trunks may be substituted for the word lines wherever applicable):

1. Something about the installation (or a cable cut) affects several (perhaps all) lines involved in the installation. A trouble report is submitted regarding one of the lines involved. Perhaps the other lines involved are mentioned on the trouble report. Perhaps a separate trouble report is submitted for some (but seldom all) of the lines affected. But since they are all due to the same cause, the troubles on these other lines are excluded as "common-caused". Even though the trouble affects many lines, it counts as only one trouble in the numerator.

2. Several seemingly unrelated troubles occur to different lines which were installed together as part of the same service order. While the troubles may have different symptoms and occur on different days, since they occur within seven or 30 days of installation and are reported on different lines, they are all generally counted as separate troubles in the numerator.

3. Several seemingly unrelated troubles affecting a single line are reported within seven or 30 days of installation. The first is the only trouble counted in the numerator of PR-6. The later ones are counted as repeat troubles in the numerator of MR-5.

4. Several seemingly unrelated troubles affecting multiple lines which were installed on the same service order are reported on the same line within seven or 30 days of installation. Though the troubles affect many lines, only a single trouble is reported, or if additional troubles are reported on other lines, they are excluded as "common-caused". The first trouble for one of the lines is counted in the numerator of PR-6. The later troubles reported on that line are counted as repeat troubles in the numerator of MR-5. Only one trouble will count in the PR-6 numerator.

In each of the above scenarios, Verizon PA counts each of the lines of an installation separately in the denominator, yet counts only the first trouble reported on a line in the numerator. DCI considers that this approach may be valid for Scenarios 2 and 3, but not for Scenarios 1 and 4.

The metric name: Installation Quality: One consistent and valid approach to defining this metric is based on the name of the metric itself. Implicit in calling the metric by the name Installation Quality, is that the fundamental unit whose quality is being measured is an installation. An installation would consist of all the lines involved in a service order (or possibly an LSR/ASR?) viewed as a single entity. In constructing a metric which is to be evaluated for parity using a binomial distribution, the outcome of each installation needs to be viewed in a binary fashion with only two possible outcomes:

(a) there were no troubles on any lines involved in the installation – this installation is successful, or

(b) there was a trouble on some line involved in the installation – this installation is unsuccessful.

Using this approach, all four of the scenarios listed above would be counted as one trouble in the numerator, and one installation in the denominator (regardless of how many lines were involved in the installation). Consistent implementation of this approach would require special coding to ensure that the several troubles reported on different lines involved in the installation (Scenario 2 above) are counted only once as a single unsuccessful installation.

The C2C Guidelines Definition: A different consistent and valid approach uses individual lines as the fundamental unit whose quality of installation is being measured. This approach is implied by the C2C Guidelines definition:

"This metric measures the percent of lines/circuits/trunks installed where a reported trouble was found within 30 days of order completion."

Consistent implementation of this approach implies that the question to be answered for each of these lines regarding the numerator is: Was there a reported trouble found within 30 days of installation which affected this line? Even though a trouble reported on this line was "common-cause" excluded, or even when no trouble was reported on this line, if the trouble reported on a different line would have affected this line, then installation of this line should be viewed as unsuccessful (Scenarios 1 & 4). In other words, according to this approach, a single trouble should be counted multiple times in the numerator, once for each line that it would have affected. Unfortunately, an indication of all the lines potentially affected by a trouble is not generally

available in the data mart or even on the trouble ticket. A conservative (biased against Verizon PA) approximation would involve counting each trouble multiple times, once for each line involved on the installation of the line the trouble was reported on. While this would handle Scenarios 1 & 4, it would overcount troubles in Scenarios 2 & 3.

Verizon PA's implementation: Verizon PA has implemented the approach implied by the C2C Guidelines Definition in calculating the denominator of PR-6 in that each line is counted separately, but has not carried this through to the numerator. Verizon PA's calculation of the numerator is similar to the approach implied by the metric name Installation Quality in that troubles are only counted against the line they are reported on and not against all the lines affected. For consistency, that approach would require counting orders in the denominator rather than lines, but Verizon PA has not carried that approach through to the denominator.

Impact on PR-6 metric results: Verizon PA's implementation results in reporting a much lower rate of installation-related troubles than would result from either of the two consistent valid approaches described above. This is because for the denominator, Verizon PA uses the approach which provides a larger denominator, whereas for the numerator, Verizon PA uses the approach which provides a smaller numerator.

Impact on PR-6 Parity Determinations: CLECs tend to focus their market more on high volume business customers, whose per-order line counts will be usually larger than found in the residential market which predominates the retail results. Consequently, the downward bias inherent in Verizon PA's PR-6 implementation will impact the CLEC results to a greater degree than it impacts the retail results. Potential disparities in installation service quality may be masked by results indicating parity which were calculated using Verizon PA's inconsistent implementation.

2. **The UNE 2-Wire xDSL Line Sharing Metrics Results Incorrectly Include Line Splitting Orders. (ER D-013).**

The algorithm for the following UNE 2-wire xDSL Line Sharing metrics incorrectly includes Line Splitting orders:

- PR-6-01-3343 denominator
- PR-6-03-3343 denominator

Verizon PA's response to ER D-013 agreed with this exception, and explained that this is the result of old code consistent with the pre-April PA C2C Guidelines which incuded Line Splitting together with Line Sharing. Verizon PA indicated that they would issue change control #10329 to correct this problem with targeted implementation of the October 2003 data month.

DCI found a October 15, 2003 change control notification indicating that CC #10329 has been scheduled.

3. **The PA May CMA Contains No Denominator Algorithms For Several PR-6 Sub-Metrics (ER D-015).**

The PA CMA documentation contains no denominator algorithm for the following PMs:

- PR-6-01-2100 (CLEC)
- PR-6-01-2200 (CLEC)
- PR-6-01-2341 (CLEC)
- PR-6-01-3341 (Retail)
- PR-6-01-3342 (Retail)
- PR-6-03-2100
- PR-6-03-2200

Verizon PA's (August 27, 2003) response to ER D-015 agreed with this exception and indicated that the denominator algorithms would be supplied in the next release of the PA CMAs.

DCI has examined the June PA CMA (supplied September 27, 2003) and found that while previously missing algorithms have been supplied, several are incorrect, as indicated in Finding 2.

4. **The Retail Comparative Used For PR-6-01-3112 In April And May Was Incorrect (ER D-037).**

The April C2C Guidelines indicate that the comparative Retail measurement for PR-6-01-3112 (UNE POTS Loop Installation Quality) is Retail POTS Total. The Guidelines were modified in June, indicating Retail POTS Dispatched as the comparative retail measurement for UNE POTS Loop. Verizon PA results for April and May indicate that Verizon PA had used Retail POTS Dispatched as the Retail Comparative to UNE POTS Loop in April and May before this Guideline change had been approved in Pennsylvania. This made achieving a parity result in April easier for Verizon PA as the Retail comparative result using Retail POTS Total was 7603 installation-related troubles on 224119 lines installed for PR-6 = 3.39% while the retail result reported on the C2C report was 2004 installation-related troubles on 32833 lines installed = 6.10%. Similarly, in May, Verizon PA reported 2040 installation troubles on 32143 lines installed, which was the POTS Dispatched result of 6.35%, when the Retail POTS Total result would have been 3.80% (7810 installation-related troubles on 205710 lines installed).   In June, the retail comparative that Verizon PA had implemented prior to April became the appropriate retail comparative for Pennsylvania, so Verizon PA's reported retail result of 6.77% for June is based on the correct retail comparative.

While there was non-compliance with the C2C Guidelines in using an as-yet unapproved retail comparative for April and May, no action is needed to correct this ER for future months. Verizon PA's CLEC results for April and May were 2.52% and 3.26% respectively, so Verizon PA would have passed these metrics anyway had they used Retail POTS Total as the retail comparative as required by the April C2C Guidelines, so PA PAP penalties have not been affected by this error.

In its response to ER D-037, Verizon PA agreed with this finding, noting that the retail comparative is now correct.

5.   Incorrect Denominators Were Reported For PR-6-03-3112 (ER D-038).

The CMA denominator algorithm for PR-6-03-3112 is the same as that for PR-6-01-3112, and there is no logical reason for using a different denominator. DCI's independent calculation verifies the denominator for PR-6-01-3112. However, Verizon PA reports a higher denominator for PR-6-03-3112, although the result reported matches the result calculated independently by DCI which was based on a lower denominator:

Table C-31

Month	Metric	DCI			Verizon C2C Results		
		Num	**Denom**	**Result**	**Num**	**Denom**	**Result**
April	PR-6-01-3112	144	5712	2.52%	144	5712	2.52%
	PR-6-03-3112	132	5712	2.31%	148	**6398**	2.31%
May	PR-6-01-3112	162	4972	3.26%	162	4972	3.26%
	PR-6-03-3112	124	4972	2.49%	139	**5591**	2.49%
June	PR-6-01-3112	214	4686	4.57%	214	4686	4.57%
	PR-6-03-3112	163	4686	3.48%	188	**5410**	3.48%

In the above table, the numerators for the Verizon PA C2C results were independently calculated by DCI from the Denominators and Results on the C2C reports, they were not provided by Verizon PA on the reports. The fact that Verizon PA and DCI found the exact same results for PR-6-03 while reporting different denominators indicates that Verizon PA actually used the correct denominator in its calculation of the result, while computing a different, incorrect denominator, which it included on the C2C report. This indicates that the C2C reported results are not generally based on the same calculation as the C2C reported denominators.

Verizon PA responded to ER D-038 as follows:

> "Verizon agrees with this exception.   This error occurred with the conversion to the new C2C Guidelines in the April, 2003 data month. Although the wrong tag name (description) was displayed for the denominator during report production, Verizon did use the correct denominator value in the metric calculations. The correct performance results for PR-6-03-3112 were reported for the April 2003 data month.
>
> Verizon will issue a metrics change control to correct this mapping issue. PR-6-03-3112 is not a penalty bearing metric."

DCI found a Change Control Notification dated 10/31/03 indicating that CC #10505 has been scheduled to revise the report mapping for PR-6-03 UNE POTS Loops Denominator with implementation scheduled for the November data month.

6. **The Derivation Of The GLOBAL EXCLUSION Field Is Insufficiently Documented.**

See text for Finding No. 18, Metric PR-1, on Page C-79.

7. **C2C Guidelines Performance Standards For PR-6 xDSL Loops Are Inconsistent With The Retail Analog Compare Table.**

See text for Finding No. 5, Metric PR-5, on Page C-87.

8. **Verizon PA Counts Troubles Within 30 Days Of Installation As Installation-Related In Its PR-6 Calculations, Even For POTS Services, Where The Guidelines Mandate Seven Days.**

The C2C Guidelines clearly indicate that seven days is the window for installation related troubles for POTS Services, and 30 days for all other installations. Verizon PA incorrectly uses 30 days throughout its C2C calculations. This incorrectly inflates the C2C CLEC results and their Retail comparatives for POTS Services. It also inflates retail comparatives for some none POTS Services, as the Retail comparatives for several Digital services are Retail POTS services. In these cases, the C2C reported Retail comparative is inflated while the CLEC result is not, so the comparison may be considered invalid, and biased in the direction of indicating parity even if there would be a disparity. The comparison is valid in this case, as either both the CLEC and its retail comparative should be based on seven days, or both on 30 days, even if one is considered POTS services and the other not. However, this basic principle of measurement; that valid comparisons require the same operations on both the CLEC and its Retail comparative, has generally not been followed by Verizon PA. For Verizon PA to be consistent with its practice on other metrics, Verizon PA should consider this an invalid comparison and consider troubles within 30 days as installation-related for the CLEC non-POTS result, but require troubles to be within seven days for their Retail comparative POTS results). This error has a significant impact on results, however, it did not cause any PR-6 parity determinations to be reported as disparities, or vice versa, throughout the three months results reviewed.

9. **Verizon PA Incorrectly Counts Enhanced Extended Loops And Interoffice Facilities In Its PR-6 Specials Results.**

The C2C Guidelines state that Specials are a product disaggregation without clearly defining whether EELs and IOF should be included. However, the Glossary at the end of the C2C Guidelines indicates that Trunks are excluded from Special Services and that IOF and EEL are separately reported for Provisioning.   As PR-6 is (mostly) a Provisioning metric, DCI understands the Guidelines to exclude IOF and EEL from PR-6 reporting, as no separate IOF or EEL disaggregation is indicated for PR-6. Verizon PA incorrectly included IOF and EEL orders and troubles together with DS0, DS1, DS3, and other Specials. This generally lowers the PR-6 results, as there are no installation-related troubles on EELs and IOF throughout the three months of data reviewed, although there are hundreds of such orders each month for both CLEC and Retail. This error has a significant impact on results, however, it did not cause any PR-6 parity determinations to be reported as disparities, or vice versa, throughout the three months results reviewed.

10. Verizon PA Includes Reciprocal Trunks As CLEC Trunks In Its PR-6 Trunks Results.

When Reciprocal Trunks are to be included in the CLEC results, the C2C Guidelines generally explicitly state this to be the case. For example, in the PR-4 Definition, the Guidelines state "Trunks: Includes reciprocal trunks from VZ to CLEC". That a similar statement is not present in the C2C Guidelines for PR-6 indicates that Reciprocal Trunks were not intended to be included. However, Verizon PA does include them, inflating the denominators by 300%. This has no effect on the PR-6 results, as there were no installation-related troubles on Trunks throughout the three months data reviewed.

PR-8 FINDINGS

1. The UNE 2-Wire xDSL Line Sharing Metrics Results Incorrectly Include Line Splitting Orders (ER D-013).

The algorithm for the following UNE 2-wire xDSL Line Sharing metrics incorrectly includes Line Splitting orders:

- PR-8-01-3343 denominator
- PR-8-02-3343 denominator

Verizon PA's response to ER D-013 agreed with this exception, and explained that this is the result of old code consistent with the pre-April PA C2C Guidelines which incuded Line Splitting together with Line Sharing. Verizon PA indicated that they would issue change control #10329 to correct this problem with targeted implementation of the October 2003 data month.

DCI found an October 15, 2003 change control notification indicating that CC #10329 has been scheduled.

2. The PA April/May CMA Contains No Denominator Algorithms For Several PR-8 Sub-Metrics (ER D-015).

The PA April/May CMA documentation contains no denominator algorithm for the following PMs:

- PR-8-01-2200 (Retail)
- PR-8-01-2341 (Retail)
- PR-8-01-3200 (Retail)
- PR-8-01-2200 (Retail)
- PR-8-01-3341 (Retail)
- PR-8-01-3345 (CLEC)
- PR-8-02-3100 (CLEC)
- PR-8-02-3200 (CLEC)
- PR-8-02-3341 (CLEC)
- PR-8-02-3342 (CLEC)

- PR-8-02-3343 (CLEC)
- PR-8-02-3345 (CLEC)

Verizon PA's (August 27, 2003) response to ER D-015 agreed with this exception and indicated that the denominator algorithms would be supplied in the next release of the PA CMAs.

DCI has examined the June PA CMA (supplied September 27, 2003) and found that while previously missing algorithms have been supplied, several are incorrect. In addition the PR-8-02-3341 denominator algorithm seems to have extra conditions on the fields CISR_MAC, COMP_MAC_LAST, COMP_MAC_DY_CNT, and COMPL_DATE>ORG_DUE_DATE. These are not in the numerator and are inappropriate for the PR-8-02 denominators.

3. **The PA April/May CMA Contains No Numerator Algorithms For Several PR-8 Sub-Metrics (ER D-016).**

The PA April/May CMA contains no numerator algorithm for the following PMs:

- PR-8-01-2100
- PR-8-01-2200
- PR-8-01-2341
- PR-8-01-3100
- PR-8-01-3200
- PR-8-01-3341
- PR-8-01-3342 (CLEC)
- PR-8-01-3343
- PR-8-01-3345
- PR-8-01-3510 (CLEC)
- PR-8-01-3530 (CLEC)
- PR-8-02-2100
- PR-8-02-2200
- PR-8-02-2341
- PR-8-02-3100
- PR-8-02-3200
- PR-8-02-3341
- PR-8-02-3342 (CLEC)
- PR-8-02-3343
- PR-8-02-3345
- PR-8-02-3510
- PR-8-02-3530 (CLEC)

Verizon PA's (August 27, 2003) response to ER D-016 agreed with this exception and indicated that the denominator algorithms would be supplied in the next release of the PA CMAs.

DCI has examined the June PA CMA (supplied September 27, 2003) and found that the previously missing numerator algorithms have been supplied, and most seem correct.

An inconsistency between the June PR-8-01-2200/2341 CLEC numerator and denominator algorithms is that the numerator algorithm allows Resale Migration records without an appointment interval (RESALE_MIGR_NO_APPINTV='Y') except on Verizon PA initiated orders that are customer affecting, but not requested by the customer (ORG_APPT_CODE='Y'), whereas the denominator algorithm would include such Resale Migration records without an appointment interval (RESALE_MIGR_NO_APPINTV='Y') even on Verizon PA initiated orders that are customer affecting, but not requested by the customer (ORG_APPT_CODE='Y'). Practically, this difference in coding makes no difference in calculations, as the derivation of the RESALE_MIGR_NO_APPINTV='Y' condition itself precludes ORG_APPT_CODE='Y'.

4. Incorrect Retail Numerator Algorithms Were Used In The April/May CMA For PR-8-01-3342/3530 (ER D-017).

The PA April/May CMA retail numerator algorithms for PR-8-01-3342 and PR-8-01-3530 are incorrect in that the numerator algorithms which should count pending orders, were incorrectly counting completed orders, since they restricted STATUS to '55B' (completed) and used REPORT_PERIOD=200305 instead of 200000.

In its response to DCI's clarification of DR D-017, Verizon PA agreed with the CMA documentation error, and committed to update these algorithms in the June CMA.

DCI has verified that these issues have been resolved in the June CMA.

5. Incorrect Retail Denominator Algorithms Were Used In The April/May CMA For PR-8-02-3342/3530 (ER D-018).

The PA April/May CMA retail denominator algorithms for PR-8-01-3342 and PR-8-01-3530 are incorrect in that the denominator algorithms which should count completed orders (see Guidelines: "total number of orders completed in the reporting period"), were incorrectly counting pending orders, since they restricted STATUS to other than '55B' (completed) or 'CAN' (cancelled) and used REPORT_PERIOD=200000 instead of 200305.

In its response to DCI's clarification of DR D-018, Verizon PA agreed with the CMA documentation error, and committed to update these algorithms in the June CMA.

DCI has examined the June CMA and found that these issues have been mostly resolved. However, the retail denominator algorithm for PR-8-01-3530 is still incorrect in that it does not restrict STATUS to '55B' (completed orders).

6. The Derivation Of The GLOBAL EXCLUSION Field Is Insufficiently Documented.

See text for Finding No. 18, Metric PR-1, on Page C-79.

7. **C2C Guidelines Performance Standards For PR-8 xDSL Loops Are Inconsistent With The Retail Analog Compare Table.**

See text for Finding No. 5, Metric PR-5, on Page C-87.

8. **The PR-8 Denominators In The C2C Reports For Trunks Are Incorrect.**

Verizon PA's reported CLEC and Retail denominators for PR-8-01-5000 and PR-8-02-8000 are much too small. They are in the 100 – 300 range, when they should be in the 5000 – 20000 range (if reciprocal trunks are included), or in the 3000 – 20000 range (if reciprocal trunks are not included).

PR-9 FINDINGS

1. **Verizon PA Correctly Calculates PR-9-01 And PR-9-08.**

As is apparent from Table C-32, DCI's calculated PR-9-01 results and Verizon PA's C2C reported results matched perfectly. As indicated by Table C-33 DCI's calculated PR-9-08 results and Verizon PA C2C reported results match.

D – RECOMMENDATIONS

Recommendations which address Provisioning metrics, including those related to findings listed in this Appendix (C), are located in Chapter IV – Measurement Calculations and Chapter V – Measurement Calculation Results. In some instances they have been subsumed into broader recommendations.

APPENDIX D – MAINTENANCE AND REPAIR METRICS

APPENDIX D - MAINTENANCE AND REPAIR METRICS

A - INTRODUCTION

This Appendix discusses each of the Verizon PA's five (5) Maintenance and Repair metrics, which are comprised of 23 sub-metrics, not including MR-4-09 and MR-4-10 which are not in use in Verizon PA.

For April/May 2003, MR-1-01, MR-1-03, MR1-04, MR-1-06, MR-2-01, MR-2-02, MR-2-03, MR-3-01, MR-3-02, MR-4-01, MR-4-02, MR-4-03, MR-4-08, and MR-5-01 were included in Pennsylvania's Performance Assurance Plan (PA PAP). For June 2003, MR-1-03, MR-1-04, MR-2-01, MR-2-02, and MR-2-03 were removed from the PA PAP, and MR-4-04, MR-4-05, MR-4-06, and MR-4-07 were added to the PA PAP, leaving 13 metrics, specifically MR-1-01, MR-1-06, MR-3-01, MR-3-02, MR-4-01, MR-4-02, MR-4-03, MR-4-04, MR-4-05, MR-4-06, MR-4-07, MR-4-08, and MR-5-01.

Maintenance and Repair Metrics are of two types. MR-1 is an OSS system response time measurement. MR-2 – MR-5 are measurements based on customer trouble report data. Therefore, the following overview discusses how metrics MR-2 – MR-5 are calculated. This overview describes the data mart tables used, business rules, disposition codes, and product codes for these metrics. The comparable discussion for MR-1 is contained within the Section B discussion of that specific metric.

OVERVIEW

In its performance metrics on the Maintenance Domain, Verizon PA measures and reports its performance on:

- Average Time Interval of:

    – Trouble Duration (MR-4-01, MR-4-02, MR-4-03)

- Rate of:

    – Troubles per lines / circuits / trunks in service (MR-2 except MR-2-04)
    – Subsequent Troubles per Initial Troubles (MR-2-04)
    – Installation-related troubles per lines / circuits trunks installed (PR-6)

- Percent of:

    – Troubles which were not Cleared by the committed time (MR-3)
    – Troubles which are Repeats (MR-5)
    – Troubles which are Cleared within 24 hours (MR-4-04)
    – Troubles which remain Out of Service beyond 2, 4, 12, and 24 hours (MR-4-05, MR-4-06, MR-4-07, MR-4-08)

DATA MART TABLES

The Maintenance metrics results are calculated from the data contained in the following 4 data mart tables:

- TB_DM_MNR_TRBL_FACT (MR-2, MR-3, MR-4, MR-5, PR-6 numerators: Plain Old Telephone Service (POTS) troubles, i.e. all except Specials & Trunks)

- TB_DM_MNR_TRBL_FACT_SPL (MR-2, MR-3, MR-4, MR-5, PR-6 numerators: Specials & Trunks)

- TB_DM_MNR_LINE_COUNT_FACT (MR-2 denominators)

Maintenance and Repair POTS Troubles Data Mart

Competitive Local Exchange Carrier (CLEC) and Retail maintenance and repair trouble report records for products other than Specials and Trunks are stored in the M&R POTS Troubles Data Mart.

Global Exclusions: Any of the following conditions will cause a trouble record to be excluded from all the Carrier-To-Carrier (C2C) Maintenance and Repair metrics results:

- A non-null value other than 0 in the EXCLUDE_BY_FST_IND field ("The Final Status Transaction mask or screen in Loop Maintenance Operations System (LMOS) has a field labeled Exclude and when you populate it with an "X" and the Telephone Number field with the TN reported and enter it into the LMOS system the trouble report is negated and not counted in metrics. Only records populated with 0 will be included in the FACT.")

- A value other than "N" in the CORP_TEL_IND field (There are currently 10 MCNs which will generate Corporate Telephone Service (CORP_TEL_IND="Y"))

- A value other than "N" in the fGTE_IND field (which indicates if the line is from a former GTE state).

- A value other than "1" in the REPORT_CATEGORY field

  - "1"- Includes Customer Direct (CD) and Customer Reports (CR)
  - "4" – Includes Auto Detect (AD), Assist Test (AT), Preventive Maintenance (PM), Routine Installation (RI), Release (RL), Referred from Self (RS), and Repair Tracking (RT)
  - "6" – Includes Information (IN))

- A value other than "P" in the SERVICE_LEVEL_CD field

  - P – POTS
  - M – Trunks
  - S – Specials

- A non-blank value other than "N" in the ADMIN_REPEAT_FLAG field (This exclusion is not operative for MR-2-04). The Administrative Repeat Flag is set to "Y" when the closed date is identical and there is a different cleared date for a circuit.

The Final Status Transaction indicator, former GTE state, and Trunks and Specials exclusions are administered prior to the data extract supplied to DCI, so no records will be found satisfying them. The following table lists the frequency of troubles globally excluded due to the other exclusions from all POTS Maintenance and Repair results:

Table D-1 – Globally Excluded POTS Troubles

	April	May	June
Total troubles	95289	105581	131313
Corp Tel Svc	200 (0.21%)	205 (0.19%)	211 (0.16%)
Report Category 4	2635 (2.77%)	2787 (2.64%)	2578 (1.96%)
Report Category 6	933 (0.98%)	989 (0.94%)	1083 (0.82%)
Admin Repeat	2 (0.00%)	1 (0.00%)	1 (0.00%)

Product Disaggregations: Verizon PA determines product disaggregations for its ordering metrics by using the fields PROVIDER_IND, PRODUCT_IND, and RES_BUS_PUB_IND. PROVIDER_IND classifies based on the type of provider, PRODUCT_IND classifies based on product groupings, and RES_BUS_PUB_IND classifies based on whether the service provided is Residential, Business, or Public (Coin). The POTS trouble record breakdown for these three fields is indicated in the following tables:

Table D-2 – Distribution of Products by Provider Type

Provider_Ind	Product_Ind	April	May	June
All troubles which were not globally excluded		91664	101741	127565
'L' (Retail)	*Total*	*78806 (85.97%)*	*87890 (86.39%)*	*110055 (86.27%)*
	DIGITAL	677 (0.86%)	634 (0.72%)	678 (0.62%)
	SIMPLE	78129 (99.14%)	87256 (99.28%)	109377 (99.38%)
'R' (Resale)	*Total*	*774 (0.84%)*	*712 (0.70%)*	*833 (0.65%)*
	DIGITAL	20 (2.58%)	28 (3.93%)	11 (1.32%)
	SIMPLE	754 (97.42%)	684 (96.07%)	822 (98.68%)
'U' (UNE)	*Total*	*9525 (10.39%)*	*10765 (10.58%)*	*13802 (10.82%)*
	@[1]	857 (9.00%)	978 (9.08%)	1291 (9.35%)
	DIGITAL	46 (0.48%)	34 (0.32%)	26 (0.19%)
	LINESHARE	46 (0.48%)	65 (0.60%)	111 (0.80%)
	LINESPLIT	4 (0.04%)	0 (0.00%)	12 (0.09%)
	LOOP	1656 (17.39%)	1782 (16.55%)	2114 (15.32%)
	LOOP XDSL	213 (2.24%)	191 (1.77%)	264 (1.91%)
	PLATFORM	6703 (70.37%)	7715 (71.67%)	9984 (72.34%)
'V' (VADI)	*Lineshare*	*2559 (2.79%)*	*2374 (2.33%)*	*2882 (2.19%)*

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[1] The FACT Table Layout does not show '@' as one of the possible values for PRODUCT_IND. That 9% of each month's UNE troubles get this value and are therefore excluded from metrics results is a metter of concern.

Table D-3 – Distribution of Res_Bus_Pub_Ind by Provider Type

Provider_Ind	Res_Bus _Pub_Ind	April	May	June
All troubles which were not globally excluded		91664	101741	127565
'L' (Retail)	*Total*	*78806 (85.97%)*	*87890 (86.39%)*	*110055 (86.27%)*
	B	11965 (15.18%)	12594 (14.33%)	13871 (12.60%)
	P	1289 (1.64%)	1141 (1.30%)	1433 (1.30%)
	R	65552 (83.18%)	74155 (84.37%)	94751 (86.09%)
'R' (Resale)	*Total*	*774 (0.84%)*	*712 (0.70%)*	*833 (0.65%)*
	B	412 (53.23%)	394 (55.34%)	460 (55.58%)
	R	362 (46.77%)	318 (44.66%)	370 (44.42%)
'U' (UNE)	*Total*	*9525 (10.39%)*	*10765 (10.58%)*	*13802 (10.82%)*
	@	8 (0.08%)	13 (0.12%)	8 (0.06%)
	B	2183 (22.92%)	2524 (23.46%)	3068 (22.23%)
	P	1 (0.01%)	0 (0.00%)	1 (0.01%)
	R	7333 (76.99%)	8228 (76.43%)	10725 (77.71%)
'V' (VADI)	*Total*	*2559 (2.79%)*	*2374 (2.33%)*	*2882 (2.19%)*
	B	34 (1.33%)	29 (1.22%)	40 (1.39%)
	R	2525 (98.67%)	2345 (98.78%)	2835 (98.61%)

Classification into performance measurement product disaggregation codes and their retail comparatives is accomplished by combining PROVIDER_IND, PRODUCT_IND and RES_BUS_PUB_IND categorizations as indicated in the following table:

Table D-3a – POTS Troubles Product Code Determination

Prod Code	Description	Provider _Ind	Product _Ind	Res_Bus _Pub_ind
2100	Resale POTS	R vs L	SIMPLE	R,B[2]
2110	Resale POTS Bus	R vs L	SIMPLE	B
2120	Resale POTS Res	R vs L	SIMPLE	R
2341	Resale 2w Digital ISDN	R vs L	DIGITAL	R,B
3140	UNE POTS Platform	U vs L	PLATFORM vs SIMPLE	R,B[2]
3144	UNE POTS Platform Bus	U vs L	PLATFORM vs SIMPLE	B
3145	UNE POTS Platform Res	U vs L	PLATFORM vs SIMPLE	R
3341	UNE 2w Digital ISDN	U vs L	DIGITAL vs unrestricted	R,B[2]
3342	UNE 2wire xDSL	U vs L	LOOP XDSL vs unrestricted	R,B[2]
3343	UNE LineSharing	U vs V	LINESHARE	R,B
3345	UNE LineSplitting	U vs V	LINESPLITTING vs LINESHARE	R,B
3520	UNE Hot Cut Loops	U	LOOP (& hot_cut_ind='Y')	R,B
3550	UNE POTS Loop	U vs L	LOOP vs SIMPLE	R,B[2]

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[2] Verizon PA also includes P (Public Coin) wherever R,B is indicated. This improperly biases parity comparisons in Verizon PA's favor in the footnoted cases. See Finding s 2, 8, 17 and 19 below.

Maintenance and Repair Specials and Trunks Troubles Data Mart

CLEC and Retail maintenance and repair trouble report records for Specials and Trunks are stored in the M&R Specials and Trunks Troubles Data Mart.

Global Exclusions: Any of the following conditions will cause a trouble record to be excluded from all the C2C Maintenance and Repair metrics results:

- A non-null value other than 0 in the EXCLUDE_BY_FST_IND field ("The Final Status Transaction mask or screen in LMOS has a field labeled Exclude and when you populate it with an "X" and the Telephone Number field with the TN reported and enter it into the LMOS system the trouble report is negated and not counted in metrics. Only records populated with 0 will be included in the FACT.")

- A value other than "N" in the CORP_TEL_IND field (Currently 10 MCNs will generate Corporate Telephone Service (CORP_TEL_IND="Y"))

- A value other than "N" in the fGTE_IND field (which indicates if the line is from a former GTE state).

- A value other than "1" in the REPORT_CATEGORY field

   - "1"- Includes Customer Direct (CD) and Customer Reports (CR)
   - "4" – Includes Auto Detect (AD), Assist Test (AT), Preventive Maintenance (PM), Routine Installation (RI), Release (RL), Referred from Self (RS), and Repair Tracking (RT)
   - "6" – Includes Information (IN))

- For Specials results, a value other than "S" in the SERVICE_LEVEL_CD field;   for Trunks results, a value other than "M" in the SERVICE_LEVEL_CD field

   - P – POTS
   - M – Trunks
   - S – Specials

- A non-blank value other than "N" in the ADMIN_REPEAT_FLAG field. (This exclusion not operative for MR-2-04). The Administrative Repeat Flag is set to "Y" when closed date is identical and there is a different cleared date for a circuit.

- A value other than "B" or "N" in the ACCESS_EXCL_IND (Access Exclusion Indicator) field

   - A – Access
   - N – Non-Access
   - B – Bypass (If provider is UNE then ACCESS_EXCL_IND = 'B')
   - @ – Default value

The Final Status Transaction indicator, former GTE state, and POTS exclusions are administered prior to the data extract supplied to DCI, so no records will be found satisfying them. The following table lists the frequency of troubles globally excluded due to the other exclusions from all Specials and Trunks Maintenance and Repair results:

Table D-4 – Globally Excluded Specials & Trunks Troubles

	April	May	June
Total troubles	11444	12126	13386
Corp Tel Svc	559 (4.88%)	701 (5.78%)	610 (4.56%)
Report Category '4'	1770 (15.47%)	1922 (15.85%)	1903 (14.22%)
Report Category '6'	1937 (16.93%)	1955 (16.12%)	1913 (14.29%)
Report Category '@'	2 (0.02%)	0 (0.00%)	0 (0.00%)
Access Excl Ind '@'	180 (1.57%)	178 (1.47%)	198 (1.48%)
Access Excl Ind 'A'	3349 (29.26%)	3629 (29.93%)	4192 (31.32%)

Product Disaggregations: Verizon PA determines product disaggregations for its ordering metrics primarily by using the fields PROVIDER_IND and DS_LEVEL. PROVIDER_IND classifies based on the type of provider, DS_LEVEL classifies based on whether the product is DS0 or DS1 or DS3. The Specials trouble record breakdown for these two fields is indicated in the following table:

Table D-5 – DS Level by Provider Type

Provider_Ind	DS_Level	April	May	June
All Specials troubles which were not globally excluded		4936	5161	5910
'L' (Retail)	*Total*	*2521 (51.07%)*	*2631 (50.98%)*	*2885 (48.82%)*
	DS0	1840 (72.99%)	1912 (72.67%)	2112 (73.21%)
	DS1	662 (26.26%)	699 (26.57%)	741 (25.68%)
	DS3	19 (0.75%)	20 (0.76%)	32 (1.11%)
'R' (Resale)	*Total*	*16 (0.32%)*	*34 (0.66%)*	*33 (0.56%)*
	DS0	15 (93.75%)	31 (91.18%)	28 (84.85%)
	DS1	1 (6.25%)	3 (8.82%)	5 (15.15%)
	DS3	0 (0.00%)	0 (0.00%)	0 (0.00%)
'U' (UNE)	*Total*	*2399 (48.60%)*	*2496 (48.36%)*	*2992 (50.63%)*
	@	119 (4.96%)	145 (5.81%)	0 (0.00%)
	DS0	2022 (84.29%)	2084 (83.49%)	2506 (83.76%)
	DS1	257 (10.71%)	257 (10.30%)	446 (14.91%)
	DS3	1 (0.04%)	10 (0.40%)	40 (1.34%)

The Trunks trouble record breakdown by PROVIDER_IND is indicated in the following table:

Table D-6 – Trunks Troubles by Provider Type

Provider_Ind	April	May	June
All Trunks troubles which were not globally excluded	27	39	44
'L' (Retail)	*23 (85.19%)*	*34 (87.18%)*	*37 (84.09%)*
'U' (UNE)	*4 (14.81%)*	*5 (12.82%)*	*7 (15.91%)*

Classification into performance measurement product disaggregation codes and their retail comparatives is accomplished by combining PROVIDER_IND and DS_LEVEL categorizations as indicated in the following table:

Table D-7 – Specials & Trunks Product Code Determination

Product Code	Description	Service_ Level_cd	Provider _Ind	DS_Level
2200	Resale Specials	S	R vs L	
2216	Resale POTS DS0	S	R vs L	DS0
2217	Resale POTS DS1 DS3	S	R vs L	DS1, DS3
3200	UNE Specials	S	U vs L	
3216	UNE Specials DS0	S	U vs L	DS0
3217	UNE Specials DS1 DS3	S	U vs L	DS1, DS3
5000	Trunks	M	U vs L	

Line Count Data Mart

Inventory of counts of lines, circuits, and trunks to facilitate the calculation of the MR-2 denominators for POTS, Specials, and Trunks is stored in the Line Count Data Mart.

Global Exclusions: Any of the following conditions will cause a trouble record to be excluded from all the C2C Maintenance and Repair metrics results:

- A value other than "N" in the CORP_TEL_IND field (There are currently 10 MCNs which will generate Corporate Telephone Service (CORP_TEL_IND="Y"))

- A value other than "N" in the fGTE_IND field (which indicates if the line is from a former GTE state).

- A value other than "B" or "N" in the ACCESS_EXCL_IND (Access Exclusion Indicator) field

    - A – Access
    - N – Non-Access
    - B – Bypass (If provider is UNE then ACCESS_EXCL_IND = 'B')
    - @ – Default value

- A value other than "N" in the TEST_ACC_IND field. (A value of "V" is allowed (and required) for the retail comparatives for the Linesharing and Linesplitting product disaggregations)

  - A – Affiliates
  - C – Maintenance Center exclusion
  - F – CAC exclusion
  - M – Master Customer Name Exclusion
  - N – Include for Metrics
  - Q – Measured By Sys/ Measured by Flag exclusion
  - R – Trouble Code exclusion
  - S – Service Code Modifier exclusion
  - V – Vadi Account
  - Z – Test Account
  - P – Specials Project PON exclusion
  - O – Other exclusions

The former GTE state exclusion is administered prior to the data extract supplied to DCI, so no records will be found satisfying it. The following table lists the frequency of line count records globally excluded from MR-2 denominators due to the other exclusions:

Table D-8 – Globally Excluded Line Count Records

	April	May	June
Total line count records	2749	2772	2802
Corp Tel Svc	79 (2.87%)	77 (2.78%)	79 (2.82%)
Access Excl Ind '@'	6 (0.22%)	6 (0.22%)	6 (0.22%)
Access Excl Ind 'A'	202 (7.35%)	203 (7.32%)	204 (7.28%)
Test Acc Ind 'A'	7 (0.25%)	7 (0.25%)	7 (0.25%)
Test Acc Ind 'C'	1 (0.04%)	4 (0.14%)	4 (0.14%)
Test Acc Ind 'V'	54 (1.96%)	51 (1.84%)	52 (1.86%)
Test Acc Ind 'X'	6 (0.22%)	6 (0.22%)	5 (0.18%)
Test Acc Ind 'Z'	286 (10.40%)	286 (10.32%)	286 (10.21%)

Product Disaggregations: Verizon PA determines product disaggregations for its ordering metrics by using the fields PROVIDER_IND and PRODUCT_IND. PROVIDER_IND classifies based on the type of provider, and PRODUCT_IND classifies based on product groupings The POTS trouble record breakdown for these two fields is indicated in the following tables:

Table D-9 – Product by Provider Type Line Count Records

Provider_Ind	Product_Ind	April	May	June
All records which were not globally excluded		2157	2202	2231
'L' (Retail)	*Total*	*303 (13.89%)*	*303 (13.76%)*	*304 (13.63%)*
	DIGITAL	9 (2.97%)	8 (2.64%)	8 (2.63%)
	SIMPLE	18 (5.94%)	18 (5.94%)	18 (5.92%)
	SPECIALS	114 (37.62%)	115 (37.95%)	116 (38.16%)
	TRUNK	150 (49.50%)	150 (49.50%)	150 (49.34%)
	XDSL	12 (3.96%)	12 (3.96%)	12 (3.95%)
'R' (Resale)	*Total*	*718 (32.92%)*	*716 (32.92%)*	*715 (32.05%)*
	DIGITAL	76 (10.58%)	76 (10.61%)	75 (10.49%)
	SIMPLE	481 (66.99%)	481 (67.18%)	483 (67.55%)
	SPECIALS	92 (12.81%)	93 (12.99%)	95 (13.29%)
	XDSL	69 (9.61%)	66 (9.22%)	62 (8.67%)
'U' (UNE)	*Total*	*1135 (52.04%)*	*1161 (52.72%)*	*1190 (53.34%)*
	DIGITAL	10 (0.88%)	11 (0.95%)	10 (0.84%)
	LINESHARE	14 (1.23%)	14 (1.21%)	14 (1.18%)
	LINESPLIT	1 (0.48%)	4 (0.34%)	4 (0.34%)
	LOOP	82 (7.22%)	82 (7.06%)	82 (6.89%)
	LOOP DIGITAL	55 (4.85%)	55 (4.74%)	61 (5.13%)
	LOOP XDSL	74 (6.52%)	75 (6.46%)	76 (6.39%)
	PLATFORM	333 (29.34%)	346 (29.80%)	368 (30.92%)
	SIMPLE	380 (33.48%)	387 (33.33%)	392 (32.94%)
	SPECIALS	103 (9.07%)	104 (8.96%)	101 (8.49%)
	TRUNK	46 (4.05%)	46 (3.96%)	46 (3.87%)
	XDSL	37 (3.26%)	37 (3.19%)	36 (3.03%)
'V' (VADI)	*Total*	*25 (1.15%)*	*22 (1.15%)*	*22 (0.99%)*
	LINESHARE	11 (44.00%)	11 (50.00%)	11 (50.00%)
	PLATFORM	1 (4.00%)	0 (0.00%)	0 (0.00%)
	SIMPLE	6 (24.00%)	5 (22.73%)	5 (22.73%)
	SPECIALS	3 (12.00%)	2 (9.09%)	1 (4.55%)
	XDSL	4 (16.00%)	4 (18.18%)	5 (22.73%)

Classification into performance measurement product disaggregation codes and their retail comparatives is accomplished by combining PROVIDER_IND and PRODUCT_IND categorizations as indicated in the following table:

Table D-10 – Line Counts Product Code Determination

Product Code	Description	Provider _Ind	Product _Ind	Test Acc_ind
2100	Resale POTS	R vs L	SIMPLE	N
2200	Resale Specials	R vs L	SPECIALS	N
2341	Resale 2w Digital ISDN	R vs L	DIGITAL	N
3140	UNE POTS Platform	U vs L	PLATFORM vs SIMPLE	N
3200	UNE Specials	U vs L	SPECIALS	N
3341	UNE 2w Digital ISDN	U vs L	LOOP DIGITAL vs SIMPLE, DIGITAL	N
3342	UNE 2wire xDSL	U vs L	LOOP XDSL vs SIMPLE, DIGITAL	N
3343	UNE LineSharing	U vs V	LINESHARE	N vs V
3345	UNE LineSplitting	U vs V	LINESPLITTING vs LINESHARE	N vs V
3550	UNE POTS Loop	U vs L	LOOP vs SIMPLE	N

Trouble Disposition: Common to all the MR metrics is that the trouble disposition determination is used to identify which sub-metrics the trouble will be reported under.

For POTS Troubles, the DISPOSITION_CD field, which contains the first two digits of the four-digit full disposition code, is used to determine which sub-metrics a trouble is counted in. The following table provides interpretations for the disposition code categories and indicates which submetrics troubles with such disposition codes are counted in:

Table D-11 – Dispostion Code Interpretation and Inclusion in SubMetrics

Disposition Code	Interpretation	Counted in SubMetrics
03xx	Station Wiring	MR-2-02, MR-2-04, MR-3-01, MR-4-01, MR-4-02, MR-4-04, MR-4-05, MR-4-06, MR-4-07, MR-4-08, MR-5-01, PR-6-01
04xx	Outside Plant	
05xx	Verizon Central Office	MR-2-03, MR-2-04, MR-3-02, MR-4-01, MR-4-03, MR-4-04, MR-4-05, MR-4-06, MR-4-07, MR-4-08, MR-5-01, PR-6-01
07xx	Test OK (VZ North)	
08xx	Found OK – CO (VZ North)	MR-2-05, MR-3-03, PR-6-03
09xx	Not Found Troubles	
12xx	Customer Equipment, Wiring	
13xx	Customer Wiring (VZ North)	
01xx		
02xx		
06xx	Customer Action	Excluded from all C2C metrics results
10xx	Referred Out	
11xx		

The following table indicates the distribution of DISPOSITION_CD by PROVIDER_IND for all POTS troubles not globally excluded during April 2003:

Table D-12 – Disposition Codes by Provider - April 2003

Table of DISPOSITION_CD by PROVIDER_IND

DISPOSITION_CD

PROVIDER_IND

Frequency Col Pct	L	R	U	V	Total
01	631 0.80	0 0.00	0 0.00	0 0.00	631
02	284 0.36	0 0.00	1 0.01	0 0.00	285
03	16523 20.97	166 21.45	1594 16.74	49 1.91	18332
04	24839 31.52	293 36.56	3146 33.03	114 4.45	28381
05	4454 5.65	36 4.65	551 5.79	135 5.28	5176
06	3092 3.92	6 0.78	73 0.77	3 0.12	3174
07	1068 1.36	0 0.00	12 0.13	15 0.59	1095
09	10627 13.49	28 3.62	277 2.91	101 3.95	11033
10	201 0.26	0 0.00	4 0.04	0 0.00	205
12	17087 21.68	255 32.95	3865 40.59	2142 83.70	23349
Total	78806	774	9522	2559	91661

The following table indicates the distribution of DISPOSITION_CD by PROVIDER_IND for all POTS troubles not globally excluded during May 2003:

Table D-13 – Disposition Codes by Provider - May 2003

Table of DISPOSITION_CD by PROVIDER_IND

DISPOSITION_CD

PROVIDER_IND

Frequency Col Pct	L	R	U	V	Total
01	571 0.65	0 0.00	2 0.02	0 0.00	573
02	243 0.28	0 0.00	3 0.03	1 0.04	247
03	17891 20.36	141 19.83	1872 17.39	56 2.36	19960
04	28043 31.91	233 32.77	3588 33.33	114 4.80	31978
05	4608 5.24	43 6.05	426 3.96	103 4.34	5180
06	3192 3.63	7 0.98	65 0.60	0 0.00	3264
07	1059 1.20	0 0.00	17 0.16	11 0.46	1087
09	11652 13.26	36 5.06	319 2.96	70 2.95	12077
10	1179 1.34	5 0.70	13 0.12	0 0.00	1197
11	0 0.00	0 0.00	1 0.01	0 0.00	1
12	19452 22.13	246 34.60	4459 41.42	2019 85.05	26176
Total	87890	711	10765	2374	101740

The following table indicates the distribution of DISPOSITION_CD by PROVIDER_IND for all POTS troubles not globally excluded during June 2003:

Table D-14 – Dispostion Codes by Provider - June 2003

Table of DISPOSITION_CD by PROVIDER_IND

DISPOSITION_CD

PROVIDER_IND

Frequency Col Pct	L	R	U	V	Total
01	684 0.62	0 0.00	0 0.00	0 0.00	684
02	325 0.30	0 0.00	1 0.01	3 0.10	329
03	22064 20.05	143 17.21	2318 16.79	41 1.43	24566
04	35887 32.61	309 37.18	4597 33.31	133 4.63	40926
05	4685 4.26	25 3.01	410 2.97	180 6.26	5300
06	3677 3.34	8 0.96	71 0.51	1 0.03	3757
07	1489 1.35	3 0.36	13 0.09	6 0.21	1511
09	15323 13.92	31 3.73	388 2.81	76 2.64	15818
10	637 0.58	3 0.36	18 0.13	0 0.00	658
11	1 0.00	0 0.00	0 0.00	9 0.31	10
12	25283 22.97	309 37.18	5985 43.36	2426 84.38	34003
13	0 0.00	0 0.00	1 0.01	0 0.00	1
Total	110055	831	13802	2875	127563

For Specials and Trunks Troubles, the TROUBLE_CD field is used to determine which sub-metrics a trouble is counted in. TROUBLE_CD values of 'FAC' (Facility) or 'CO' (Central Office) qualify a trouble to be counted in the MR-2-01, MR-4, MR-5, and PR-6-01 submetrics. TROUBLE_CD values other than 'FAC' or 'CO' qualify a trouble to be counted in the MR-2-05 and PR-6-03 submetrics.

B – SPECIFIC METRICS

For all metrics in the maintenance and repair domain, the following occurred:

- Metrics data from the Verizon PA data mart was submitted to DCI for April, May, and June 2003 analysis.

- Metric results in the form of a C2C report were submitted to DCI for April, May, and June 2003 analysis.

- The metric algorithms for this domain originally supplied by Verizon PA to DCI was documented in "February 2003 Data Month based on NY C2C Guidelines - November 2002," which were later replaced by new algorithms documented in "May 2003 Data Month based on PA C2C Guidelines - May 2002(sic)."

- For some metrics, the Structured Query Language (SQL) that comprises the metric algorithm was modified to function properly against data and schema provided to DCI by Verizon PA. The modification required is described as the "DCI Derived Metric Statement" for every metric result finding listed on the following pages.

For audit purposes, DCI selected product code 2000 to perform its MR-1 testing activities.

MR-1: RESPONSE TIME OSS MAINTENANCE INTERFACE

Definition

This metric measures the response time defined as the time, in seconds, that elapses from issuance of a query request to receipt of a response by the requesting carrier. For CLECs this performance is measured at the access platform.[3]

Verizon PA uses two databases to collect maintenance performance data. Coding specified in body of the *C2C Guidelines* documentation is largely POTS services, with special services and trunks coding descriptions included in *Appendix A* to the documentation.[4]

Sub-metrics

MR-1-01: Average Response Time - Create Trouble
MR-1-02: Average Response Time - Status Trouble
MR-1-03: Average Response Time - Modify Trouble
MR-1-04: Average Response Time - Request Cancellation of Trouble
MR-1-05: Average Response Time - Trouble Report History (by TN/Circuit)
MR-1-06: Average Response Time - Test Trouble (POTS only)

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[3] Maintenance and Repair Domain Workshop, Philadelphia, PA, June 12, 2003 (Tab 4 - C2C Guidelines.doc, Page 2)
[4] Maintenance and Repair Domain Workshop, Philadelphia, PA, June 12, 2003 (Tab 4 - C2C Guidelines.doc, Page 2)

Although included in Verizon PA's Network Metric Platform (NMP), only MR-1-01, MR-1-03, MR1-04, MR-1-06 were included in Verizon PA's PAP for the period April 2003 to May 2003, and only MR-1-01 and MR-1-06 were included in period June 2003.[5]

Report Dimension

Verizon PA Retail or CLEC Aggregate: Pennsylvania (product is either from Verizon PA Retail or CLEC).[6]

Exclusions

Two types of transactions, CLEC Create Transactions (complex create trouble transactions not available to retail) and EnView transactions, are excluded.[7]

Performance Standard

Parity with retail plus not more than four (4) seconds.[8]

Metric Creation

8:00AM to 5:00PM seven (7) days per week, no holiday exclusions [9]

For VZ retail representatives, retail performance is reported directly from Common Agent Desktop (CAD). Measurements begin when the CAD server receives a request from the Graphical User Interface (GUI) and end when the CAD server sends a response to the GUI. The create, modify, and request cancellation of trouble transaction measurements are the sum of the averages of the response times for the initial inquiry transaction (initiated from the blank Trouble Entry (TE) screen) and the requested create, modify, or cancel (initiated from the Trouble Report (TR) screen). The first measurement captures the response time from the time the CAD receives an inquiry request from the user (who enters a TN) and hits the ok button the TE screen until the data is received from LMOS and CAD sends a TR screen to the user. The second measurement captures the response time from the time CAD receives an action request from the user, to the time the LMOS information is received and sent to the GUI. The action request initiated from the TR screen can be create, modify, or cancel. If the user cancels the transaction between the first and second measurement, the time from the first measurement is still included in the calculation of the average for the first measurement.[10]

For CLEC representatives, actual response times are reported by Repair Trouble Administration System (RETAS). Create Trouble transactions include basic create function.[11]

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[5] Information Response PM-004.8 (Incentive Plan Reports)

[6] Maintenance and Repair Domain Workshop, Philadelphia, PA, June 12, 2003 (Tab 4 - C2C Guidelines.doc, Page 2)

[7] Maintenance and Repair Domain Workshop, Philadelphia, PA, June 12, 2003 (Tab 4 - C2C Guidelines.doc, Page 2)

[8] Maintenance and Repair Domain Workshop, Philadelphia, PA, June 12, 2003 (Tab 4 - C2C Guidelines.doc, Page 2)

[9] Maintenance and Repair Domain Workshop, Philadelphia, PA, June 12, 2003 (Tab 4 - C2C Guidelines.doc, Page 2)

[10] Maintenance and Repair Domain Workshop, Philadelphia, PA, June 12, 2003 (Tab 4 - C2C Guidelines.doc, Page 2)

[11] Maintenance and Repair Domain Workshop, Philadelphia, PA, June 12, 2003 (Tab 4 - C2C Guidelines.doc, Page 2)

MR-1-01: AVERAGE RESPONSE TIME (CREATE TROUBLE)

Formula

MR-1-01 is defined as the sum of all response times from Enter key to reply on screen for Create Trouble transactions divided by the number of Create Trouble transactions. Verizon PA value is determined by summing the P1 and P2 results.[12]

DCI Derived Metric Statement

MR-1-01-2000 CLEC

select a11.STATE_CODE STATE_CODE,
a11.CLEC_ID CLEC_ID,
a11.REPORT_PERIOD REPORT_PERIOD,
((sum(a11.RESPONSE_TIME) + sum(a11.ENTITLE_TIME4)) + sum(a11.ENTITLE_TIME5)) /
count(a11.RESPONSE_TIME) MR101_C
from TB_DM_MNR_SYS_RESP_TIME_FACT a11
where (a11.SYSTEM_ID = 'RETAS'
and a11.TEST_ACC_IND = 'N'
and a11.BA_GTE_IND = 'N'
and a11.TRANS_TYPE_ID = 'CREATE'
and a11.CKT_ID_TYPE = 'P'
and a11.ICODE_FL = 'N'
and a11.STARMEM_FL = 'N')
group by a11.STATE_CODE,
a11.CLEC_ID,
a11.REPORT_PERIOD

MR-1-01-2000 CLEC Aggregate

select a11.STATE_CODE STATE_CODE,
a11.REPORT_PERIOD REPORT_PERIOD,
((sum(a11.RESPONSE_TIME) + sum(a11.ENTITLE_TIME4)) + sum(a11.ENTITLE_TIME5)) /
count(a11.RESPONSE_TIME) MR101_CA
from TB_DM_MNR_SYS_RESP_TIME_FACT a11
where (a11.SYSTEM_ID = 'RETAS'
and a11.TEST_ACC_IND = 'N'
and a11.BA_GTE_IND = 'N'
and a11.TRANS_TYPE_ID = 'CREATE'
and a11.CKT_ID_TYPE = 'P'
and a11.ICODE_FL = 'N'
and a11.STARMEM_FL = 'N')
group by a11.STATE_CODE, a11.REPORT_PERIOD

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[12] Maintenance and Repair Domain Workshop, Philadelphia, PA, June 12, 2003 (Tab 4 - C2C Guidelines.doc, Page 3)

MR-1-01-2000 Verizon (P1)

select a11.STATE_CODE STATE_CODE,
a11.REPORT_PERIOD REPORT_PERIOD,
a11.CLEC_ID CLEC_ID,
(sum(a11.RESPONSE_TIME) / count(a11.RESPONSE_TIME)) MR101_P1
from TB_DM_MNR_SYS_RESP_TIME_FACT a11
where (a11.SYSTEM_ID = 'CAD'
and a11.BA_GTE_IND = 'N'
and a11.TEST_ACC_IND = 'N'
and a11.TRANS_TYPE_ID = 'INQUIRY')
group by a11.STATE_CODE,
a11.REPORT_PERIOD,
a11.CLEC_ID

MR-1-01-2000 Verizon (P2)

select a11.STATE_CODE STATE_CODE,
a11.REPORT_PERIOD REPORT_PERIOD,
a11.CLEC_ID CLEC_ID,
(sum(a11.RESPONSE_TIME) / count(a11.RESPONSE_TIME)) MR101_P2
from TB_DM_MNR_SYS_RESP_TIME_FACT a11
where (a11.SYSTEM_ID = 'CAD'
and a11.BA_GTE_IND = 'N'
and a11.TEST_ACC_IND = 'N'
and a11.TRANS_TYPE_ID = 'CREATE')
group by a11.STATE_CODE,
a11.REPORT_PERIOD,
a11.CLEC_ID

MR-1-02: AVERAGE RESPONSE TIME (STATUS TROUBLE)

Formula

MR-1-02 is defined as the sum of all response times from Enter key to reply on screen for Status Trouble transactions divided by the number of Status Trouble transactions.[13]

DCI Derived Metric Statement

MR-1-02-2000 CLEC

select a11.STATE_CODE STATE_CODE,
a11.REPORT_PERIOD REPORT_PERIOD,
a11.CLEC_ID CLEC_ID,
((sum(a11.RESPONSE_TIME) + sum(a11.ENTITLE_TIME4)) + sum(a11.ENTITLE_TIME5)) /
count(a11.RESPONSE_TIME) MR102_C

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[13] Maintenance and Repair Domain Workshop, Philadelphia, PA, June 12, 2003 (Tab 4 - C2C Guidelines.doc, Page 3)

```
from TB_DM_MNR_SYS_RESP_TIME_FACT a11
where (a11.SYSTEM_ID = 'RETAS'
and a11.TEST_ACC_IND = 'N'
and a11.BA_GTE_IND = 'N'
and a11.TRANS_TYPE_ID = 'STATUS'
and a11.CKT_ID_TYPE = 'P'
and a11.ICODE_FL = 'N'
and a11.SM_TRB_ORIG <> 'EU')
group by a11.STATE_CODE,
a11.REPORT_PERIOD,
a11.CLEC_ID
```

MR-1-02-2000 CLEC Aggregate

```
select a11.STATE_CODE STATE_CODE,
a11.REPORT_PERIOD REPORT_PERIOD,
((sum(a11.RESPONSE_TIME) + sum(a11.ENTITLE_TIME4)) + sum(a11.ENTITLE_TIME5)) /
count(a11.RESPONSE_TIME) MR102_CA
from TB_DM_MNR_SYS_RESP_TIME_FACT a11
where (a11.SYSTEM_ID = 'RETAS'
and a11.TEST_ACC_IND = 'N'
and a11.BA_GTE_IND = 'N'
and a11.TRANS_TYPE_ID = 'STATUS'
and a11.CKT_ID_TYPE = 'P'
and a11.ICODE_FL = 'N'
and a11.SM_TRB_ORIG <> 'EU')
group by a11.STATE_CODE,
a11.REPORT_PERIOD
```

MR-1-02-2000 Verizon (P1)

```
select a11.STATE_CODE STATE_CODE,
a11.REPORT_PERIOD REPORT_PERIOD,
a11.CLEC_ID CLEC_ID,
(sum(a11.RESPONSE_TIME) / count(a11.RESPONSE_TIME)) MR102_P1
from TB_DM_MNR_SYS_RESP_TIME_FACT a11
where (a11.SYSTEM_ID = 'CAD'
and a11.BA_GTE_IND = 'N'
and a11.TEST_ACC_IND = 'N'
and a11.TRANS_TYPE_ID = 'INQUIRY')
group by a11.STATE_CODE,
a11.REPORT_PERIOD,
a11.CLEC_ID
```

MR-1-03: AVERAGE RESPONSE TIME (MODIFY TROUBLE)

Formula

MR-1-03 is defined as the sum of all response times from Enter key to reply on screen for Modify Trouble transactions divided by the number of Modify Trouble transactions. Verizon PA value is determined by summing the P1 and P2 results.[14]

DCI Derived Metric Statement

MR-1-03-2000 CLEC

select a11.STATE_CODE STATE_CODE,
a11.REPORT_PERIOD REPORT_PERIOD,
a11.CLEC_ID CLEC_ID,
((sum(a11.RESPONSE_TIME) + sum(a11.ENTITLE_TIME4)) + sum(a11.ENTITLE_TIME5)) /
count(a11.RESPONSE_TIME) MR103_C
from TB_DM_MNR_SYS_RESP_TIME_FACT a11
where (a11.SYSTEM_ID = 'RETAS'
and a11.TEST_ACC_IND = 'N'
and a11.BA_GTE_IND = 'N'
and a11.CKT_ID_TYPE = 'P'
and a11.ICODE_FL = 'N')
and (
a11.TRANS_TYPE_ID = 'MODIFY' or
(a11.TRANS_TYPE_ID = 'STATUS' and a11.SM_TRB_ORIG = 'EU') or
(a11.TRANS_TYPE_ID = 'CLOSE' and a11.ERROR_CD = '302.0')
)
group by a11.STATE_CODE,
a11.REPORT_PERIOD,
a11.CLEC_ID

MR-1-03-2000 CLEC Aggregate

select a11.STATE_CODE STATE_CODE,
a11.REPORT_PERIOD REPORT_PERIOD,
((sum(a11.RESPONSE_TIME) + sum(a11.ENTITLE_TIME4)) + sum(a11.ENTITLE_TIME5)) /
count(a11.RESPONSE_TIME) MR103_CA
from TB_DM_MNR_SYS_RESP_TIME_FACT a11
where (a11.SYSTEM_ID = 'RETAS'
and a11.TEST_ACC_IND = 'N'
and a11.BA_GTE_IND = 'N'
and a11.CKT_ID_TYPE = 'P'
and a11.ICODE_FL = 'N')
and (

---

[14] Maintenance and Repair Domain Workshop, Philadelphia, PA, June 12, 2003 (Tab 4 - C2C Guidelines.doc, Page 3)

a11.TRANS_TYPE_ID = 'MODIFY' or
(a11.TRANS_TYPE_ID = 'STATUS' and a11.SM_TRB_ORIG = 'EU') or
(a11.TRANS_TYPE_ID = 'CLOSE' and a11.ERROR_CD = '302.0')
)
group by a11.STATE_CODE,
a11.REPORT_PERIOD

MR-1-03-2000 Verizon (P1)

select a11.STATE_CODE STATE_CODE,
a11.REPORT_PERIOD REPORT_PERIOD,
a11.CLEC_ID CLEC_ID,
(sum(a11.RESPONSE_TIME) / count(a11.RESPONSE_TIME)) MR103_P1
from TB_DM_MNR_SYS_RESP_TIME_FACT a11
where (a11.SYSTEM_ID = 'CAD'
and a11.BA_GTE_IND = 'N'
and a11.TEST_ACC_IND = 'N'
and a11.TRANS_TYPE_ID = 'INQUIRY')
group by a11.STATE_CODE,
a11.REPORT_PERIOD,
a11.CLEC_ID

MR-1-03-2000 Verizon (P2)

select a11.STATE_CODE STATE_CODE,
a11.REPORT_PERIOD REPORT_PERIOD,
a11.CLEC_ID CLEC_ID,
(sum(a11.RESPONSE_TIME) / count(a11.RESPONSE_TIME)) MR103_P2
from TB_DM_MNR_SYS_RESP_TIME_FACT a11
where (a11.SYSTEM_ID = 'CAD'
and a11.BA_GTE_IND = 'N'
and a11.TEST_ACC_IND = 'N'
and a11.TRANS_TYPE_ID = 'MODIFY')
group by a11.STATE_CODE,
a11.REPORT_PERIOD,
a11.CLEC_ID

MR-1-04: AVERAGE RESPONSE TIME (REQUEST CANCELLATION OF TROUBLE)

Formula

MR-1-04 is defined as the sum of all response times from Enter key to reply on screen for Request for Cancellation of Trouble transactions divided by the number of Request for Cancellation of Trouble transactions. Verizon PA value is determined by summing the P1 and P2 results.[15]

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[15] Maintenance and Repair Domain Workshop, Philadelphia, PA, June 12, 2003 (Tab 4 - C2C Guidelines.doc, Page 3)

<u>DCI Derived Metric Statement</u>

MR-1-04-2000 CLEC

select a11.STATE_CODE STATE_CODE,
a11.REPORT_PERIOD REPORT_PERIOD,
a11.CLEC_ID CLEC_ID,
((sum(a11.RESPONSE_TIME) + sum(a11.ENTITLE_TIME4)) + sum(a11.ENTITLE_TIME5)) /
count(a11.RESPONSE_TIME) MR104_C
from TB_DM_MNR_SYS_RESP_TIME_FACT a11
where (a11.SYSTEM_ID = 'RETAS'
and a11.TEST_ACC_IND = 'N'
and a11.BA_GTE_IND = 'N'
and a11.TRANS_TYPE_ID = 'CLOSE'
and a11.CKT_ID_TYPE = 'P'
and a11.ICODE_FL = 'N'
and a11.ERROR_CD <> '302.0')
group by a11.STATE_CODE,
a11.REPORT_PERIOD,
a11.CLEC_ID

MR-1-04-2000 CLEC Aggregate

select a11.STATE_CODE STATE_CODE,
a11.REPORT_PERIOD REPORT_PERIOD,
((sum(a11.RESPONSE_TIME) + sum(a11.ENTITLE_TIME4)) + sum(a11.ENTITLE_TIME5)) /
count(a11.RESPONSE_TIME) MR104_CA
from TB_DM_MNR_SYS_RESP_TIME_FACT a11
where (a11.SYSTEM_ID = 'RETAS'
and a11.TEST_ACC_IND = 'N'
and a11.BA_GTE_IND = 'N'
and a11.TRANS_TYPE_ID = 'CLOSE'
and a11.CKT_ID_TYPE = 'P'
and a11.ICODE_FL = 'N'
and a11.ERROR_CD <> '302.0')
group by a11.STATE_CODE,
a11.REPORT_PERIOD

MR-1-04-2000 Verizon (P1)

select a11.STATE_CODE STATE_CODE,
a11.REPORT_PERIOD REPORT_PERIOD,
a11.CLEC_ID CLEC_ID,
(sum(a11.RESPONSE_TIME) / count(a11.RESPONSE_TIME)) MR104_P1
from TB_DM_MNR_SYS_RESP_TIME_FACT a11
where (a11.SYSTEM_ID = 'CAD'

and a11.BA_GTE_IND = 'N'
and a11.TEST_ACC_IND = 'N'
and a11.TRANS_TYPE_ID = 'INQUIRY')
group by a11.STATE_CODE,
a11.REPORT_PERIOD,
a11.CLEC_ID

MR-1-04-2000 Verizon (P2)

select a11.STATE_CODE STATE_CODE,
a11.REPORT_PERIOD REPORT_PERIOD,
a11.CLEC_ID CLEC_ID,
(sum(a11.RESPONSE_TIME) / count(a11.RESPONSE_TIME)) MR104_P2
from TB_DM_MNR_SYS_RESP_TIME_FACT a11
where (a11.SYSTEM_ID = 'CAD'
and a11.BA_GTE_IND = 'N'
and a11.TEST_ACC_IND = 'N'
and a11.TRANS_TYPE_ID = 'CLOSE')
group by a11.STATE_CODE,
a11.REPORT_PERIOD,
a11.CLEC_ID

MR-1-05: AVERAGE RESPONSE TIME (TROUBLE REPORT HISTORY (BY TN/CIRCUIT))

Formula

MR-1-05 is defined as the sum of all response times from Enter key to reply on screen for Trouble Report History transactions divided by the number of Trouble Report History transactions.[16]

DCI Derived Metric Statement

MR-1-05-2000 CLEC

select a11.STATE_CODE STATE_CODE,
a11.REPORT_PERIOD REPORT_PERIOD,
a11.CLEC_ID CLEC_ID,
((sum(a11.RESPONSE_TIME) + sum(a11.ENTITLE_TIME4)) + sum(a11.ENTITLE_TIME5)) /
count(a11.RESPONSE_TIME) MR105_C
from TB_DM_MNR_SYS_RESP_TIME_FACT a11
where (a11.SYSTEM_ID = 'RETAS'
and a11.TEST_ACC_IND = 'N'
and a11.BA_GTE_IND = 'N'
and a11.TRANS_TYPE_ID = 'HISTORY'

---

[16] Maintenance and Repair Domain Workshop, Philadelphia, PA, June 12, 2003 (Tab 4 - C2C Guidelines.doc, Page 3)

and a11.CKT_ID_TYPE = 'P'

and a11.ICODE_FL = 'N')

group by a11.STATE_CODE,

a11.REPORT_PERIOD,

a11.CLEC_ID

MR-1-05-2000 CLEC Aggregate

select a11.STATE_CODE STATE_CODE,

a11.REPORT_PERIOD REPORT_PERIOD,

((sum(a11.RESPONSE_TIME) + sum(a11.ENTITLE_TIME4)) + sum(a11.ENTITLE_TIME5)) /

count(a11.RESPONSE_TIME) MR105_CA

from TB_DM_MNR_SYS_RESP_TIME_FACT a11

where (a11.SYSTEM_ID = 'RETAS'

and a11.TEST_ACC_IND = 'N'

and a11.BA_GTE_IND = 'N'

and a11.TRANS_TYPE_ID = 'HISTORY'

and a11.CKT_ID_TYPE = 'P'

and a11.ICODE_FL = 'N')

group by a11.STATE_CODE,

a11.REPORT_PERIOD

MR-1-05-2000 Verizon (P1)

select a11.STATE_CODE STATE_CODE,

a11.REPORT_PERIOD REPORT_PERIOD,

a11.CLEC_ID CLEC_ID,

(sum(a11.RESPONSE_TIME) / count(a11.RESPONSE_TIME)) MR105_P1

from TB_DM_MNR_SYS_RESP_TIME_FACT a11

where (a11.SYSTEM_ID = 'CAD'

and a11.BA_GTE_IND = 'N'

and a11.TEST_ACC_IND = 'N'

and a11.TRANS_TYPE_ID = 'HISTORY')

group by a11.STATE_CODE,

a11.REPORT_PERIOD,

a11.CLEC_ID

MR-1-06: AVERAGE RESPONSE TIME (TEST TROUBLE (POTS ONLY))

Formula

MR-1-06 is defined as the sum of all response times from Enter key to reply on screen for Trouble Test transactions divided by the number of Trouble Test transactions.[17]

---

[17] Maintenance and Repair Domain Workshop, Philadelphia, PA, June 12, 2003 (Tab 4 - C2C Guidelines.doc, Page 3)

DCI Derived Metric Statement

MR-1-06-2000 CLEC

select a11.STATE_CODE STATE_CODE,

a11.REPORT_PERIOD REPORT_PERIOD,

a11.CLEC_ID CLEC_ID,

((sum(a11.RESPONSE_TIME) + sum(a11.ENTITLE_TIME4)) + sum(a11.ENTITLE_TIME5)) /

count(a11.RESPONSE_TIME) MR106_C

from TB_DM_MNR_SYS_RESP_TIME_FACT a11

where (a11.SYSTEM_ID = 'RETAS'

and a11.TEST_ACC_IND = 'N'

and a11.BA_GTE_IND = 'N'

and a11.TRANS_TYPE_ID = 'TEST'

and a11.CKT_ID_TYPE = 'P'

and a11.ICODE_FL = 'N')

group by a11.STATE_CODE,

a11.REPORT_PERIOD,

a11.CLEC_ID

MR-1-06-2000 CLEC Aggregate

select a11.STATE_CODE STATE_CODE,

a11.REPORT_PERIOD REPORT_PERIOD,

((sum(a11.RESPONSE_TIME) + sum(a11.ENTITLE_TIME4)) + sum(a11.ENTITLE_TIME5)) /

count(a11.RESPONSE_TIME) MR106_CA

from TB_DM_MNR_SYS_RESP_TIME_FACT a11

where (a11.SYSTEM_ID = 'RETAS'

and a11.TEST_ACC_IND = 'N'

and a11.BA_GTE_IND = 'N'

and a11.TRANS_TYPE_ID = 'TEST'

and a11.CKT_ID_TYPE = 'P'

and a11.ICODE_FL = 'N')

group by a11.STATE_CODE,

a11.REPORT_PERIOD

MR-1-06-2000 Verizon (P1)

select a11.STATE_CODE STATE_CODE,

a11.REPORT_PERIOD REPORT_PERIOD,

a11.CLEC_ID CLEC_ID,

(sum(a11.RESPONSE_TIME) / count(a11.RESPONSE_TIME)) MR106_P1

from TB_DM_MNR_SYS_RESP_TIME_FACT a11

    1.   where (a11.SYSTEM_ID = 'CAD'

and a11.BA_GTE_IND = 'N'

and a11.TEST_ACC_IND = 'N'

and a11.TRANS_TYPE_ID = 'TEST')
group by a11.STATE_CODE,
a11.REPORT_PERIOD,
a11.CLEC_ID

M&R METRICS MR-2 – MR-5 – INTRODUCTION

In the following pages, DCI documents the processes Verizon uses to calculate the Maintenance metrics MR-2 through MR-5 from data mart tables through metrics results.

This documentation indicates which data mart tables are used for these metrics, and for each data mart table, the business rules used to globally exclude records from C2C MR metrics results, how Verizon disaggregates its data into product codes using the Provider, Product, and Res_Bus_Pub indicator fields.

Also documented is which disposition code values (for POTS troubles) and which trouble code values (for Specials troubles) are present in the data mart tables and which of them are counted in each submetric.

This general section is followed by sections specific to each of the metrics MR-2, MR-3, MR-4 and MR-5. These individual metric sections document the definition of each metric, how it is calculated, and how its submetrics are determined. They then present DCI's SAS macro specification of the metrics calculations, DCI's recalculation results, and DCI's Findings and, as appropriate, recommendations.

In addition to providing the results of DCI's analyses and its findings, these sections serve to comprehensively document Verizon PA's metrics calculation processes, in a clearer, more concise, and more intuitively understandable fashion than the PA CMA.

MR-2: TROUBLE REPORT RATE

Definition

This metric measures the total initial customer direct or referred troubles reported, where the trouble disposition was found to be in the network, per 100 lines/circuits/trunks in service. MR-2-04 measures subsequent reports, which are additional customer trouble calls while an existing trouble report is pending – typically for status or to change or update information. The following discussion applies to all MR-2 metrics except MR-2-04, which will be discussed separately after the other MR-2 metrics due to its structural differences.

POTS Troubles

Denominator: From the Line Count Data Mart, the values in the LINE_COUNT field of those line count records which are not globally excluded and meet the criteria for a reportable sub-metric (see below) and product disaggregation (see the product code table at the end of the Line Count

Data Mart section above), will be summed to obtain the MR-2 denominators, with the exception that records whose CLEC_ID field has the value "RTL9" are excluded from the CLEC results.

Numerator: From the POTS Troubles Data Mart, those trouble records which are not globally excluded and meet the criteria for a reportable sub-metric (see below) and product disaggregation (see the product code table at the end of the POTS Troubles Data Mart section above), will be counted in the MR-2 numerators.

Specials and Trunks Troubles

Denominator: From the Line Count Data Mart, the values in the LINE_COUNT field of those line count records which are not globally excluded and meet the criteria for a reportable sub-metric (see below) and product disaggregation (see the product code table at the end of the Line Count Data Mart section above), will be summed to obtain the MR-2 denominators.

Numerator: From the Specials and Trunks Troubles Data Mart, those trouble records which are not globally excluded and meet the criteria for a reportable sub-metric (see below) and product disaggregation (see the product code table at the end of the POTS Troubles Data Mart section above), will be counted in the MR-2 numerators.

Sub-Metrics

The following table indicates the number of trouble records which were not globally excluded and are potentially relevant to the MR-2 submetrics, prior to product and provider disaggregation:

Table D-15 – MR-2 SubMetric Eligibility

MR-2 Submetric	POTS Disposition Codes	Specials & Trunks Trouble Codes	April	May	June
MR-2-01		FAC, CO	2185	2395	2591
MR-2-02	03, 04		46713	51938	65492
MR-2-03	05		5176	5180	5300
MR-2-04	03, 04, 05		51889	57118	70792
MR-2-05	07, 08, 09, 12, 13		35477	39340	51333
		Other than FAC, CO	2778	2805	3363

MR-2-04 differs from the other MR-2 submetrics in that instead of measuring rate of initial troubles per lines / circuits / trunks, it measures rate of subsequent troubles per initial trouble. As the numerator and denominator elements for MR-2-04 are all contained within the POTS Trouble Data Mart, the methodology for specifying and calculating MR-2-04 is simpler.

DCI Recalculation Process

DCI developed a SAS macro to calculate metric results based on a clear specification of the metrics definitions. DCI then implemented the information described in the pages immediately above into 2 SAS macro invocations, one for POTS troubles, and one for Specials Troubles. DCI then pooled these results to obtain its metric numerators, denominators, and results. DCI also

automatically extracted Verizon PA's C2C report results to obtain Verizon PA's calculated numerators, denominators, and results. DCI's recalculation program then combines and compares DCI's results and Verizon PA's C2C reported results in an Excel spreadsheet.

DCI presents below the 2 SAS macro invocations which are completely sufficient to calculate all the MR-2 results (except MR-2-04, whose single macro invocation will be presented subsequently):

The first of these calculates all MR-2 trouble rate metric numerator contributions from the POTS Troubles Data Mart, and denominator contributions from the Line Count Data Mart:

SAS Macro Invocation 1: MR-2 – POTS Troubles:

```
%pm_2tbl( tbl_num=mr_dm_trbl_gen, yearmm=&report_month, metric=MR-2

        ,tbl_dnm=mr_dm_line_cnt
        , glblcond_num=exclude_by_fst_ind in(0,.)
                        and corp_tel_ind eq 'N'
                        and admin_repeat_flag in('N', ' ')
                        and fGTE_ind eq 'N'
                        and report_category eq '1'
                        and service_level_cd eq 'P'
                        and res_bus_pub_ind in('R','B','P')
        , glblcond_dnm=access_excl_ind in('B','N')
                        and corp_tel_ind eq 'N'
                        and fGTE_ind eq 'N'
                        and service_level_cd eq 'P'
        , submetrics=02 03 05
        , sbpm_typ=Count Count Count
        , eligvars=MR_2_02_elig MR_2_03_elig MR_2_05_elig
        , valucond= disposition_cd in('03','04')
                        :disposition_cd in('05')
                        :disposition_cd in('07','08','09','12','13')
        , valuvars= loop_troubes co_troubles cpe_tok_fok_troubles
        , wt_var_dnm = line_count
        , eligcond= clec_id ne 'RTL9' and test_acc_ind eq 'N'
                        :clec_id ne 'RTL9' and test_acc_ind eq 'N'
                        :clec_id ne 'RTL9' and test_acc_ind eq 'N'
        , eligcmpr= 1:1:1
        , sm_catgs= 2100:2341:3140:3341:3342:3343:3345:3550
                        |2100:2341:3140:3341:3342:3343:3345:3550
                        |2100:2341:3140:3341:3342:3343:3345:3550
        , sm_conds_dnm= product_ind eq 'SIMPLE' and provider_ind eq 'R'
                        :product_ind eq 'DIGITAL' and provider_ind eq 'R'
                        :product_ind eq 'PLATFORM' and provider_ind eq 'U'
                        :product_ind eq 'LOOP DIGITAL' and provider_ind eq 'U'
                        :product_ind eq 'LOOP XDSL' and provider_ind eq 'U'
                        :product_ind eq 'LINESHARE' and provider_ind eq 'U'
                        :product_ind eq 'LINESPLITTING' and provider_ind eq 'U'
                        :product_ind eq 'LOOP' and provider_ind eq 'U'
                        | product_ind eq 'SIMPLE' and provider_ind eq 'R'
                        :product_ind eq 'DIGITAL' and provider_ind eq 'R'
                        :product_ind eq 'PLATFORM' and provider_ind eq 'U'
                        :product_ind eq 'LOOP DIGITAL' and provider_ind eq 'U'
                        :product_ind eq 'LOOP XDSL' and provider_ind eq 'U'
                        :product_ind eq 'LINESHARE' and provider_ind eq 'U'
                        :product_ind eq 'LINESPLITTING' and provider_ind eq 'U'
                        :product_ind eq 'LOOP' and provider_ind eq 'U'
                        | product_ind eq 'SIMPLE' and provider_ind eq 'R'
                        :product_ind eq 'DIGITAL' and provider_ind eq 'R'
                        :product_ind eq 'PLATFORM' and provider_ind eq 'U'
                        :product_ind eq 'LOOP DIGITAL' and provider_ind eq 'U'
                        :product_ind eq 'LOOP XDSL' and provider_ind eq 'U'
                        :product_ind eq 'LINESHARE' and provider_ind eq 'U'
```

```
                    :product_ind eq 'LINESPLITTING' and provider_ind eq 'U'
                    :product_ind eq 'LOOP' and provider_ind eq 'U'
, sm_cmprs_dnm=product_ind eq 'SIMPLE' and provider_ind eq 'L' and test_acc_ind eq 'N'
                    :product  ind eq 'DIGITAL' and provider  ind eq 'L' and test  acc  ind eq 'N'
                    :product_ind eq 'SIMPLE' and provider_ind eq 'L'  and test_acc_ind eq 'N'
                    :product_ind in('SIMPLE','DIGITAL') and provider_ind eq 'L' and test_acc_ind eq 'N'
                    :product_ind in('SIMPLE','DIGITAL') and provider_ind eq 'L' and test_acc_ind eq 'N'
                    :product_ind eq 'LINESHARE' and provider_ind eq 'V'  and test_acc_ind eq 'V'
                    :product_ind eq 'LINESHARE' and provider_ind eq 'V'  and test_acc_ind eq 'V'
                    :product_ind eq 'SIMPLE' and provider_ind eq 'L'  and test_acc_ind eq 'N'
                    | product_ind eq 'SIMPLE' and provider_ind eq 'L' and test_acc_ind eq 'N'
                    :product_ind eq 'DIGITAL' and provider_ind eq 'L' and test_acc_ind eq 'N'
                    :product_ind eq 'SIMPLE' and provider_ind eq 'L'  and test_acc_ind eq 'N'
                    :product_ind in('SIMPLE','DIGITAL') and provider_ind eq 'L' and test_acc_ind eq 'N'
                    :product_ind in('SIMPLE','DIGITAL') and provider_ind eq 'L' and test_acc_ind eq 'N'
                    :product_ind eq 'LINESHARE' and provider_ind eq 'V'  and test_acc_ind eq 'V'
                    :product_ind eq 'LINESHARE' and provider_ind eq 'V'  and test_acc_ind eq 'V'
                    :product_ind eq 'SIMPLE' and provider_ind eq 'L'  and test_acc_ind eq 'N'
                    | product_ind eq 'SIMPLE' and provider_ind eq 'L' and test_acc_ind eq 'N'
                    :product_ind eq 'DIGITAL' and provider_ind eq 'L' and test_acc_ind eq 'N'
                    :product_ind eq 'SIMPLE' and provider_ind eq 'L'  and test_acc_ind eq 'N'
                    :product_ind in('SIMPLE','DIGITAL') and provider_ind eq 'L' and test_acc_ind eq 'N'
                    :product_ind in('SIMPLE','DIGITAL') and provider_ind eq 'L' and test_acc_ind eq 'N'
                    :product_ind eq 'LINESHARE' and provider_ind eq 'V'  and test_acc_ind eq 'V'
                    :product_ind eq 'LINESHARE' and provider_ind eq 'V'  and test_acc_ind eq 'V'
                    :product_ind eq 'SIMPLE' and provider_ind eq 'L'  and test_acc_ind eq 'N'
, sm_conds_num= product_ind eq 'SIMPLE' and provider_ind eq 'R'  and test_acc_ind eq 'N'
                    :product_ind eq 'DIGITAL' and provider_ind eq 'R'  and test_acc_ind eq 'N'
                    :product_ind eq 'PLATFORM' and provider_ind eq 'U'  and test_acc_ind eq 'N'
                    :product_ind eq 'DIGITAL' and provider_ind eq 'U'  and test_acc_ind eq 'N'
                    :product_ind eq 'LOOP XDSL' and provider_ind eq 'U'  and test_acc_ind eq 'N'
                    :product_ind eq 'LINESHARE' and provider_ind eq 'U'  and test_acc_ind eq 'N'
                    :product_ind eq 'LINESPLITTING' and provider_ind eq 'U'  and test_acc_ind eq 'N'
                    :product_ind eq 'LOOP' and provider_ind eq 'U'  and test_acc_ind eq 'N'
                    | product_ind eq 'SIMPLE' and provider_ind eq 'R'  and test_acc_ind eq 'N'
                    :product_ind eq 'DIGITAL' and provider_ind eq 'R'  and test_acc_ind eq 'N'
                    :product_ind eq 'PLATFORM' and provider_ind eq 'U'  and test_acc_ind eq 'N'
                    :product_ind eq 'DIGITAL' and provider_ind eq 'U'  and test_acc_ind eq 'N'
                    :product_ind eq 'LOOP XDSL' and provider_ind eq 'U'  and test_acc_ind eq 'N'
                    :product_ind eq 'LINESHARE' and provider_ind eq 'U'  and test_acc_ind eq 'N'
                    :product_ind eq 'LINESPLITTING' and provider_ind eq 'U'  and test_acc_ind eq 'N'
                    :product_ind eq 'LOOP' and provider_ind eq 'U'  and test_acc_ind eq 'N'
                    | product_ind eq 'SIMPLE' and provider_ind eq 'R'  and test_acc_ind eq 'N'
                    :product_ind eq 'DIGITAL' and provider_ind eq 'R'  and test_acc_ind eq 'N'
                    :product  ind eq 'PLATFORM' and provider  ind eq 'U'  and test  acc  ind eq 'N'
                    :product_ind eq 'DIGITAL' and provider_ind eq 'U'  and test_acc_ind eq 'N'
                    :product_ind eq 'LOOP XDSL' and provider_ind eq 'U'  and test_acc_ind eq 'N'
                    :product_ind eq 'LINESHARE' and provider_ind eq 'V'  and test_acc_ind eq 'N'
                    :product_ind eq 'LINESPLITTING' and provider_ind eq 'V'  and test_acc_ind eq 'N'
                    :product_ind eq 'LOOP' and provider_ind eq 'U'  and test_acc_ind eq 'N'
, sm_cmprs_num=  product_ind eq 'SIMPLE' and provider_ind eq 'L'  and test_acc_ind eq 'N'
                    :product_ind eq 'DIGITAL' and provider_ind eq 'L'  and test_acc_ind eq 'N'
                    :product_ind eq 'SIMPLE' and provider_ind eq 'L'  and test_acc_ind eq 'N'
                    :product_ind NE 'XXXXXX' and provider_ind eq 'L'  and test_acc_ind eq 'N'
                    :product_ind NE 'XXXXXX' and provider_ind eq 'L'  and test_acc_ind eq 'N'
                    :product_ind eq 'LINESHARE' and provider_ind eq 'V'  and test_acc_ind eq 'V'
                    :product_ind eq 'LINESHARE' and provider_ind eq 'V'   and test_acc_ind eq 'V'
                    :product_ind eq 'SIMPLE' and provider_ind eq 'L'  and test_acc_ind eq 'N'
                    | product_ind eq 'SIMPLE' and provider_ind eq 'L'  and test_acc_ind eq 'N'
                    :product_ind eq 'DIGITAL' and provider_ind eq 'L'  and test_acc_ind eq 'N'
                    :product_ind eq 'SIMPLE' and provider_ind eq 'L'  and test_acc_ind eq 'N'
                    :product_ind NE 'XXXXXX' and provider_ind eq 'L'  and test_acc_ind eq 'N'
                    :product_ind NE 'XXXXXX' and provider_ind eq 'L'  and test_acc_ind eq 'N'
                    :product_ind eq 'LINESHARE' and provider_ind eq 'V'  and test_acc_ind eq 'V'
                    :product_ind eq 'LINESHARE' and provider_ind eq 'V'   and test_acc_ind eq 'V'
                    :product_ind eq 'SIMPLE' and provider_ind eq 'L'  and test_acc_ind eq 'N'
                    | product_ind eq 'SIMPLE' and provider_ind eq 'L'  and test_acc_ind eq 'N'
                    :product_ind eq 'DIGITAL' and provider_ind eq 'L'  and test_acc_ind eq 'N'
                    :product_ind eq 'SIMPLE' and provider_ind eq 'L'  and test_acc_ind eq 'N'
                    :product_ind NE 'XXXXXX' and provider_ind eq 'L'  and test_acc_ind eq 'N'
                    :product_ind NE 'XXXXXX' and provider_ind eq 'L'  and test_acc_ind eq 'N'
                    :product_ind eq 'LINESHARE' and provider_ind eq 'V'  and test_acc_ind eq 'V'
                    :product_ind eq 'LINESHARE' and provider_ind eq 'V'   and test_acc_ind eq 'V'
                    :product_ind eq 'SIMPLE' and provider_ind eq 'L'  and test_acc_ind eq 'N'
```

The second SAS macro invocation calculates all MR-2 trouble rate metric numerator contributions from the Specials and Trunks Troubles Data Mart, and denominator contributions from the Line Count Data Mart:

SAS Macro Invocation 2: MR-2 – Specials & Trunks Troubles:

```
%pm_2tbl(tbl_num=mr_dm_trbl_spc, yearmm=&report_month, metric=MR-2
        ,     tbl_dnm=mr_dm_line_cnt
        ,     glblcond_num = exclude_by_fst_ind in(0,.)
                                        and corp_tel_ind eq 'N'
                                        and admin_repeat_flag in('N', ' ')
                                        and fGTE_ind eq 'N'
                                        and report_category eq '1'
                                        and service_level_cd eq 'S'
                                        and test_acc_ind eq 'N'
                                        and access_excl_ind in('B','N')
        , glblcond_dnm = access_excl_ind in('B','N')
                                        and corp_tel_ind eq 'N'
                                        and fGTE_ind eq 'N'
                                        and service_level_cd eq 'S'
                                        and test_acc_ind eq 'N'
        , submetrics=01 05
        , sbpm_typ=Count Count
        , eligvars=MR_2_01_elig MR_2_05_elig
        , valucond=    trouble_cd in('FAC','CO')
                        :not(trouble_cd in('FAC','CO'))
        , valuvars= loop_co_troubles cpe_tok_fok_troubles
        , wt_var_dnm = line_count
        , eligcond= 1:1
        , eligcmpr= 1:1
        , sm_catgs= 2200:3200
                        |2200:3200
        , sm_conds_dnm= provider_ind eq 'R':provider_ind eq 'U'
                        | provider_ind eq 'R':provider_ind eq 'U'
        , sm_cmprs_dnm= provider_ind eq 'L':provider_ind eq 'L'
                        | provider_ind eq 'L':provider_ind eq 'L'
        , sm_conds_num= provider_ind eq 'R':provider_ind eq 'U'
                        | provider_ind eq 'R':provider_ind eq 'U'
        , sm_cmprs_num= provider_ind eq 'L':provider_ind eq 'L'
                        | provider_ind eq 'L':provider_ind eq 'L'
```

The following SAS macro invocation calculates the MR-2-04 results, using the POTS Troubles Data Mart:

SAS Macro Invocation 3: MR-2-04:

```
%pm_mr(   tbl=mr_dm_trbl_gen, yearmm=&report_month, metric=MR-2
        , glblcond=exclude_by_fst_ind in(0,.)
                        and corp_tel_ind eq 'N'
                        and fGTE_ind eq 'N'
                        and report_category eq '1'
                        and service_level_cd eq 'P'
        , submetrics=04
        , sbpm_typ=Count
        , eligvars=MR_2_04_elig
        , valuvars=subseq
        , valucond=subsequent_cnt gt 0
        , eligcond= disposition_cd in('03','04','05') and clec_id ne 'RTL9'
                        and test_acc_ind eq 'N' and res_bus_pub_ind in('R','B')
        , eligcmpr= disposition_cd in('03','04','05') and res_bus_pub_ind in('R','B')
        , sm_catgs=2100:2341:3140:3341:3342:3343:3345:3550
        , sm_conds=  product_ind eq 'SIMPLE' and provider_ind eq 'R'
                        :product_ind eq 'DIGITAL' and provider_ind eq 'R'
                        :product_ind eq 'PLATFORM' and provider_ind eq 'U'
                        :product_ind eq 'DIGITAL' and provider_ind eq 'U'
                        :product_ind eq 'LOOP XDSL' and provider_ind eq 'U'
                        :product_ind eq 'LINESHARE' and provider_ind eq 'U'
                        :product_ind eq 'LINESPLITTING' and provider_ind eq 'U'
                        :product_ind eq 'LOOP' and provider_ind eq 'U'

        , sm_cmprs=  product_ind eq 'SIMPLE' and provider_ind eq 'L'
                        :product_ind eq 'DIGITAL' and provider_ind eq 'L'
```

:product_ind eq 'SIMPLE' and provider_ind eq 'L'
:product_ind NE 'XXXXXX' and provider_ind eq 'L'
:product_ind NE 'XXXXXX' and provider_ind eq 'L'
:product_ind eq 'LINESHARE' and provider_ind eq 'V'
:product_ind eq 'LINESHARE' and provider_ind eq 'V'
:product_ind eq 'SIMPLE' and provider_ind eq 'L'

DCI Recalculation Results

The following 9 tables provide the results of DCI's MR-2-01 metric results recalculation and compare Verizon PA's C2C reported results with DCI's results for the three months reviewed:

Table D-16 – MR-2-01-2200 Trouble Rate: Resale Specials – April 2003

MR-2-01-2200	CLEC			Retail			Stat. Score	Compliance Score
April 2003	Num	Denom	Result	Num	Denom	Result		
DCI calculation	6	1557	0.39%	598	164426	0.36%	0.00000	0
C2C Report	6	1557	0.39%	598	164426	0.36%	-0.00385	0
Discrepancy	0	0	0.00%	0	0	0.00%	-0.00385	0

Table D-17 – MR-2-01-2200 Trouble Rate: Resale Specials – May 2003

MR-2-01-2200	CLEC			Retail			Stat. Score	Compliance Score
May 2003	Num	Denom	Result	Num	Denom	Result		
DCI calculation	10	1556	0.64%	669	163878	0.41%	-1.21793	-1
C2C Report	10	1556	0.64%	669	163878	0.41%	-1.21785	-1
Discrepancy	0	0	0.00%	0	0	0.00%	0.00008	0

Table D-18 – MR-2-01-2200 Trouble Rate: Resale Specials – June 2003

MR-2-01-2200	CLEC			Retail			Stat. Score	Compliance Score
June 2003	Num	Denom	Result	Num	Denom	Result		
DCI calculation	9	1560	0.58%	706	162871	0.43%	-0.69967	0
C2C Report	9	1560	0.58%	706	162871	0.43%	-0.70345	0
Discrepancy	0	0	0.00%	0	0	0.00%	-0.00378	0

Table D-19 – MR-2-01-3200 Trouble Rate: UNE Specials – April 2003

MR-2-01-3200	CLEC			Retail			Stat. Score	Compliance Score
April 2003	Num	Denom	Result	Num	Denom	Result		
DCI calculation	124	9220	1.34%	598	164426	0.36%	-15.23026	-2
C2C Report	124	9220	1.34%	598	164426	0.36%	<-5.00000	-2
Discrepancy	0	0	0.00%	0	0	0.00%		0

Table D-20 – MR-2-01-3200 Trouble Rate: UNE Specials – May 2003

MR-2-01-3200	CLEC			Retail			Stat. Score	Compliance Score
May 2003	Num	Denom	Result	Num	Denom	Result		
DCI calculation	153	9403	1.63%	669	163878	0.41%	-18.02707	-2
C2C Report	153	9403	1.63%	669	163878	0.41%	<-5.00000	-2
Discrepancy	0	0	0.00%	0	0	0.00%		0

Table D-21 – MR-2-01-3200 Trouble Rate: UNE Specials – June 2003

MR-2-01-3200	CLEC			Retail			Stat. Score	Compliance Score
June 2003	Num	Denom	Result	Num	Denom	Result		
DCI calculation	182	9675	1.88%	706	162871	0.43%	-21.05842	-2
C2C Report	182	9675	1.88%	706	162871	0.43%	<-5.00000	-2
Discrepancy	0	0	0.00%	0	0	0.00%		0

Table D-22 – MR-2-01-5000 Trouble Rate: Trunks – April 2003

MR-2-01-5000	CLEC			Retail			Stat. Score	Compliance Score
April 2003	Num	Denom	Result	Num	Denom	Result		
DCI calculation	0	554507	0.00%	0	376891	0.00%		
C2C Report	3	554507	0.00%	2	376891	0.00%	0.00005	0
Discrepancy	3	0	0.00%	2	0	0.00%		

Table D-23 – MR-2-01-5000 Trouble Rate: Trunks – May 2003

MR-2-01-5000	CLEC			Retail			Stat. Score	Compliance Score
May 2003	Num	Denom	Result	Num	Denom	Result		
DCI calculation	0	553686	0.00%	9	379292	0.00%	2.31112	0
C2C Report	3	553686	0.00%	11	430651	0.00%		
Discrepancy	3	0	0.00%	2	51359	0.00%		

Table D-24 – MR-2-01-5000 Trouble Rate: Trunks – June 2003

MR-2-01-5000	CLEC			Retail			Stat. Score	Compliance Score
June 2003	Num	Denom	Result	Num	Denom	Result		
DCI calculation	1	550165	0.00%	2	378722	0.00%	1.49257	0
C2C Report	3	550165	0.00%	2	430561	0.00%		
Discrepancy	2	0	0.00%	0	51839	0.00%		

The following 3 tables provide the results of DCI's MR-2-02 metric results recalculation and compare Verizon PA's C2C reported results with DCI's results for the month of April 2003:

Table D-25 – MR-2-02 Trouble Rate: POTS Loop Troubles – April 2003 – DCI Calculations

MR-2-02 DCI	CLEC			Retail			Stat. Score	Compliance Score
April 2003	Num	Denom	Result	Num	Denom	Result		
MR-2-02-2100	444	87180	0.51%	41079	4853980	0.85%	10.76621	0
MR-2-02-2341	5	1096	0.46%	154	38276	0.40%	-0.11275	0
MR-2-02-3140	3312	421573	0.79%	41079	4853980	0.85%	4.18552	0
MR-2-02-3341	18	2533	0.71%	41233	4892256	0.84%	0.82632	0
MR-2-02-3342	82	18152	0.45%	41233	4892256	0.84%	5.75300	0
MR-2-02-3343	5	5130	0.10%	163	169872	0.10%	0.12246	0
MR-2-02-3345	0	1	0.00%	163	169872	0.10%		
MR-2-02-3550	967	203218	0.48%	41079	4853980	0.85%	17.86040	0

Table D-26 – MR-2-02 Trouble Rate: POTS Loop Troubles – April 2003 – C2C Reported Results

MR-2-02 C2C	CLEC			Retail			Stat.	Compliance
April 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-02-2100	444	87180	0.51%	41186	4853980	0.85%	> 5.0000	0
MR-2-02-2341	5	1096	0.46%	154	38276	0.40%	-0.11265	0
MR-2-02-3140	3311	421573	0.79%	41186	4853980	0.85%	4.35855	0
MR-2-02-3341	18	2533	0.71%	41364	4892256	0.85%	0.83805	0
MR-2-02-3342	81	23282	0.35%	41364	4892256	0.85%	> 5.0000	0
MR-2-02-3343	3	5130	0.06%	133	169872	0.08%	0.72055	0
MR-2-02-3345	0	1	0.00%	133	169872	0.08%		
MR-2-02-3550	966	203218	0.48%	41186	4853980	0.85%	> 5.0000	0

Table D-27 – MR-2-02 Trouble Rate: POTS Loop Troubles – April 2003 – Discrepancies

MR-2-02 discrepancy	CLEC			Retail			Stat.	Compliance
April 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-02-2100	0	0	0.00%	107	0	0.00%		0
MR-2-02-2341	0	0	0.00%	0	0	0.00%	0.00010	0
MR-2-02-3140	-1	0	0.00%	107	0	0.00%	0.17303	0
MR-2-02-3341	0	0	0.00%	131	0	0.00%	0.01173	0
MR-2-02-3342	-1	5130	-0.10%	131	0	0.00%		0
MR-2-02-3343	-2	0	-0.04%	-30	0	-0.02%	0.59809	0
MR-2-02-3345	0	0	0.00%	-30	0	-0.02%		
MR-2-02-3550	-1	0	0.00%	107	0	0.00%		0

The following 3 tables provide the results of DCI's MR-2-02 metric results recalculation and compare Verizon PA's C2C reported results with DCI's results for the month of May 2003:

Table D-28 – MR-2-02 Trouble Rate: POTS Loop Troubles – May 2003 – DCI Calculations

MR-2-02 DCI	CLEC			Retail			Stat.	Compliance
May 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-02-2100	369	82429	0.45%	45653	4794067	0.95%	14.79110	0
MR-2-02-2341	5	1014	0.49%	131	36417	0.36%	-0.49937	0
MR-2-02-3140	3950	436403	0.91%	45653	4794067	0.95%	3.10454	0
MR-2-02-3341	19	2542	0.75%	45784	4830484	0.95%	1.15836	0
MR-2-02-3342	69	18363	0.38%	45784	4830484	0.95%	7.98536	0
MR-2-02-3343	3	5678	0.05%	170	171061	0.10%	1.39608	0
MR-2-02-3345	0	7	0.00%	170	171061	0.10%	0.08345	0
MR-2-02-3550	1006	203516	0.49%	45653	4794067	0.95%	20.83553	0

Table D-29 – MR-2-02 Trouble Rate: POTS Loop Troubles – May 2003 – C2C Reported Results

MR-2-02 C2C	CLEC			Retail			Stat.	Compliance
May 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-02-2100	369	82429	0.45%	45807	4794067	0.96%	> 5.0000	0
MR-2-02-2341	5	1014	0.49%	131	36417	0.36%	-0.49925	0
MR-2-02-3140	3952	436403	0.91%	45807	4794067	0.96%	3.29515	0
MR-2-02-3341	19	2542	0.75%	45914	4830484	0.95%	1.16935	0
MR-2-02-3342	68	24041	0.28%	45914	4830484	0.95%	> 5.0000	0
MR-2-02-3343	1	5678	0.02%	129	171061	0.08%	2.17575	0
MR-2-02-3345	0	7	0.00%	129	171061	0.08%		
MR-2-02-3550	1006	203516	0.49%	45807	4794067	0.96%	> 5.0000	0

Table D-30 – MR-2-02 Trouble Rate: POTS Loop Troubles – May 2003 – Discrepancies

| MR-2-02 discrepancy | CLEC | | | Retail | | | Stat. | Compliance |
May 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-02-2100	0	0	0.00%	154	0	0.00%		0
MR-2-02-2341	0	0	0.00%	0	0	0.00%	0.00012	0
MR-2-02-3140	2	0	0.00%	154	0	0.00%	0.19061	0
MR-2-02-3341	0	0	0.00%	130	0	0.00%	0.01099	0
MR-2-02-3342	-1	5678	-0.09%	130	0	0.00%		0
MR-2-02-3343	-2	0	-0.04%	-41	0	-0.02%	0.77967	0
MR-2-02-3345	0	0	0.00%	-41	0	-0.02%		
MR-2-02-3550	0	0	0.00%	154	0	0.00%		0

The following 3 tables provide the results of DCI's MR-2-02 metric results recalculation and compare Verizon PA's C2C reported results with DCI's results for the month of June 2003:

Table D-31 – MR-2-02 Trouble Rate: POTS Loop Troubles – June 2003 – DCI Calculations

| MR-2-02 DCI | CLEC | | | Retail | | | Stat. | Compliance |
June 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-02-2100	447	80557	0.55%	57655	4745001	1.22%	16.95953	0
MR-2-02-2341	5	1015	0.49%	128	34755	0.37%	-0.44999	0
MR-2-02-3140	5104	450316	1.13%	57655	4745001	1.22%	4.77902	0
MR-2-02-3341	16	2545	0.63%	57783	4779756	1.21%	3.02783	0
MR-2-02-3342	119	18693	0.64%	57783	4779756	1.21%	7.14606	0
MR-2-02-3343	4	6579	0.06%	174	175711	0.10%	1.21285	0
MR-2-02-3345	0	17	0.00%	174	175711	0.10%	0.12981	0
MR-2-02-3550	1127	204230	0.55%	57655	4745001	1.22%	26.78759	0

Table D-32 – MR-2-02 Trouble Rate: POTS Loop Troubles – June 2003 – C2C Reported Results

| MR-2-02 C2C | CLEC | | | Retail | | | Stat. | Compliance |
June 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-02-2100	447	80557	0.55%	57818	4745001	1.22%	>5.0000	0
MR-2-02-2341	5	1015	0.49%	128	34755	0.37%	-0.44985	0
MR-2-02-3140	5104	450316	1.13%	57818	4745001	1.22%	>5.0000	0
MR-2-02-3341	16	2545	0.63%	57955	4779756	1.21%	3.04075	0
MR-2-02-3342	119	25272	0.47%	57955	4779756	1.21%	>5.0000	0
MR-2-02-3343	3	6579	0.05%	143	175711	0.08%	1.27045	0
MR-2-02-3345	0	17	0.00%	143	175711	0.08%		0
MR-2-02-3550	1126	204230	0.55%	57818	4745001	1.22%	>5.0000	0

Table D-33 – MR-2-02 Trouble Rate: POTS Loop Troubles – June 2003 – Discrepancies

| MR-2-02 Discrep | CLEC | | | Retail | | | Stat. | Compliance |
June 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-02-2100	0	0	0.00%	163	0	0.00%		0
MR-2-02-2341	0	0	0.00%	0	0	0.00%	0.00014	0
MR-2-02-3140	0	0	0.00%	163	0	0.00%		0
MR-2-02-3341	0	0	0.00%	172	0	0.00%	0.01292	0
MR-2-02-3342	0	6579	-0.17%	172	0	0.00%		0
MR-2-02-3343	-1	0	-0.02%	-31	0	-0.02%	0.05760	0
MR-2-02-3345	0	0	0.00%	-31	0	-0.02%		0
MR-2-02-3550	-1	0	0.00%	163	0	0.00%		0

The following 3 tables provide the results of DCI's MR-2-03 metric results recalculation and compare Verizon PA's C2C reported results with DCI's results for the month of April 2003:

Table D-34 – MR-2-03 POTS Central Office Trouble Rate – April 2003 – DCI Calculations

| MR-2-03 DCI | CLEC | | | Retail | | | Stat. | Compliance |
April 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-03-2100	35	87180	0.04%	4353	4853980	0.09%	4.84261	0
MR-2-03-2341	1	1096	0.09%	92	38276	0.24%	1.45979	0
MR-2-03-3140	352	421573	0.08%	4353	4853980	0.09%	1.32254	0
MR-2-03-3341	5	2533	0.20%	4445	4892256	0.09%	-1.37905	-1
MR-2-03-3342	13	18152	0.07%	4445	4892256	0.09%	0.98350	0
MR-2-03-3343	4	5130	0.08%	135	169872	0.08%	0.21245	0
MR-2-03-3345	0	1	0.00%	135	169872	0.08%		0
MR-2-03-3550	38	203218	0.02%	4353	4853980	0.09%	10.47272	0

Table D-35 – MR-2-03 POTS Central Office Trouble Rate – April 2003 – C2C Reported Results

| MR-2-03 C2C | CLEC | | | Retail | | | Stat. | Compliance |
April 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-03-2100	35	87180	0.04%	4344	4853980	0.09%	>5	0
MR-2-03-2341	1	1096	0.09%	92	38276	0.24%	1.45975	0
MR-2-03-3140	352	421573	0.08%	4344	4853980	0.09%	1.28365	0
MR-2-03-3341	5	2533	0.20%	4476	4892256	0.09%	-1.37625	-1
MR-2-03-3342	13	23282	0.06%	4476	4892256	0.09%	2.00285	0
MR-2-03-3343	2	5130	0.04%	59	169872	0.03%	0.07095	0
MR-2-03-3345	0	1	0.00%	59	169872	0.03%		0
MR-2-03-3550	38	203218	0.02%	4344	4853980	0.09%	>5	0

Table D-36 – MR-2-03 POTS Central Office Trouble Rate – April 2003 – Discrepancies

| MR-2-03 discrep | CLEC | | | Retail | | | Stat. | Compliance |
April 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-03-2100	0	0	0.00%	-9	0	0.00%		0
MR-2-03-2341	0	0	0.00%	0	0	0.00%	-0.00004	0
MR-2-03-3140	0	0	0.00%	-9	0	0.00%	-0.03889	0
MR-2-03-3341	0	0	0.00%	31	0	0.00%	0.00280	0
MR-2-03-3342	0	5130	-0.02%	31	0	0.00%	1.01935	0
MR-2-03-3343	-2	0	-0.04%	-76	0	-0.04%	-0.14150	0
MR-2-03-3345	0	0	0.00%	-76	0	-0.04%		0
MR-2-03-3550	0	0	0.00%	-9	0	0.00%		0

The following 3 tables provide the results of DCI's MR-2-03 metric results recalculation and compare Verizon PA's C2C reported results with DCI's results for the month of May 2003:

Table D-37 – MR-2-03 POTS Central Office Trouble Rate – May 2003 – DCI Calculations

MR-2-03 DCI	CLEC			Retail			Stat.	Compliance
May 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-03-2100	38	82429	0.05%	4540	4794067	0.09%	4.49785	0
MR-2-03-2341	5	1014	0.49%	65	36417	0.18%	-1.73587	-2
MR-2-03-3140	263	436403	0.06%	4540	4794067	0.09%	7.08036	0
MR-2-03-3341	1	2542	0.04%	4605	4830484	0.10%	1.34985	0
MR-2-03-3342	14	18363	0.08%	4605	4830484	0.10%	0.95543	0
MR-2-03-3343	8	5678	0.14%	103	171061	0.06%	-1.92600	-2
MR-2-03-3345	0	7	0.00%	103	171061	0.06%	0.06494	0
MR-2-03-3550	52	203516	0.03%	4540	4794067	0.09%	9.93323	0

Table D-38 – MR-2-03 POTS Central Office Trouble Rate – May 2003 – C2C Reported Results

MR-2-03 C2C	CLEC			Retail			Stat.	Compliance
May 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-03-2100	38	82429	0.05%	4530	4794067	0.09%	>5	0
MR-2-03-2341	5	1014	0.49%	65	36417	0.18%	-1.73575	-2
MR-2-03-3140	264	436403	0.06%	4530	4794067	0.09%	>5	0
MR-2-03-3341	1	2542	0.04%	4613	4830484	0.10%	1.34515	0
MR-2-03-3342	14	24041	0.06%	4613	4830484	0.10%	2.07605	0
MR-2-03-3343	2	5678	0.04%	37	171061	0.02%	-0.39555	0
MR-2-03-3345	0	7	0.00%	37	171061	0.02%		
MR-2-03-3550	52	203516	0.03%	4530	4794067	0.09%	>5	0

Table D-39 – MR-2-03 POTS Central Office Trouble Rate – May 2003 – Discrepancies

MR-2-03 discrep	CLEC			Retail			Stat.	Compliance
May 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-03-2100	0	0	0.00%	-10	0	0.00%		0
MR-2-03-2341	0	0	0.00%	0	0	0.00%	0.00012	0
MR-2-03-3140	1	0	0.00%	-10	0	0.00%		0
MR-2-03-3341	0	0	0.00%	8	0	0.00%	-0.00470	0
MR-2-03-3342	0	5678	-0.02%	8	0	0.00%	1.12062	0
MR-2-03-3343	-6	0	-0.11%	-66	0	-0.04%	1.53045	2
MR-2-03-3345	0	0	0.00%	-66	0	-0.04%		0
MR-2-03-3550	0	0	0.00%	-10	0	0.00%		0

The following 3 tables provide the results of DCI's MR-2-03 metric results recalculation and compare Verizon PA's C2C reported results with DCI's results for the month of June 2003:

Table D-40 – MR-2-03 POTS Central Office Trouble Rate – June 2003 – DCI Calculations

MR-2-03 DCI	CLEC			Retail			Stat.	Compliance
June 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-03-2100	25	80557	0.03%	4595	4745001	0.10%	5.95442	0
MR-2-03-2341	0	1015	0.00%	87	34755	0.25%	1.57318	0
MR-2-03-3140	244	450316	0.05%	4595	4745001	0.10%	8.79473	0
MR-2-03-3341	0	2545	0.00%	4682	4779756	0.10%	1.57926	0
MR-2-03-3342	15	18693	0.08%	4682	4779756	0.10%	0.88314	0
MR-2-03-3343	10	6579	0.15%	180	175711	0.10%	-1.03060	-1
MR-2-03-3345	1	17	5.88%	180	175711	0.10%	-2.11144	-2
MR-2-03-3550	40	204230	0.02%	4595	4745001	0.10%	10.99032	0

Table D- 41 – MR-2-03 POTS Central Office Trouble Rate – June 2003 – C2C Reported Results

MR-2-03 C2C	CLEC			Retail			Stat. Score	Compliance Score
June 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-03-2100	25	80557	0.03%	4579	4745001	0.10%	>5	0
MR-2-03-2341	0	1015	0.00%	87	34755	0.25%		0
MR-2-03-3140	245	450316	0.05%	4579	4745001	0.10%	>5	0
MR-2-03-3341	0	2545	0.00%	4708	4779756	0.10%		0
MR-2-03-3342	15	25272	0.06%	4708	4779756	0.10%	2.19775	0
MR-2-03-3343	2	6579	0.03%	61	175711	0.03%	0.41245	0
MR-2-03-3345	0	17	0.00%	61	175711	0.03%		0
MR-2-03-3550	40	204230	0.02%	4579	4745001	0.10%	>5	0

Table D-42 – MR-2-03 POTS Central Office Trouble Rate – June 2003 – Discrepancies

MR-2-03 discrep	CLEC			Retail			Stat. Score	Compliance Score
June 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-03-2100	0	0	0.00%	-16	0	0.00%		0
MR-2-03-2341	0	0	0.00%	0	0	0.00%		0
MR-2-03-3140	1	0	0.00%	-16	0	0.00%		0
MR-2-03-3341	0	0	0.00%	26	0	0.00%		0
MR-2-03-3342	0	6579	-0.02%	26	0	0.00%	1.31461	0
MR-2-03-3343	-8	0	-0.12%	-119	0	-0.07%	1.44305	1
MR-2-03-3345	-1	0	-5.88%	-119	0	-0.07%	!!!	2
MR-2-03-3550	0	0	0.00%	-16	0	0.00%		0

The following 3 tables provide the results of DCI's MR-2-04 metric results recalculation and compare Verizon PA's C2C reported results with DCI's results for the month of April 2003:

Table D-43 – MR-2-04 Subsequent Reports Rate – April 2003 – DCI Calculations

MR-2-04 DCI	CLEC			Retail			Stat. Score	Compliance Score
April 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-04-2100	40	479	8.35%	10032	45433	22.08%	7.20668	0
MR-2-04-2341	0	6	0.00%	36	246	14.63%	1.00204	0
MR-2-04-3140	335	3664	9.14%	10032	45433	22.08%	18.16218	0
MR-2-04-3341	2	23	8.70%	10068	45679	22.04%	1.54358	0
MR-2-04-3342	10	95	10.53%	10068	45679	22.04%	2.70462	0
MR-2-04-3343	0	9	0.00%	50	298	16.78%	1.32715	0
MR-2-04-3345				50	298	16.78%		
MR-2-04-3550	491	1005	48.86%	10032	45433	22.08%	-20.24086	-2

Table D-44 – MR-2-04 Subsequent Reports Rate – April 2003 – C2C Reported Results

MR-2-04 C2C	CLEC			Retail			Stat. Score	Compliance Score
April 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-04-2100	40	519	7.71%					
MR-2-04-2341	0	6	0.00%					
MR-2-04-3140	335	3999	8.38%					
MR-2-04-3341	2	25	8.00%					
MR-2-04-3342	10	105	9.52%					
MR-2-04-3343	0	9	0.00%					
MR-2-04-3345								
MR-2-04-3550	491	1496	32.82%					

Table D-45 – MR-2-04 Subsequent Reports Rate – April 2003 – Discrepancies

| MR-2-04 discrepancy | CLEC | | | Retail | | | Stat. | Compliance |
April 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-04-2100	0	40	-0.64%					
MR-2-04-2341	0	0	0.00%					
MR-2-04-3140	0	335	-0.77%					
MR-2-04-3341	0	2	-0.70%					
MR-2-04-3342	0	10	-1.00%					
MR-2-04-3343	0	0	0.00%					
MR-2-04-3345								
MR-2-04-3550	0	491	-16.03%					

The following 3 tables provide the results of DCI's MR-2-04 metric results recalculation and compare Verizon PA's C2C reported results with DCI's results for the month of May 2003:

Table D-46 – MR-2-04 Subsequent Reports Rate – May 2003 – DCI Calculations

| MR-2-04 DCI | CLEC | | | Retail | | | Stat. | Compliance |
May 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-04-2100	28	407	6.88%	10568	50194	21.05%	6.98591	0
MR-2-04-2341	1	10	10.00%	35	196	17.86%	0.63280	0
MR-2-04-3140	358	4213	8.50%	10568	50194	21.05%	19.20165	0
MR-2-04-3341	0	20	0.00%	10603	50390	21.04%	2.30820	0
MR-2-04-3342	5	83	6.02%	10603	50390	21.04%	3.35387	0
MR-2-04-3343	1	11	9.09%	60	273	21.98%	1.01198	0
MR-2-04-3345				60	273	21.98%		
MR-2-04-3550	580	1058	54.82%	10568	50194	21.05%	-26.65997	-2

Table D-47 – MR-2-04 Subsequent Reports Rate – May 2003 – C2C Reported Results

| MR-2-04 C2C | CLEC | | | Retail | | | Stat. | Compliance |
May 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-04-2100	28	435	6.44%					
MR-2-04-2341	1	11	9.09%					
MR-2-04-3140	358	4571	7.83%					
MR-2-04-3341	0	20	0.00%					
MR-2-04-3342	5	88	5.68%					
MR-2-04-3343	1	12	8.33%					
MR-2-04-3345								
MR-2-04-3550	580	1638	35.41%					

Table D-48 – MR-2-04 Subsequent Reports Rate – May 2003 – Discrepancies

| MR-2-04 discrepancy | CLEC | | | Retail | | | Stat. | Compliance |
May 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-04-2100	0	28	-0.44%					
MR-2-04-2341	0	1	-0.91%					
MR-2-04-3140	0	358	-0.67%					
MR-2-04-3341	0	0	0.00%					
MR-2-04-3342	0	5	-0.34%					
MR-2-04-3343	0	1	-0.76%					
MR-2-04-3345								
MR-2-04-3550	0	580	-19.41%					

The following 3 tables provide the results of DCI's MR-2-04 metric results recalculation and compare Verizon PA's C2C reported results with DCI's results for the month of June 2003:

Table D-49 – MR-2-04 Subsequent Reports Rate – June 2003 – DCI Calculations

| MR-2-04 DCI | CLEC | | | Retail | | | Stat. | Compliance |
June 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-04-2100	46	472	9.75%	18135	62250	29.13%	9.23472	0
MR-2-04-2341	0	5	0.00%	52	215	24.19%		
MR-2-04-3140	423	5348	7.91%	18135	62250	29.13%	32.77882	0
MR-2-04-3341	0	16	0.00%	18187	62465	29.12%	2.56325	0
MR-2-04-3342	9	134	6.72%	18187	62465	29.12%	5.70137	0
MR-2-04-3343	0	14	0.00%	27	354	7.63%	1.05451	0
MR-2-04-3345	0	1	0.00%	27	354	7.63%		
MR-2-04-3550	712	1167	61.01%	18135	62250	29.13%	-23.74592	-2

Table D-50 – MR-2-04 Subsequent Reports Rate – June 2003 – C2C Reported Results

| MR-2-04 C2C | CLEC | | | Retail | | | Stat. | Compliance |
June 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-04-2100	46	518	8.88%					
MR-2-04-2341	0	5	0.00%					
MR-2-04-3140	423	5771	7.33%					
MR-2-04-3341	0	16	0.00%					
MR-2-04-3342	9	143	6.29%					
MR-2-04-3343	0	14	0.00%					
MR-2-04-3345	0	1	0.00%					
MR-2-04-3550	712	1879	37.89%					

Table D-51 – MR-2-04 Subsequent Reports Rate – June 2003 – Discrepancies

| MR-2-04 discrepancy | CLEC | | | Retail | | | Stat. | Compliance |
June 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-04-2100	0	46	-0.87%					
MR-2-04-2341	0	0	0.00%					
MR-2-04-3140	0	423	-0.58%					
MR-2-04-3341	0	0	0.00%					
MR-2-04-3342	0	9	-0.42%					
MR-2-04-3343	0	0	0.00%					
MR-2-04-3345	0	0	0.00%					
MR-2-04-3550	0	712	-23.12%					

The following 3 tables provide the results of DCI's MR-2-05 metric results recalculation and compare Verizon PA's C2C reported results with DCI's results for the month of April 2003:

Table D-52 – MR-2-05 CPE / TOK / FOK Trouble Rate – April 2003 – DCI Calculations

| MR-2-05 DCI | CLEC | | | Retail | | | Stat. | Compliance |
April 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-05-2100	269	87180	0.31%	28108	4853980	0.58%	10.43345	0
MR-2-05-2200	6	1557	0.39%	1061	164426	0.65%	1.27488	0
MR-2-05-2341	14	1096	1.28%	414	38276	1.08%	-0.61775	0
MR-2-05-3140	2971	421573	0.70%	28108	4853980	0.58%	-10.31524	-2
MR-2-05-3200	110	9220	1.19%	1061	164426	0.65%	-6.39235	-2
MR-2-05-3341	23	2533	0.91%	28522	4892256	0.58%	-2.14802	-2
MR-2-05-3342	118	18152	0.65%	28522	4892256	0.58%	-1.18461	-1
MR-2-05-3343	0	5130	0.00%	2258	169872	1.33%	8.19040	0
MR-2-05-3345	0	1	0.00%	2258	169872	1.33%		
MR-2-05-3550	648	203218	0.32%	28108	4853980	0.58%	15.14539	0

Table D-53 – MR-2-05 CPE / TOK / FOK Trouble Rate – April 2003 – C2C Reported Results

| MR-2-05 C2C | CLEC | | | Retail | | | Stat. | Compliance |
April 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-05-2100	269	87180	0.31%					
MR-2-05-2200	6	1557	0.39%					
MR-2-05-2341	14	1096	1.28%					
MR-2-05-3140	2970	421573	0.70%					
MR-2-05-3200	109	9220	1.18%					
MR-2-05-3341	23	2533	0.91%					
MR-2-05-3342	118	23282	0.51%					
MR-2-05-3343	37	5130	0.72%					
MR-2-05-3345	4	1	400.00%					
MR-2-05-3550	647	203218	0.32%					

Table D-54 – MR-2-05 CPE / TOK / FOK Trouble Rate – April 2003 – Discrepancies

| MR-2-05 discrepancy | CLEC | | | Retail | | | Stat. | Compliance |
April 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-05-2100	0	0	0.00%					
MR-2-05-2200	0	0	0.00%					
MR-2-05-2341	0	0	0.00%					
MR-2-05-3140	-1	0	0.00%					
MR-2-05-3200	-1	0	-0.01%					
MR-2-05-3341	0	0	0.00%					
MR-2-05-3342	0	5130	-0.14%					
MR-2-05-3343	37	0	0.72%					
MR-2-05-3345	4	0	400.00%					
MR-2-05-3550	-1	0	0.00%					

The following 3 tables provide the results of DCI's MR-2-05 metric results recalculation and compare Verizon PA's C2C reported results with DCI's results for the month of May 2003:

Table D-55 – MR-2-05 CPE / TOK / FOK Trouble Rate – May 2003 – DCI Calculations

| MR-2-05 DCI | CLEC | | | Retail | | | Stat. | Compliance |
May 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-05-2100	264	82429	0.32%	31515	4794067	0.66%	11.87467	0
MR-2-05-2200	8	1556	0.51%	1090	163878	0.67%	0.72929	0
MR-2-05-2341	18	1014	1.78%	417	36417	1.15%	-1.86009	-2
MR-2-05-3140	3439	436403	0.79%	31515	4794067	0.66%	-10.22556	-2
MR-2-05-3200	92	9403	0.98%	1090	163878	0.67%	-3.63454	-2
MR-2-05-3341	14	2542	0.55%	31932	4830484	0.66%	0.68610	0
MR-2-05-3342	108	18363	0.59%	31932	4830484	0.66%	1.21695	0
MR-2-05-3343	0	5678	0.00%	2100	171061	1.23%	8.26463	0
MR-2-05-3345	0	7	0.00%	2100	171061	1.23%	0.29496	0
MR-2-05-3550	724	203516	0.36%	31515	4794067	0.66%	16.49188	0

Table D-56 – MR-2-05 CPE / TOK / FOK Trouble Rate – May 2003 – C2C Reported Results

| MR-2-05 C2C | CLEC | | | Retail | | | Stat. | Compliance |
May 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-05-2100	264	82429	0.32%					
MR-2-05-2200	8	1556	0.51%					
MR-2-05-2341	18	1014	1.78%					
MR-2-05-3140	3441	436403	0.79%					
MR-2-05-3200	89	9403	0.95%					
MR-2-05-3341	14	2542	0.55%					
MR-2-05-3342	108	24041	0.45%					
MR-2-05-3343	54	5678	0.95%					
MR-2-05-3345	0	7	0.00%					
MR-2-05-3550	723	203516	0.36%					

Table D-57 – MR-2-05 CPE / TOK / FOK Trouble Rate – May 2003 – Discrepancies

| MR-2-05 discrepancy | CLEC | | | Retail | | | Stat. | Compliance |
May 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-05-2100	0	0	0.00%					
MR-2-05-2200	0	0	0.00%					
MR-2-05-2341	0	0	0.00%					
MR-2-05-3140	2	0	0.00%					
MR-2-05-3200	-3	0	-0.03%					
MR-2-05-3341	0	0	0.00%					
MR-2-05-3342	0	5678	-0.14%					
MR-2-05-3343	54	0	0.95%					
MR-2-05-3345	0	0	0.00%					
MR-2-05-3550	-1	0	0.00%					

The following 3 tables provide the results of DCI's MR-2-05 metric results recalculation and compare Verizon PA's C2C reported results with DCI's results for the month of June 2003:

Table D-58 – MR-2-05 CPE / TOK / FOK Trouble Rate – June 2003 – DCI Calculations

MR-2-05 DCI	CLEC			Retail			Stat.	Compliance
June 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-05-2100	337	80557	0.42%	41334	4745001	0.87%	13.71314	0
MR-2-05-2200	17	1560	1.09%	1204	162871	0.74%	-1.60846	-1
MR-2-05-2341	6	1015	0.59%	445	34755	1.28%	1.92527	0
MR-2-05-3140	4562	450316	1.01%	41334	4745001	0.87%	-9.79719	-2
MR-2-05-3200	104	9675	1.07%	1204	162871	0.74%	-3.74512	-2
MR-2-05-3341	10	2545	0.39%	41779	4779756	0.87%	2.60701	0
MR-2-05-3342	130	18693	0.70%	41779	4779756	0.87%	2.61871	0
MR-2-05-3343	0	6579	0.00%	2508	175711	1.43%	9.58262	0
MR-2-05-3345	0	17	0.00%	2508	175711	1.43%	0.49612	0
MR-2-05-3550	947	204230	0.46%	41334	4745001	0.87%	19.40031	0

Table D-59 – MR-2-05 CPE / TOK / FOK Trouble Rate – June 2003 – C2C Reported Results

MR-2-05 C2C	CLEC			Retail			Stat.	Compliance
June 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-05-2100	337	80557	0.42%					
MR-2-05-2200	17	1560	1.09%					
MR-2-05-2341	6	1015	0.59%					
MR-2-05-3140	4564	450316	1.01%					
MR-2-05-3200	103	9675	1.06%					
MR-2-05-3341	10	2545	0.39%					
MR-2-05-3342	130	25272	0.51%					
MR-2-05-3343	97	6579	1.47%					
MR-2-05-3345	11	17	64.71%					
MR-2-05-3550	947	204230	0.46%					

Table D-60 – MR-2-05 CPE / TOK / FOK Trouble Rate – June 2003 – Discrepancies

MR-2-05 discrepancy	CLEC			Retail			Stat.	Compliance
June 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-2-05-2100	0	0	0.00%					
MR-2-05-2200	0	0	0.00%					
MR-2-05-2341	0	0	0.00%					
MR-2-05-3140	2	0	0.00%					
MR-2-05-3200	-1	0	-0.01%					
MR-2-05-3341	0	0	0.00%					
MR-2-05-3342	0	6579	-0.18%					
MR-2-05-3343	97	0	1.47%					
MR-2-05-3345	11	0	64.71%					
MR-2-05-3550	0	0	0.00%					

MR-3: MISSED REPAIR APPOINTMENTS

Definition

This metric measures the percent of reported Network Troubles not repaired and cleared by the date and time committed.

POTS Troubles

From the POTS Troubles Data Mart, those trouble records which are not globally excluded and meet the criteria for a reportable sub-metric (see below) and product disaggregation (see the product code table at the end of the POTS Troubles Data Mart section above), will be summed to obtain the MR-3 denominators, with the exception that records whose CLEC_ID field has the value "RTL9" are excluded from the CLEC results. Such records with a value greater than 0 in the MISSED_APPT_CNT field will also be counted in the MR-3 numerator.

The MR-3 metric is only reported on POTS troubles.

Sub-Metrics

The following table indicates the number of trouble records which were not globally excluded and are potentially relevant to the MR-3 submetrics, prior to product disaggregation:

Table D-61 – MR-3 SubMetric Eligibility

MR-3 Submetric	POTS Disposition Codes	April CLEC	April Retail	May CLEC	May Retail	June CLEC	June Retail
MR-3-01	03, 04	5188	41525	5834	46104	7367	58125
MR-3-02	05	587	4589	469	4711	435	4865
MR-3-03	07, 08, 09, 12, 13	4437	31040	5077	34263	6730	44603
Excluded	01, 02, 06, 10, 11	84	4211	96	5186	101	5337

DCI Recalculation Process

DCI developed a SAS macro to calculate metric results based on a clear specification of the metrics definitions. DCI then implemented the information described in the pages immediately above into one SAS macro invocation for POTS troubles. DCI then used these results of running this macro to obtain its metric numerators, denominators, and results. DCI also automatically extracted Verizon PA's C2C report results to obtain Verizon PA's calculated numerators, denominators, and results. DCI's recalculation program then combines and compares DCI's results and Verizon PA's C2C reported results in an Excel spreadsheet.

DCI presents below the SAS macro invocation which is completely sufficient to calculate all the MR-3 results:

SAS Macro Invocation 4: MR-3 Calculation:

```
%pm_mr(  tbl=mr_dm_trbl_gen, yearmm=&report_month, metric=MR-3
        , glblcond= exclude_by_fst_ind in(0,.)
                        and corp_tel_ind eq 'N'
                        and admin_repeat_flag in('N', ' ')
                        and fGTE_ind eq 'N'
                        and report_category eq '1'
                        and service_level_cd eq 'P'
        , submetrics=01 02 03
        , sbpm_typ=Count Count Count
        , eligvars=MR_3_01_elig MR_3_02_elig MR_3_03_elig
        , valuvars=  missed missed missed
        , valucond=  missed_appt_cnt gt 0
                        :missed_appt_cnt gt 0
                        :missed_appt_cnt gt 0
```

```
, eligcond=  disposition_cd in('03','04') and clec_id ne 'RTL9' and test_acc_ind eq 'N'
                  :disposition_cd in('05') and clec_id ne 'RTL9' and test_acc_ind eq 'N'
                  :disposition_cd in('07','08','09','12','13') and clec_id ne 'RTL9' and test_acc_ind eq 'N'
, eligcmpr=  disposition_cd in('03','04')
                  :disposition_cd in('05')
                  :disposition_cd in('07','08','09','12','13')
, sm_catgs=  2110:2120:2341:3144:3145:3341:3342:3343:3345:3550
             |2110:2120:2341:3144:3145:3341:3342:3343:3345:3550
             |2100:2341:3140:3341:3342:3343:3345:3550
, sm_conds=  product_ind eq 'SIMPLE' and provider_ind eq 'R' and res_bus_pub_ind eq 'B'
                  :product_ind eq 'SIMPLE' and provider_ind eq 'R' and res_bus_pub_ind eq 'R'
                  :product_ind eq 'DIGITAL' and provider_ind eq 'R' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'PLATFORM' and provider_ind eq 'U' and res_bus_pub_ind eq 'B'
                  :product_ind eq 'PLATFORM' and provider_ind eq 'U' and res_bus_pub_ind eq 'R'
                  :product_ind eq 'DIGITAL' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'LOOP XDSL' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'LINESHARE' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'LINESPLITTING' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'LOOP' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
              | product_ind eq 'SIMPLE' and provider_ind eq 'R' and res_bus_pub_ind eq 'B'
                  :product_ind eq 'SIMPLE' and provider_ind eq 'R' and res_bus_pub_ind eq 'R'
                  :product_ind eq 'DIGITAL' and provider_ind eq 'R' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'PLATFORM' and provider_ind eq 'U' and res_bus_pub_ind eq 'B'
                  :product_ind eq 'PLATFORM' and provider_ind eq 'U' and res_bus_pub_ind eq 'R'
                  :product_ind eq 'DIGITAL' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'LOOP XDSL' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'LINESHARE' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'LINESPLITTING' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'LOOP' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
                                   and not(dispatch_in_cnt eq 1 and dispatch_out_cnt eq 1)
              | product_ind eq 'SIMPLE' and provider_ind eq 'R' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'DIGITAL' and provider_ind eq 'R' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'PLATFORM' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'DIGITAL' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'LOOP XDSL' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'LINESHARE' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'LINESPLITTING' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'LOOP' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')


, sm_cmprs=  product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind eq 'B'
                  :product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind eq 'R'
                  :product_ind eq 'DIGITAL' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind eq 'B'
                  :product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind eq 'R'
                  :product_ind NE 'XXXXXX' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
                  :product_ind NE 'XXXXXX' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'LINESHARE' and provider_ind eq 'V' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'LINESHARE' and provider_ind eq 'V' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
              | product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind eq 'B'
                  :product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind eq 'R'
                  :product_ind eq 'DIGITAL' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind eq 'B'
                  :product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind eq 'R'
                  :product_ind NE 'XXXXXX' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
                  :product_ind NE 'XXXXXX' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'LINESHARE' and provider_ind eq 'V' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'LINESHARE' and provider_ind eq 'V' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
              | product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'DIGITAL' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
                  :product_ind NE 'XXXXXX' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
                  :product_ind NE 'XXXXXX' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'LINESHARE' and provider_ind eq 'V' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'LINESHARE' and provider_ind eq 'V' and res_bus_pub_ind in('R','B')
                  :product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
```

DCI Recalculation Results

The following 3 tables provide the results of DCI's MR-3-01 metric results recalculation and compare Verizon PA's C2C reported results with DCI's results for the month of April 2003:

Table D-62 – MR-3-01 % Missed Repair Appointments - Loop – April 2003 – DCI Calculations

MR-3-01 DCI	CLEC			Retail			Stat.	Compliance
April 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-3-01-2110	66	227	29.07%	1806	5798	31.15%	0.73137	0
MR-3-01-2120	21	217	9.68%	7305	35281	20.71%	3.99691	0
MR-3-01-2341	2	5	40.00%	74	154	48.05%		
MR-3-01-3144	185	623	29.70%	1806	5798	31.15%	0.78924	0
MR-3-01-3145	354	2689	13.16%	7305	35281	20.71%	9.30210	0
MR-3-01-3341	3	18	16.67%	9185	41233	22.28%	0.83924	0
MR-3-01-3342	7	82	8.54%	9185	41233	22.28%	3.45085	0
MR-3-01-3343	1	5	20.00%	67	163	41.10%		
MR-3-01-3345				67	163	41.10%		
MR-3-01-3550	121	967	12.51%	9111	41079	22.18%	7.15154	0

Table D-63 - MR-3-01 % Missed Repair Appointments - Loop - April 2003 - C2C Reported Results

MR-3-01 C2C	CLEC			Retail			Stat.	Compliance
April 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-3-01-2110	66	227	29.07%	1806	5798	31.15%	0.73135	0
MR-3-01-2120	21	217	9.68%	7305	35281	20.71%	4.43315	0
MR-3-01-2341	2	5	40.00%	74	154	48.05%		
MR-3-01-3144	185	623	29.70%	1806	5798	31.15%	0.78925	0
MR-3-01-3145	354	2689	13.16%	7305	35281	20.71%	5	0
MR-3-01-3341	3	18	16.67%	9227	41362	22.31%	0.84245	0
MR-3-01-3342	7	82	8.54%	9227	41362	22.31%	3.45695	0
MR-3-01-3343	1	5	20.00%	67	163	41.10%		
MR-3-01-3345				67	163	41.10%		
MR-3-01-3550	121	967	12.51%	9153	41208	22.21%	5	0

Table D-64 – MR-3-01 % Missed Repair Appointments - Loop – April 2003 – Discrepancies

MR-3-01 discrepancy	CLEC			Retail			Stat.	Compliance
April 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-3-01-2110	0	0	0.00%	0	0	0.00%	-0.00002	0
MR-3-01-2120	0	0	0.00%	0	0	0.00%	0.43624	0
MR-3-01-2341	0	0	0.00%	0	0	0.00%		
MR-3-01-3144	0	0	0.00%	0	0	0.00%	0.00001	0
MR-3-01-3145	0	0	0.00%	0	0	0.00%	-4.30210	0
MR-3-01-3341	0	0	0.00%	42	129	0.03%	0.00321	0
MR-3-01-3342	0	0	0.00%	42	129	0.03%	0.00610	0
MR-3-01-3343	0	0	0.00%	0	0	0.00%		
MR-3-01-3345				0	0	0.00%		
MR-3-01-3550	0	0	0.00%	42	129	0.03%	-2.15154	0

The following 3 tables provide the results of DCI's MR-3-01 metric results recalculation and compare Verizon PA's C2C reported results with DCI's results for the month of May 2003:

Table D-65 – MR-3-01 % Missed Repair Appointments - Loop – May 2003 – DCI Calculations

MR-3-01 DCI	CLEC			Retail			Stat.	Compliance
May 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-3-01-2110	56	186	30.11%	1903	6086	31.27%	0.40884	0
MR-3-01-2120	25	183	13.66%	8050	39567	20.35%	2.43233	0
MR-3-01-2341	0	5	0.00%	62	131	47.33%		
MR-3-01-3144	221	776	28.48%	1903	6086	31.27%	1.63102	0
MR-3-01-3145	405	3174	12.76%	8050	39567	20.35%	10.21372	0
MR-3-01-3341	4	19	21.05%	10015	45784	21.87%	0.31468	0
MR-3-01-3342	3	69	4.35%	10015	45784	21.87%	4.30738	0
MR-3-01-3343	1	3	33.33%	63	170	37.06%		
MR-3-01-3345				63	170	37.06%		
MR-3-01-3550	111	1006	11.03%	9953	45653	21.80%	8.18170	0

Table D-66 – MR-3-01 % Missed Repair Appointments - Loop – May 2003 – C2C Reported Results

MR-3-01 C2C	CLEC			Retail			Stat.	Compliance
May 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-3-01-2110	56	186	30.11%	1903	6086	31.27%	0.40885	0
MR-3-01-2120	25	183	13.66%	8050	39567	20.35%	2.43235	0
MR-3-01-2341	0	5	0.00%	62	131	47.33%		
MR-3-01-3144	221	776	28.48%	1903	6086	31.27%	1.63105	0
MR-3-01-3145	405	3174	12.76%	8050	39567	20.35%	5	0
MR-3-01-3341	4	19	21.05%	10055	45934	21.89%	0.31635	0
MR-3-01-3342	3	69	4.35%	10055	45934	21.89%	4.30275	0
MR-3-01-3343	1	3	33.33%	63	170	37.06%		
MR-3-01-3345				63	170	37.06%		
MR-3-01-3550	111	1006	11.03%	9993	45803	21.82%	5	0

Table D-67 – MR-3-01 % Missed Repair Appointments - Loop – May 2003 – Discrepancies

MR-3-01 discrepancy	CLEC			Retail			Stat.	Compliance
May 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-3-01-2110	0	0	0.00%	0	0	0.00%	0.00001	0
MR-3-01-2120	0	0	0.00%	0	0	0.00%	0.00002	0
MR-3-01-2341	0	0	0.00%	0	0	0.00%		
MR-3-01-3144	0	0	0.00%	0	0	0.00%	0.00003	0
MR-3-01-3145	0	0	0.00%	0	0	0.00%	-5.21372	0
MR-3-01-3341	0	0	0.00%	40	150	0.02%	0.00167	0
MR-3-01-3342	0	0	0.00%	40	150	0.02%	-0.00463	0
MR-3-01-3343	0	0	0.00%	0	0	0.00%		
MR-3-01-3345				0	0	0.00%		
MR-3-01-3550	0	0	0.00%	40	150	0.02%	-3.18170	0

The following 3 tables provide the results of DCI's MR-3-01 metric results recalculation and compare Verizon PA's C2C reported results with DCI's results for the month of June 2003:

Table D-68 – MR-3-01 % Missed Repair Appointments - Loop – June 2003 – DCI Calculations

MR-3-01 DCI	CLEC			Retail			Stat.	Compliance
June 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-3-01-2110	73	217	33.64%	2591	7009	36.97%	1.07269	0
MR-3-01-2120	41	230	17.83%	14860	50646	29.34%	4.08611	0
MR-3-01-2341	2	5	40.00%	61	128	47.66%		
MR-3-01-3144	343	1012	33.89%	2591	7009	36.97%	1.93933	0
MR-3-01-3145	592	4092	14.47%	14860	50646	29.34%	20.09986	0
MR-3-01-3341	2	16	12.50%	17512	57783	30.31%	1.96579	0
MR-3-01-3342	14	119	11.76%	17512	57783	30.31%	4.39657	0
MR-3-01-3343	3	4	75.00%	76	174	43.68%		
MR-3-01-3345				76	174	43.68%		
MR-3-01-3550	149	1127	13.22%	17451	57655	30.27%	12.33671	0

Table D-69 – MR-3-01 % Missed Repair Appointments - Loop – June 2003 – C2C Reported Results

MR-3-01 C2C	CLEC			Retail			Stat.	Compliance
June 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-3-01-2110	73	217	33.64%	2591	7009	36.97%	1.07265	0
MR-3-01-2120	41	230	17.83%	14860	50646	29.34%	4.08855	0
MR-3-01-2341	2	5	40.00%	61	128	47.66%		
MR-3-01-3144	343	1012	33.89%	2591	7009	36.97%	1.93935	0
MR-3-01-3145	592	4092	14.47%	14860	50646	29.34%	5	0
MR-3-01-3341	2	16	12.50%	17562	57951	30.30%	1.96555	0
MR-3-01-3342	14	119	11.76%	17562	57951	30.30%	5	0
MR-3-01-3343	3	4	75.00%	76	174	43.68%		
MR-3-01-3345				76	174	43.68%		
MR-3-01-3550	149	1127	13.22%	17501	57823	30.27%	5	0

Table D-70 – MR-3-01 % Missed Repair Appointments - Loop – June 2003 – Discrepancies

MR-3-01 discrepancy	CLEC			Retail			Stat.	Compliance
June 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-3-01-2110	0	0	0.00%	0	0	0.00%	-0.00004	0
MR-3-01-2120	0	0	0.00%	0	0	0.00%	0.00244	0
MR-3-01-2341	0	0	0.00%	0	0	0.00%		
MR-3-01-3144	0	0	0.00%	0	0	0.00%	0.00002	0
MR-3-01-3145	0	0	0.00%	0	0	0.00%	-15.09986	0
MR-3-01-3341	0	0	0.00%	50	168	0.00%	-0.00024	0
MR-3-01-3342	0	0	0.00%	50	168	0.00%	0.60343	0
MR-3-01-3343	0	0	0.00%	0	0	0.00%		
MR-3-01-3345				0	0	0.00%		
MR-3-01-3550	0	0	0.00%	50	168	0.00%	-7.33671	0

The following 3 tables provide the results of DCI's MR-3-02 metric results recalculation and compare Verizon PA's C2C reported results with DCI's results for the month of April 2003:

Table D-71 – MR-3-02 % Missed Repair Appointments - Central Office – April 2003 – DCI Calculations

MR-3-02 DCI	CLEC			Retail			Stat.	Compliance
April 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-3-02-2110	3	21	14.29%	98	971	10.09%	-0.35163	0
MR-3-02-2120	0	14	0.00%	244	3382	7.21%	1.04120	0
MR-3-02-2341	0	1	0.00%	26	92	28.26%		
MR-3-02-3144	8	95	8.42%	98	971	10.09%	0.67816	0
MR-3-02-3145	12	257	4.67%	244	3382	7.21%	1.73377	0
MR-3-02-3341	0	5	0.00%	368	4445	8.28%		
MR-3-02-3342	1	13	7.69%	368	4445	8.28%	0.45453	0
MR-3-02-3343	0	4	0.00%	41	135	30.37%		
MR-3-02-3345				41	135	30.37%		
MR-3-02-3550	1	34	2.94%	342	4353	7.86%	1.53732	0

Table D-72 – MR-3-02 % Missed Repair Appointments - Central Office – April 2003 – C2C Reported Results

MR-3-02 C2C	CLEC			Retail			Stat.	Compliance
April 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-3-02-2110	3	21	14.29%	98	971	10.09%	-0.35155	0
MR-3-02-2120	0	14	0.00%	244	3382	7.21%	5	0
MR-3-02-2341	0	1	0.00%	26	92	28.26%		
MR-3-02-3144	8	95	8.42%	98	971	10.09%	0.67815	0
MR-3-02-3145	12	257	4.67%	244	3382	7.21%	1.73375	0
MR-3-02-3341	0	5	0.00%	370	4454	8.31%		
MR-3-02-3342	1	13	7.69%	370	4454	8.31%	0.45815	0
MR-3-02-3343	0	4	0.00%	41	135	30.37%		
MR-3-02-3345				41	135	30.37%		
MR-3-02-3550	1	23	4.35%	344	4362	7.89%	1.03165	0

Table D-73 – MR-3-02 % Missed Repair Appointments - Central Office – April 2003 – Discrepancies

MR-3-02 discrepancy	CLEC			Retail			Stat.	Compliance
April 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-3-02-2110	0	0	0.00%	0	0	0.00%	0.00008	0
MR-3-02-2120	0	0	0.00%	0	0	0.00%	3.95880	0
MR-3-02-2341	0	0	0.00%	0	0	0.00%		
MR-3-02-3144	0	0	0.00%	0	0	0.00%	-0.00001	0
MR-3-02-3145	0	0	0.00%	0	0	0.00%	-0.00002	0
MR-3-02-3341	0	0	0.00%	2	9	0.03%		
MR-3-02-3342	0	0	0.00%	2	9	0.03%	0.00362	0
MR-3-02-3343	0	0	0.00%	0	0	0.00%		
MR-3-02-3345				0	0	0.00%		
MR-3-02-3550	0	-11	1.41%	2	9	0.03%	-0.50567	0

The following 3 tables provide the results of DCI's MR-3-02 metric results recalculation and compare Verizon PA's C2C reported results with DCI's results for the month of May 2003:

Table D-74 – MR-3-02 % Missed Repair Appointments - Central Office – May 2003 – DCI Calculations

| MR-3-02 DCI | CLEC | | | Retail | | | Stat. | Compliance |
May 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-3-02-2110	0	23	0.00%	123	1013	12.14%	1.76298	0
MR-3-02-2120	0	15	0.00%	199	3527	5.64%	0.94506	0
MR-3-02-2341	0	5	0.00%	17	65	26.15%		
MR-3-02-3144	8	84	9.52%	123	1013	12.14%	0.87860	0
MR-3-02-3145	11	179	6.15%	199	3527	5.64%	-0.16214	0
MR-3-02-3341	0	1	0.00%	339	4605	7.36%		
MR-3-02-3342	1	14	7.14%	339	4605	7.36%	0.40612	0
MR-3-02-3343	3	8	37.50%	25	103	24.27%	-0.45591	0
MR-3-02-3345				25	103	24.27%		
MR-3-02-3550	6	47	12.77%	322	4540	7.09%	-1.19626	-1

Table D-75 – MR-3-02 % Missed Repair Appointments - Central Office – May 2003 – C2C Reported Results

| MR-3-02 C2C | CLEC | | | Retail | | | Stat. | Compliance |
May 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-3-02-2110	0	23	0.00%	123	1013	12.14%	5	0
MR-3-02-2120	0	15	0.00%	199	3527	5.64%	5	0
MR-3-02-2341	0	5	0.00%	17	65	26.15%		
MR-3-02-3144	8	84	9.52%	123	1013	12.14%	0.87865	0
MR-3-02-3145	11	179	6.15%	199	3527	5.64%	-0.16205	0
MR-3-02-3341	0	1	0.00%	340	4608	7.38%		
MR-3-02-3342	1	14	7.14%	340	4608	7.38%	0.40855	0
MR-3-02-3343	3	8	37.50%	25	103	24.27%	-0.45585	0
MR-3-02-3345				25	103	24.27%		
MR-3-02-3550	6	37	16.22%	323	4543	7.11%	-1.68505	-2

Table D-76 – MR-3-02 % Missed Repair Appointments - Central Office – May 2003 – Discrepancies

| MR-3-02 discrepancy | CLEC | | | Retail | | | Stat. | Compliance |
May 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-3-02-2110	0	0	0.00%	0	0	0.00%	3.23702	0
MR-3-02-2120	0	0	0.00%	0	0	0.00%	4.05494	0
MR-3-02-2341	0	0	0.00%	0	0	0.00%		
MR-3-02-3144	0	0	0.00%	0	0	0.00%	0.00005	0
MR-3-02-3145	0	0	0.00%	0	0	0.00%	0.00009	0
MR-3-02-3341	0	0	0.00%	1	3	0.02%		
MR-3-02-3342	0	0	0.00%	1	3	0.02%	0.00243	0
MR-3-02-3343	0	0	0.00%	0	0	0.00%	0.00006	0
MR-3-02-3345				0	0	0.00%		
MR-3-02-3550	0	-10	3.45%	1	3	0.02%	-0.48879	-1

The following 3 tables provide the results of DCI's MR-3-02 metric results recalculation and compare Verizon PA's C2C reported results with DCI's results for the month of June 2003:

Table D-77 – MR-3-02 % Missed Repair Appointments - Central Office – June 2003 – DCI Calculations

MR-3-02 DCI	CLEC			Retail			Stat.	Compliance
June 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-3-02-2110	2	22	9.09%	98	965	10.16%	0.44359	0
MR-3-02-2120	0	3	0.00%	363	3630	10.00%		
MR-3-02-2341				31	87	35.63%		
MR-3-02-3144	10	71	14.08%	98	965	10.16%	-0.85892	-1
MR-3-02-3145	11	173	6.36%	363	3630	10.00%	1.77854	0
MR-3-02-3341				492	4682	10.51%		
MR-3-02-3342	3	15	20.00%	492	4682	10.51%	-0.82404	-1
MR-3-02-3343	2	10	20.00%	58	180	32.22%	1.17727	0
MR-3-02-3345	0	1	0.00%	58	180	32.22%		
MR-3-02-3550	6	35	17.14%	461	4595	10.03%	-1.10382	-1

Table D-78 – MR-3-02 % Missed Repair Appointments - Central Office – June 2003 – C2C Reported Results

MR-3-02 C2C	CLEC			Retail			Stat.	Compliance
June 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-3-02-2110	2	22	9.09%	98	965	10.16%	0.44355	0
MR-3-02-2120	0	3	0.00%	363	3630	10.00%		
MR-3-02-2341				31	87	35.63%		
MR-3-02-3144	10	71	14.08%	98	965	10.16%	-0.85885	-1
MR-3-02-3145	11	173	6.36%	363	3630	10.00%	1.77855	0
MR-3-02-3341				493	4685	10.52%		
MR-3-02-3342	3	15	20.00%	493	4685	10.52%	-0.82185	0
MR-3-02-3343	2	10	20.00%	58	180	32.22%	1.17725	0
MR-3-02-3345	0	1	0.00%	58	180	32.22%		
MR-3-02-3550	6	24	25.00%	462	4598	10.05%	-1.89795	-2

Table D-79 – MR-3-02 % Missed Repair Appointments - Central Office – June 2003 – Discrepancies

MR-3-02 discrepancy	CLEC			Retail			Stat.	Compliance
June 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-3-02-2110	0	0	0.00%	0	0	0.00%	-0.00004	0
MR-3-02-2120	0	0	0.00%	0	0	0.00%		
MR-3-02-2341				0	0	0.00%		
MR-3-02-3144	0	0	0.00%	0	0	0.00%	0.00007	0
MR-3-02-3145	0	0	0.00%	0	0	0.00%	0.00001	0
MR-3-02-3341				1	3	0.01%		
MR-3-02-3342	0	0	0.00%	1	3	0.01%	0.00219	1
MR-3-02-3343	0	0	0.00%	0	0	0.00%	-0.00002	0
MR-3-02-3345	0	0	0.00%	0	0	0.00%		
MR-3-02-3550	0	-11	7.86%	1	3	0.02%	-0.79413	-1

The following 3 tables provide the results of DCI's MR-3-03 metric results recalculation and compare Verizon PA's C2C reported results with DCI's results for the month of April 2003:

Table D-80 – MR-3-03 % Missed Repair Appointments - TOK / FOK / CPE – April 2003 – DCI Calculations

MR-3-03 DCI	CLEC			Retail			Stat.	Compliance
April 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-3-03-2100	20	269	7.43%	2371	28108	8.44%	0.58757	0
MR-3-03-2341	2	14	14.29%	83	414	20.05%	0.52967	0
MR-3-03-3140	193	2971	6.50%	2371	28108	8.44%	3.61692	0
MR-3-03-3341	1	23	4.35%	2454	28522	8.60%	0.72759	0
MR-3-03-3342	7	118	5.93%	2454	28522	8.60%	1.03280	0
MR-3-03-3343	10	37	27.03%	645	2258	28.57%	0.20544	0
MR-3-03-3345	0	4	0.00%	645	2258	28.57%		
MR-3-03-3550	32	648	4.94%	2371	28108	8.44%	3.16683	0

Table D-81 – MR-3-03 % Missed Repair Appointments - TOK / FOK / CPE – April 2003 – C2C Reported Results

MR-3-03 C2C	CLEC			Retail			Stat.	Compliance
April 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-3-03-2100	20	269	7.43%					
MR-3-03-2341	2	14	14.29%					
MR-3-03-3140	193	2971	6.50%					
MR-3-03-3341	1	23	4.35%					
MR-3-03-3342	7	118	5.93%					
MR-3-03-3343	10	37	27.03%					
MR-3-03-3345	0	4	0.00%					
MR-3-03-3550	32	648	4.94%					

Table D-82 – MR-3-03 % Missed Repair Appointments - TOK / FOK / CPE – April 2003 – Discrepancies

MR-3-03 discrepancy	CLEC			Retail			Stat.	Compliance
April 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-3-03-2100	0	0	0.00%					
MR-3-03-2341	0	0	0.00%					
MR-3-03-3140	0	0	0.00%					
MR-3-03-3341	0	0	0.00%					
MR-3-03-3342	0	0	0.00%					
MR-3-03-3343	0	0	0.00%					
MR-3-03-3345	0	0	0.00%					
MR-3-03-3550	0	0	0.00%					

The following 3 tables provide the results of DCI's MR-3-03 metric results recalculation and compare Verizon PA's C2C reported results with DCI's results for the month of May 2003:

Table D-83 – MR-3-03 % Missed Repair Appointments - TOK / FOK / CPE – May 2003 – DCI Calculations

MR-3-03 DCI	CLEC			Retail			Stat. Score	Compliance Score
May 2003	Num	Denom	Result	Num	Denom	Result		
MR-3-03-2100	26	264	9.85%	2494	31515	7.91%	-1.15968	-1
MR-3-03-2341	3	18	16.67%	77	417	18.47%	0.19255	0
MR-3-03-3140	234	3439	6.80%	2494	31515	7.91%	2.28835	0
MR-3-03-3341	0	14	0.00%	2571	31932	8.05%	1.10697	0
MR-3-03-3342	8	108	7.41%	2571	31932	8.05%	0.24559	0
MR-3-03-3343	10	54	18.52%	446	2100	21.24%	0.48247	0
MR-3-03-3345				446	2100	21.24%		
MR-3-03-3550	27	724	3.73%	2494	31515	7.91%	4.12367	0

Table D-84 – MR-3-03 % Missed Repair Appointments - TOK / FOK / CPE – May 2003 – C2C Reported Results

MR-3-03 C2C	CLEC			Retail			Stat. Score	Compliance Score
May 2003	Num	Denom	Result	Num	Denom	Result		
MR-3-03-2100	26	264	9.85%					
MR-3-03-2341	3	18	16.67%					
MR-3-03-3140	234	3439	6.80%					
MR-3-03-3341	0	14	0.00%					
MR-3-03-3342	8	108	7.41%					
MR-3-03-3343	10	54	18.52%					
MR-3-03-3345								
MR-3-03-3550	27	724	3.73%					

Table D-85 – MR-3-03 % Missed Repair Appointments - TOK / FOK / CPE – May 2003 – Discrepancies

MR-3-03 discrepancy	CLEC			Retail			Stat. Score	Compliance Score
May 2003	Num	Denom	Result	Num	Denom	Result		
MR-3-03-2100	0	0	0.00%					
MR-3-03-2341	0	0	0.00%					
MR-3-03-3140	0	0	0.00%					
MR-3-03-3341	0	0	0.00%					
MR-3-03-3342	0	0	0.00%					
MR-3-03-3343	0	0	0.00%					
MR-3-03-3345								
MR-3-03-3550	0	0	0.00%					

The following 3 tables provide the results of DCI's MR-3-03 metric results recalculation and compare Verizon PA's C2C reported results with DCI's results for the month of June 2003:

Table D-86 – MR-3-03 % Missed Repair Appointments - TOK / FOK / CPE – June 2003 – DCI Calculations

MR-3-03 DCI	CLEC			Retail			Stat. Score	Compliance Score
June 2003	Num	Denom	Result	Num	Denom	Result		
MR-3-03-2100	39	337	11.57%	5369	41334	12.99%	0.77041	0
MR-3-03-2341	2	6	33.33%	99	445	22.25%	-0.64856	0
MR-3-03-3140	377	4562	8.26%	5369	41334	12.99%	9.00953	0
MR-3-03-3341	0	10	0.00%	5468	41779	13.09%	1.22700	0
MR-3-03-3342	3	130	2.31%	5468	41779	13.09%	3.63873	0
MR-3-03-3343	21	97	21.65%	633	2508	25.24%	0.79861	0
MR-3-03-3345	1	11	9.09%	633	2508	25.24%	1.23026	0
MR-3-03-3550	61	947	6.44%	5369	41334	12.99%	5.92625	0

Table D-87 – MR-3-03 % Missed Repair Appointments - TOK / FOK / CPE – June 2003 – C2C Reported Results

MR-3-03 C2C	CLEC			Retail			Stat. Score	Compliance Score
June 2003	Num	Denom	Result	Num	Denom	Result		
MR-3-03-2100	39	337	11.57%					
MR-3-03-2341	2	6	33.33%					
MR-3-03-3140	377	4562	8.26%					
MR-3-03-3341	0	10	0.00%					
MR-3-03-3342	3	130	2.31%					
MR-3-03-3343	21	97	21.65%					
MR-3-03-3345	1	11	9.09%					
MR-3-03-3550	61	947	6.44%					

Table D-88 – MR-3-03 % Missed Repair Appointments - TOK / FOK / CPE – June 2003 – Discrepancies

MR-3-03 discrepancy	CLEC			Retail			Stat. Score	Compliance Score
June 2003	Num	Denom	Result	Num	Denom	Result		
MR-3-03-2100	0	0	0.00%					
MR-3-03-2341	0	0	0.00%					
MR-3-03-3140	0	0	0.00%					
MR-3-03-3341	0	0	0.00%					
MR-3-03-3342	0	0	0.00%					
MR-3-03-3343	0	0	0.00%					
MR-3-03-3345	0	0	0.00%					
MR-3-03-3550	0	0	0.00%					

MR-4: TROUBLE DURATION INTERVALS

Definition

This metric measures trouble duration intervals. Mean Time to Repair: (MTTR) For Network Trouble reports, the average duration time from trouble receipt to trouble clearance. Includes Disposition Codes 03 (Drop Wire), 04 (Cable) and 05 (Central Office).

For **POTS, Resale and UNE Platform,** type services trouble duration intervals are measured on a *running clock* basis. Run clock includes weekends and holidays.

For **UNE Loop, UNE 2Wire Digital Loop, and UNE 2Wire xDSL Loop** products, trouble duration intervals are measured on a limited *stop clock* basis. A *stop clock* is used when the customer premises access, provided by the CLEC and its end user, is after the offered repair interval. For example**,** if customer premises access is not available on a weekend, the clock stops at 5:00PM Friday, and resumes at 08:00AM Monday. This applies to dispatched out tickets only.

For **Special Services** type services and Interconnection trunks, this is measured on a *stop clock* basis *(e.g., the clock is stopped when CLEC testing is occurring, VZ is awaiting carrier acceptance, or VZ is denied access).*

Out of Service Intervals: The percent of Network Troubles that indicate an Out-Of-Service (OOS) condition which was repaired and cleared more than "y" hours after receipt of trouble report. OOS means that there is no dial tone, the customer cannot call out, or the customer cannot be called. The OOS period commences when the trouble is entered into VZ's designated trouble-reporting interface either directly by the CLEC or by a VZ representative upon notification. OOS intervals are measured using the same duration calculations that apply to Mean Time to Repair metrics for that product listed above. Includes Disposition Codes 03 (Drop Wire), 04 (Cable) and 05 (Central Office). **Note:** "y" equals hours OOS (2, 4, 12 or 24 hours).

For Special Services: An OOS condition is defined as follows: Troubles where, in the initial contact with the customer, it is determined that the circuit is completely OOS and not just an intermittent problem (osi = 'y'), and the trouble completion code indicated that a trouble was found within the Verizon PA network.
Verizon PA uses a single ticket process for misdirected troubles on UNE POTS voice loops (only). This process enables Verizon PA to redirect a trouble to the opposite end of the circuit after a CLEC made an error in the initial dispatch direction..

POTS Troubles

From the POTS Troubles Data Mart, those trouble records which are not globally excluded and meet the criteria for a reportable sub-metric (see below) and product disaggregation (see the product code table at the end of the POTS Troubles Data Mart section above), will be counted to obtain the MR-4 denominators, with the exception that records whose CLEC_ID field has the value "RTL9" are excluded from the CLEC results.

For the MR-4 submetrics measuring Mean Time To Repair as a time interval, the numerator contribution of each record counted in the denominator is the trouble duration interval of that record, which is the value of the ACTUAL_DURATION_RUN field, except where the PRODUCT_IND is any of 'DIGITAL', 'LOOP XDSL', 'LOOP', or 'LINESHARE'. In those cases the value of the ACTUAL_DURATION_STOP field is used as the numerator contribution.

For the other MR-4 submetrics, those records counted in the denominator which also satisfy the sub-metric's condition on the trouble duration will be counted in the numerator.

Specials Troubles

From the Specials and Trunks Troubles Data Mart, those trouble records which are not globally excluded and meet the criteria for a reportable sub-metric (see below) and product disaggregation (see the product code table at the end of the POTS Troubles Data Mart section above), and have a

value of 'S' in the SERVICE_LEVEL_CD field (this excludes Trunks, which are not reported in MR-4), will be counted to obtain the MR-4 denominators, with the exception that records whose CLEC_ID field has the value "RTL9" are excluded from the CLEC results.

For the MR-4 submetrics measuring Mean Time To Repair as a time interval, the numerator contribution of each record counted in the denominator is the trouble duration interval of that record using a stop-clock, which is the value of the ACTUAL_DURATION_STOP field.

For the other MR-4 submetrics, those records counted in the denominator which also satisfy the sub-metric's condition on the trouble duration will be counted in the numerator.

Sub-Metrics

The following table indicates the number of trouble records which were not globally excluded and are potentially relevant to the MR-4 submetrics, prior to product disaggregation:

Table D-89 – MR-4 SubMetric Eligibility

MR-4 Submetric	Out of Service?	POTS Disposition Codes	Specials & Trunks Trouble Codes	Numerator Criteria
MR-4-01		03, 04, 05	FAC, CO	TTR
MR-4-02		03, 04		TTR
MR-4-03		05		TTR
MR-4-04		03, 04, 05	FAC, CO	TTR <= 24hrs
MR-4-05			FAC, CO	
MR-4-06	Y	03, 04, 05	FAC, CO	TTR > 4 hrs
MR-4-07	Y	03, 04, 05	FAC, CO	TTR > 12 hrs
MR-4-08	Y	03, 04, 05	FAC, CO	TTR > 24 hrs

In the above table, TTR represents the value in the ACTUAL_DURATION_RUN field, except for Specials and those POTS trouble records whose PRODUCT_IND value is any of 'DIGITAL', 'LOOP XDSL', 'LOOP', or 'LINESHARE'. In those cases TTR represents the value in the ACTUAL_DURATION_STOP field. POTS troubles are reported in all MR-4 sub-metrics except MR-4-05 (which is specific to Trunks). Specials are reported only in MR-4-01, MR-4-04, MR-4-06, and MR-4-08. Trunks are reported in MR-4-01, MR-4-04, MR-4-05, MR-4-06, MR-4-07, and MR-4-08.

DCI Recalculation Process

DCI developed a SAS macro to calculate metric results based on a clear specification of the metrics definitions. DCI then implemented the information described in the pages immediately above into three SAS macro invocations, one for POTS troubles, one for Specials troubles, and one for Trunks troubles. DCI then used these results of running this macro to obtain its metric numerators, denominators, and results. DCI also automatically extracted Verizon PA's C2C report results to obtain Verizon PA's calculated numerators, denominators, and results. DCI's recalculation program then combines and compares DCI's results and Verizon PA's C2C reported results in an Excel spreadsheet.

DCI presents below the SAS macro invocation which is completely sufficient to calculate all the MR-4 results for POTS troubles:

SAS Macro Invocation 5: POTS Troubles MR-4 Calculation:

```
data pa.mr_dm_trbl_stop_&report_month;
    set pa.mr_dm_trbl_gen_&report_month;
    if provider_ind in('U','V') and dispatch_out_cnt > 0
            and product_ind in('DIGITAL','LOOP XDSL','LOOP','LINESHARE')
        then actual_duration_run = actual_duration_stop;
run;

%pm_mr( tbl=mr_dm_trbl_stop, yearmm=&report_month, metric=MR-4
    , glblcond=exclude_by_fst_ind in(0,.)
                        and corp_tel_ind eq 'N'
                        and admin_repeat_flag in('N', ' ')
                        and fGTE_ind eq 'N'
                        and report_category eq '1'
                        and service_level_cd eq 'P'
    , submetrics=01 02 03 04 06 07 08
    , sbpm_typ=Interval Interval Interval Count Count Count Count
    , eligvars=MR_4_01_elig MR_4_02_elig MR_4_03_elig MR_4_04_elig
                        MR_4_06_elig MR_4_07_elig MR_4_08_elig
    , valuexpr= actual_duration_run/1440
                        :actual_duration_run/1440
                        :actual_duration_run/1440
    , valucond=1:1:1
                        :actual_duration_run le 1440
                        :actual_duration_run gt 240
                        :actual_duration_run gt 720
                        :actual_duration_run gt 1440
    , valuvars= mttr mttr mttr mttr_le_24 oos_gt_4 oos_gt_12 oos_gt_24
    , eligcond= disposition_cd in('03','04','05') and clec_id ne 'RTL9' and test_acc_ind eq 'N'
                        :disposition_cd in('03','04') and clec_id ne 'RTL9' and test_acc_ind eq 'N'
                        :disposition_cd in('05') and clec_id ne 'RTL9' and test_acc_ind eq 'N'
                        :disposition_cd in('03','04','05') and clec_id ne 'RTL9' and test_acc_ind eq 'N'
                        :out_of_service_ind eq 'Y' and clec_id ne 'RTL9' and test_acc_ind eq 'N'
                         and disposition_cd in('03','04','05')
                        :out_of_service_ind eq 'Y' and clec_id ne 'RTL9' and test_acc_ind eq 'N'
                         and disposition_cd in('03','04','05')
                        :out_of_service_ind eq 'Y' and clec_id ne 'RTL9' and test_acc_ind eq 'N'
                         and disposition_cd in('03','04','05')
    , eligcmpr= disposition_cd in('03','04','05')
                        :disposition_cd in('03','04')
                        :disposition_cd in('05')
                        :disposition_cd in('03','04','05')
                        :out_of_service_ind eq 'Y' and disposition_cd in('03','04','05')
                        :out_of_service_ind eq 'Y' and disposition_cd in('03','04','05')
                        :out_of_service_ind eq 'Y' and disposition_cd in('03','04','05')
    , sm_catgs= 2100:2341:3140:3341:3550
                        |2110:2120:2341:3144:3145:3341:3342:3343:3345:3550
                        |2110:2120:2341:3144:3145:3341:3342:3343:3345:3550
                        |2100:2341:3140:3341:3342:3343:3345:3550
                        |2100:3140
                        |2100:2341:3140:3341:3342:3343:3345:3550
                        |2110:2120:2341:3144:3145:3341:3342:3343:3345:3550
    , sm_conds= product_ind eq 'SIMPLE' and provider_ind eq 'R' and res_bus_pub_ind in('R','B')
                        :product_ind eq 'DIGITAL' and provider_ind eq 'R' and res_bus_pub_ind in('R','B')
                        :product_ind eq 'PLATFORM' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
                        :product_ind eq 'DIGITAL' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
                        :product_ind eq 'LOOP' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
                        | product_ind eq 'SIMPLE' and provider_ind eq 'R' and res_bus_pub_ind eq 'B'
                        :product_ind eq 'SIMPLE' and provider_ind eq 'R' and res_bus_pub_ind eq 'R'
                        :product_ind eq 'DIGITAL' and provider_ind eq 'R' and res_bus_pub_ind in('R','B')
                        :product_ind eq 'PLATFORM' and provider_ind eq 'U' and res_bus_pub_ind eq 'B'
                        :product_ind eq 'PLATFORM' and provider_ind eq 'U' and res_bus_pub_ind eq 'R'
                        :product_ind eq 'DIGITAL' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
                        :product_ind eq 'LOOP XDSL' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
                        :product_ind eq 'LINESHARE' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
                        :product_ind eq 'LINESPLITTING' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
                        :product_ind eq 'LOOP' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
                        | product_ind eq 'SIMPLE' and provider_ind eq 'R' and res_bus_pub_ind eq 'B'
                        :product_ind eq 'SIMPLE' and provider_ind eq 'R' and res_bus_pub_ind eq 'R'
                        :product_ind eq 'DIGITAL' and provider_ind eq 'R' and res_bus_pub_ind in('R','B')
                        :product_ind eq 'PLATFORM' and provider_ind eq 'U' and res_bus_pub_ind eq 'B'
                        :product_ind eq 'PLATFORM' and provider_ind eq 'U' and res_bus_pub_ind eq 'R'
                        :product_ind eq 'DIGITAL' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
                        :product_ind eq 'LOOP XDSL' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
```

```
:product_ind eq 'LINESHARE' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
:product_ind eq 'LINESPLITTING' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
:product_ind eq 'LOOP' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
| product_ind eq 'SIMPLE' and provider_ind eq 'R' and res_bus_pub_ind in('R','B')
:product_ind eq 'DIGITAL' and provider_ind eq 'R' and res_bus_pub_ind in('R','B')
:product_ind eq 'PLATFORM' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
:product_ind eq 'DIGITAL' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
:product_ind eq 'LOOP XDSL' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
:product_ind eq 'LINESHARE' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
:product_ind eq 'LINESPLITTING' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
:product_ind eq 'LOOP' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
| product_ind eq 'SIMPLE' and provider_ind eq 'R' and res_bus_pub_ind in('R','B')
:product_ind eq 'PLATFORM' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
| product_ind eq 'SIMPLE' and provider_ind eq 'R' and res_bus_pub_ind in('R','B')
:product_ind eq 'DIGITAL' and provider_ind eq 'R' and res_bus_pub_ind in('R','B')
:product_ind eq 'PLATFORM' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
:product_ind eq 'DIGITAL' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
:product_ind eq 'LOOP XDSL' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
:product_ind eq 'LINESHARE' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
:product_ind eq 'LINESPLITTING' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
:product_ind eq 'LOOP' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
| product_ind eq 'SIMPLE' and provider_ind eq 'R' and res_bus_pub_ind eq 'B'
:product_ind eq 'SIMPLE' and provider_ind eq 'R' and res_bus_pub_ind eq 'R'
:product_ind eq 'DIGITAL' and provider_ind eq 'R' and res_bus_pub_ind in('R','B')
:product_ind eq 'PLATFORM' and provider_ind eq 'U' and res_bus_pub_ind eq 'B'
:product_ind eq 'PLATFORM' and provider_ind eq 'U' and res_bus_pub_ind eq 'R'
:product_ind eq 'DIGITAL' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
:product_ind eq 'LOOP XDSL' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
:product_ind eq 'LINESHARE' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
:product_ind eq 'LINESPLITTING' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
:product_ind eq 'LOOP' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')

, sm_cmprs= product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
:product_ind eq 'DIGITAL' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
:product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
:product_ind NE 'XXXXXX' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
:product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
| product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind eq 'B'
:product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind eq 'R'
:product_ind eq 'DIGITAL' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
:product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind eq 'B'
:product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind eq 'R'
:product_ind NE 'XXXXXX' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
:product_ind NE 'XXXXXX' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
:product_ind eq 'LINESHARE' and provider_ind eq 'V' and res_bus_pub_ind in('R','B')
:product_ind eq 'LINESHARE' and provider_ind eq 'V' and res_bus_pub_ind in('R','B')
:product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
| product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind eq 'B'
:product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind eq 'R'
:product_ind eq 'DIGITAL' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
:product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind eq 'B'
:product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind eq 'R'
:product_ind NE 'XXXXXX' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
:product_ind NE 'XXXXXX' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
:product_ind eq 'LINESHARE' and provider_ind eq 'V' and res_bus_pub_ind in('R','B')
:product_ind eq 'LINESHARE' and provider_ind eq 'V' and res_bus_pub_ind in('R','B')
:product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
| product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
:product_ind eq 'DIGITAL' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
:product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
:product_ind NE 'XXXXXX' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
:product_ind NE 'XXXXXX' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
:product_ind eq 'LINESHARE' and provider_ind eq 'V' and res_bus_pub_ind in('R','B')
:product_ind eq 'LINESHARE' and provider_ind eq 'V' and res_bus_pub_ind in('R','B')
:product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
| product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
:product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
| product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
:product_ind eq 'DIGITAL' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
:product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
:product_ind NE 'XXXXXX' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
:product_ind NE 'XXXXXX' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
:product_ind eq 'LINESHARE' and provider_ind eq 'V' and res_bus_pub_ind in('R','B')
:product_ind eq 'LINESHARE' and provider_ind eq 'V' and res_bus_pub_ind in('R','B')
:product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
| product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind eq 'B'
:product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind eq 'R'
:product_ind eq 'DIGITAL' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
:product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind eq 'B'
:product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind eq 'R'
:product_ind NE 'XXXXXX' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
```

```
                    :product_ind NE 'XXXXXX' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
                    :product_ind eq 'LINESHARE' and provider_ind eq 'V' and res_bus_pub_ind in('R','B')
                    :product_ind eq 'LINESHARE' and provider_ind eq 'V' and res_bus_pub_ind in('R','B')
                    :product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
     )
```

DCI presents below the SAS macro invocation which is completely sufficient to calculate all the MR-4 results for Specials troubles:

SAS Macro Invocation 6: Specials Troubles MR-4 Calculation:

```
%pm_mr(  tbl=mr_dm_trbl_spc, yearmm=&report_month, metric=MR-4
        , glblcond=exclude_by_fst_ind in(0,.)
                        and corp_tel_ind eq 'N'
                        and admin_repeat_flag in('N', ' ')
                        and fGTE_ind eq 'N'
                        and report_category eq '1'
                        and service_level_cd eq 'S'
                        and access_excl_ind in('B','N')
                        and test_acc_ind eq 'N'
        , submetrics=01 04 06 08
        , sbpm_typ=Interval Count Count Count
        , eligvars=MR_4_01_elig MR_4_04_elig
                        MR_4_06_elig MR_4_08_elig
        , valuexpr= actual_duration_stop/1440
        , valucond=1
                        :actual_duration_stop le 1440
                        :actual_duration_stop gt  240
                        :actual_duration_stop gt 1440
        , valuvars= mttr mttr_le_24 oos_gt_4 oos_gt_24
        , eligcond= trouble_cd in('FAC','CO') and clec_id ne 'RTL9'
                        :trouble_cd in('FAC','CO') and clec_id ne 'RTL9'
                        :out_of_service_ind eq 'Y' and clec_id ne 'RTL9' and trouble_cd in('FAC','CO')
                        :out_of_service_ind eq 'Y' and clec_id ne 'RTL9' and trouble_cd in('FAC','CO')
        , eligcmpr= trouble_cd in('FAC','CO')
                        :trouble_cd in('FAC','CO')
                        :out_of_service_ind eq 'Y' and trouble_cd in('FAC','CO')
                        :out_of_service_ind eq 'Y' and trouble_cd in('FAC','CO')
        , sm_catgs= 2216:2217:3216:3217
                        |2216:2217:3216:3217
                        |2216:2217:3216:3217
                        |2216:2217:3216:3217
        , sm_conds=  ds_level eq 'DS0'      and provider_ind eq 'R'
                        :ds_level in('DS1','DS3') and provider_ind eq 'R'
                        :ds_level eq 'DS0'      and provider_ind eq 'U'
                        :ds_level in('DS1','DS3') and provider_ind eq 'U'
                        | ds_level eq 'DS0'      and provider_ind eq 'R'
                        :ds_level in('DS1','DS3') and provider_ind eq 'R'
                        :ds_level eq 'DS0'      and provider_ind eq 'U'
                        :ds_level in('DS1','DS3') and provider_ind eq 'U'
                        | ds_level eq 'DS0'      and provider_ind eq 'R'
                        :ds_level in('DS1','DS3') and provider_ind eq 'R'
                        :ds_level eq 'DS0'      and provider_ind eq 'U'
                        :ds_level in('DS1','DS3') and provider_ind eq 'U'
                        | ds_level eq 'DS0'      and provider_ind eq 'R'
                        :ds_level in('DS1','DS3') and provider_ind eq 'R'
                        :ds_level eq 'DS0'      and provider_ind eq 'U'
                        :ds_level in('DS1','DS3') and provider_ind eq 'U'

        , sm_cmprs=  ds_level eq 'DS0'      and provider_ind eq 'L'
                        :ds_level in('DS1','DS3') and provider_ind eq 'L'
                        :ds_level eq 'DS0'      and provider_ind eq 'L'
                        :ds_level in('DS1','DS3') and provider_ind eq 'L'
                        | ds_level eq 'DS0'      and provider_ind eq 'L'
                        :ds_level in('DS1','DS3') and provider_ind eq 'L'
                        :ds_level eq 'DS0'      and provider_ind eq 'L'
                        :ds_level in('DS1','DS3') and provider_ind eq 'L'
                        | ds_level eq 'DS0'      and provider_ind eq 'L'
                        :ds_level in('DS1','DS3') and provider_ind eq 'L'
```

```
                              :ds_level eq 'DS0'      and provider_ind eq 'L'
                              :ds_level in('DS1','DS3') and provider_ind eq 'L'
                              | ds_level eq 'DS0'      and provider_ind eq 'L'
                              :ds_level in('DS1','DS3') and provider_ind eq 'L'
                              :ds_level eq 'DS0'      and provider_ind eq 'L'
                              :ds_level in('DS1','DS3') and provider_ind eq 'L'
          )
```

DCI presents below the SAS macro invocation which is completely sufficient to calculate all the MR-4 results for Trunks troubles:

SAS Macro Invocation 7: Trunks Troubles MR-4 Calculation:

```
%pm_mr(  tbl=mr_dm_trbl_spc, yearmm=&report_month, metric=MR-4
         , glblcond=exclude_by_fst_ind in(0,.)
                          and corp_tel_ind eq 'N'
                          and admin_repeat_flag in('N', ' ')
                          and fGTE_ind eq 'N'
                          and report_category eq '1'
                          and service_level_cd eq 'M'
                          and access_excl_ind in('B','N')
                          and trouble_cd in('FAC','CO')

         , submetrics=01 04 05 06 07 08
         , sbpm_typ=Interval Count Count Count Count Count
         , eligvars=MR_4_01_elig MR_4_04_elig MR_4_05_elig
                    MR_4_06_elig MR_4_07_elig MR_4_08_elig
         , valuexpr= actual_duration_stop/1440
         , valucond=1
                          :actual_duration_stop le 1440
                          :actual_duration_stop gt 120
                          :actual_duration_stop gt 240
                          :actual_duration_stop gt 720
                          :actual_duration_stop gt 1440
         , valuvars= mttr mttr_le_24 oos_gt_2 oos_gt_4 oos_gt_12 oos_gt_24
         , eligcond= test_acc_ind in('N','V') and provider_ind eq 'U'
                          :test_acc_ind in('N','V') and provider_ind eq 'U'
                          :test_acc_ind in('N','V') and provider_ind eq 'U' and out_of_service_ind eq 'Y'
                          :test_acc_ind in('N','V') and provider_ind eq 'U' and out_of_service_ind eq 'Y'
                          :test_acc_ind in('N','V') and provider_ind eq 'U' and out_of_service_ind eq 'Y'
                          :test_acc_ind in('N','V') and provider_ind eq 'U' and out_of_service_ind eq 'Y'
         , eligcmpr= test_acc_ind in('N','A') and provider_ind eq 'L'
                          :test_acc_ind in('N','A') and provider_ind eq 'L'
                          :test_acc_ind in('N','A') and provider_ind eq 'L' and out_of_service_ind eq 'Y'
                          :test_acc_ind in('N','A') and provider_ind eq 'L' and out_of_service_ind eq 'Y'
                          :test_acc_ind in('N','A') and provider_ind eq 'L' and out_of_service_ind eq 'Y'
                          :test_acc_ind in('N','A') and provider_ind eq 'L' and out_of_service_ind eq 'Y'
         , sm_catgs= 5000|5000|5000|5000|5000|5000
         , sm_conds= 1|1|1|1|1|1
         , sm_cmprs= 1|1|1|1|1|1
         )
```

DCI Recalculation Results

Table D-90 provides the results of DCI's MR-4 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of April 2003.

Table D-91 provides the results of DCI's MR-4 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of May 2003.

Table D-92 provides the results of DCI's MR-4 metric results recalculation and compares Verizon PA's C2C reported results with DCI's results for the month of June 2003.

Table D-90 – MR-4 Trouble Duration Intervals – April 2003

April 2003	DCI calculation						Verizon C2C Reported Results						Discrepancy					
	CLEC		Retail		Stat. Score	Comp liance	CLEC		Retail		Stat. Score	Comp liance	CLEC		Retail		Stat. Score	Comp liance
SubMetric ID	#	MTTR	#	MTTR			#	MTTR	#	MTTR			#	MTTR	#	MTTR		
MR-4-01-2100	479	19:44:24	45432	25:34:01	4.96475	0	479	19:44:24	45570	25:38:56	4.99515	0	0	0:00:00	138	0:04:55	0.03040	0
MR-4-01-2216	6	6:55:00	412	5:00:54	-0.88492	-1	6	6:55:00	412	5:00:54	-0.89895	-1	0	0:00:00	0	0:00:00	-0.01403	0
MR-4-01-2217			186	5:01:34					186	5:01:34					0	0:00:00		
MR-4-01-2341	6	28:59:40	246	21:30:07	-0.57120	0	6	28:59:40	246	21:30:07	-0.57115	0	0	0:00:00	0	0:00:00	0.00005	0
MR-4-01-3140	3664	24:10:47	45432	25:34:01	3.16140	0	3664	24:10:47	45570	25:38:56	3.32225	0	0	0:00:00	138	0:04:55	0.16085	0
MR-4-01-3216			412	5:00:54					412	5:00:54					0	0:00:00		
MR-4-01-3217	124	5:00:10	186	5:01:34	0.04019	0	124	5:00:10	186	5:01:34	0.04025	0	0	0:00:00	0	0:00:00	0.00006	0
MR-4-01-3341	23	16:44:57	45678	25:32:42	1.64796	0	23	16:44:57	45816	25:37:36			0	0:00:00	138	0:04:53		
MR-4-01-3550	1005	17:56:47	45432	25:34:01	9.35160	0	1005	17:56:47	45570	25:38:56	9.37825	0	0	0:00:00	138	0:04:55	0.02665	0
MR-4-01-5000																		
MR-4-02-2110	227	12:32:20	5798	13:05:31	0.46924	0	227	12:32:20	5798	13:05:31	0.46925	0	0	0:00:00	0	0:00:00	0.00001	0
MR-4-02-2120	217	28:09:31	35281	29:23:34	0.69392	0	217	28:09:31	35281	29:23:34	0.69395	0	0	0:00:00	0	0:00:00	0.00003	0
MR-4-02-2341	5	31:27:00	154	25:45:39			5	31:27:00	154	25:45:39			0	0:00:00	0	0:00:00		
MR-4-02-3144	623	13:36:32	5798	13:05:31	-0.70405	0	623	13:36:32	5798	13:05:31	-0.70405	0	0	0:00:00	0	0:00:00	0.00000	0
MR-4-02-3145	2689	28:08:13	35281	29:23:34	2.40303	0	2689	28:08:13	35281	29:23:34	2.40315	0	0	0:00:00	0	0:00:00	0.00012	0
MR-4-02-3341	18	20:49:30	41233	27:05:14	1.03155	0	18	20:49:30	41362	27:10:17			0	0:00:00	129	0:05:04		
MR-4-02-3342	82	16:56:17	41233	27:05:14	3.56558	0	82	16:56:17	41362	27:10:17	3.56585	0	0	0:00:00	129	0:05:04	0.00027	0
MR-4-02-3343	5	15:12:12	163	30:58:27			5	15:12:12	163	30:58:27			0	0:00:00	0	0:00:00		
MR-4-02-3345			163	30:58:27					163	30:58:27					0	0:00:00		
MR-4-02-3550	967	18:11:11	41079	27:05:31	10.64622	0	967	18:11:11	41208	27:10:36	10.65925	0	0	0:00:00	129	0:05:05	0.01303	0
MR-4-03-2110	21	10:09:26	971	7:11:54	-0.73907	0	21	10:09:26	971	7:11:54	-0.73905	0	0	0:00:00	0	0:00:00	0.00002	0
MR-4-03-2120	14	20:23:34	3382	12:18:56	-1.62210	-1	14	20:23:34	3382	12:18:56	-1.62205	-1	0	0:00:00	0	0:00:00	0.00005	0
MR-4-03-2341	1	16:43:00	92	14:22:23			1	16:43:00	92	14:22:23			0	0:00:00	0	0:00:00		
MR-4-03-3144	95	5:43:44	971	7:11:54	0.75315	0	95	5:43:44	971	7:11:54	0.75325	0	0	0:00:00	0	0:00:00	0.00010	0
MR-4-03-3145	257	15:13:06	3382	12:18:56	-2.41275	-2	257	15:13:06	3382	12:18:56	-2.41265	-2	0	0:00:00	0	0:00:00	0.00010	0
MR-4-03-3341	5	2:04:36	4445	11:14:25			5	2:04:36	4454	11:16:47			0	0:00:00	9	0:02:22		
MR-4-03-3342	13	11:35:46	4445	11:14:25	-0.06822	0	13	11:35:46	4454	11:16:47	-0.06035	0	0	0:00:00	9	0:02:22	0.00787	0
MR-4-03-3343	4	20:30:30	135	41:35:05			4	20:30:30	135	41:35:05			0	0:00:00	0	0:00:00		
MR-4-03-3345			135	41:35:05					135	41:35:05					0	0:00:00		
MR-4-03-3550	38	11:50:33	4353	11:10:27	-0.22037	0	23	11:39:08	4362	11:12:53	-0.11195	0	-15	-0:11:25	9	0:02:26	0.10842	0
MR-4-04-2100	479	71.40%	45432	60.47%	4.86637	0	479	71.40%	45570	60.42%	5	0	0	0.00%	138	-0.05%	0.13363	0
MR-4-04-2216	6	100.00%	412	98.06%	0.34221	0	6	100.00%	412	98.06%	5	0	0	0.00%	0	0.00%	4.65779	0
MR-4-04-2217			186	98.39%					186	98.39%					0	0.00%		
MR-4-04-2341	6	66.67%	246	71.95%	0.10397	0	6	66.67%	246	71.95%	0.10395	0	0	0.00%	0	0.00%	-0.00002	0
MR-4-04-3140	3664	60.94%	45432	60.47%	0.58115	0	3664	60.94%	45570	60.42%	0.64245	0	0	0.00%	138	-0.05%	0.06130	0
MR-4-04-3216			412	98.06%					412	98.06%					0	0.00%		
MR-4-04-3217	124	100.00%	186	98.39%	1.10439	0	124	100.00%	186	98.39%	5	0	0	0.00%	0	0.00%	3.89561	0
MR-4-04-3341	23	73.91%	45678	60.53%	1.55621	0	23	73.91%	45816	60.48%	1.56115	0	0	0.00%	138	-0.05%	0.00494	0

Table D-90 – MR-4 Trouble Duration Intervals – April 2003

April 2003	DCI calculation						Verizon C2C Reported Results						Discrepancy					
	CLEC		Retail		Stat. Score	Comp liance	CLEC		Retail		Stat. Score	Comp liance	CLEC		Retail		Stat. Score	Comp liance
SubMetric ID	#	MTTR	#	MTTR			#	MTTR	#	MTTR			#	MTTR	#	MTTR		
MR-4-04-3342	95	81.05%	45678	60.53%	4.40903	0	95	81.05%	45816	60.48%	4.41445	0	0	0.00%	138	-0.05%	0.00542	0
MR-4-04-3343	9	77.78%	298	45.64%	2.29998	0	9	77.78%	298	56.04%	1.69335	0	0	0.00%	0	10.40%	-0.60663	0
MR-4-04-3345			298	45.64%					298	56.04%					0	10.40%		
MR-4-04-3550	1005	75.32%	45432	60.47%	9.52594	0	1005	75.32%	45570	60.42%	5	0	0	0.00%	138	-0.05%	-4.52594	0
MR-4-04-5000																		
MR-4-05-5000																		
MR-4-06-2100	342	75.73%	28912	83.39%	3.66698	0	342	75.73%	28996	83.41%	3.67755	0	0	0.00%	84	0.02%	0.01057	0
MR-4-06-2216	3	66.67%	411	43.07%			3	66.67%	411	43.07%			0	0.00%	0	0.00%		
MR-4-06-2217			186	45.70%					186	45.70%					0	0.00%		
MR-4-06-3140	2584	85.80%	28912	83.39%	-3.18988	-2	2584	85.80%	28996	83.41%	-3.16375	-2	0	0.00%	84	0.02%	0.02613	0
MR-4-06-3216			411	43.07%					411	43.07%					0	0.00%		
MR-4-06-3217	104	54.81%	186	45.70%	-1.36596	-1	104	54.81%	186	45.70%	-1.36585	-1	0	0.00%	0	0.00%	0.00011	0
MR-4-06-5000																		
MR-4-07-2100	342	62.57%	28912	69.88%	2.93484	0	342	62.57%	28996	69.94%	2.95655	0	0	0.00%	84	0.05%	0.02171	0
MR-4-07-2341	3	66.67%	176	55.68%			3	66.67%	176	55.68%			0	0.00%	0	0.00%		
MR-4-07-3140	2584	74.69%	28912	69.88%	-5.10210	-2	2584	74.69%	28996	69.94%	-5	-2	0	0.00%	84	0.05%	0.10210	0
MR-4-07-3341	21	38.10%	29088	69.80%	3.23256	0	21	38.10%	29172	69.85%	3.23805	0	0	0.00%	84	0.05%	0.00549	0
MR-4-07-3342	82	54.88%	29088	69.80%	2.96100	0	82	54.88%	29172	69.85%	2.97175	0	0	0.00%	84	0.05%	0.01075	0
MR-4-07-3343	8	50.00%	282	81.91%	2.43960	0	8	50.00%	282	72.70%	1.73825	0	0	0.00%	0	-9.22%	-0.70135	0
MR-4-07-3345			282	81.91%					282	72.70%					0	-9.22%		
MR-4-07-3550	687	62.01%	28912	69.88%	4.39562	0	687	62.01%	28996	69.94%	4.43315	0	0	0.00%	84	0.05%	0.03753	0
MR-4-07-5000																		
MR-4-08-2110	168	10.12%	4187	12.59%	1.07294	0	168	10.12%	4187	12.59%	1.07295	0	0	0.00%	0	0.00%	0.00001	0
MR-4-08-2120	174	45.40%	24725	42.12%	-0.79823	0	174	45.40%	24725	42.12%	-0.79815	0	0	0.00%	0	0.00%	0.00008	0
MR-4-08-2216	3	0.00%	411	1.95%			3	0.00%	411	1.95%			0	0.00%	0	0.00%		
MR-4-08-2217			186	1.61%					186	1.61%					0	0.00%		
MR-4-08-2341	3	33.33%	176	30.68%			3	33.33%	176	30.68%			0	0.00%	0	0.00%		
MR-4-08-3144	463	10.37%	4187	12.59%	1.46944	0	463	10.37%	4187	12.59%	1.46945	0	0	0.00%	0	0.00%	0.00001	0
MR-4-08-3145	2121	45.12%	24725	42.12%	-2.65592	-2	2121	45.12%	24725	42.12%	-2.65585	-2	0	0.00%	0	0.00%	0.00007	0
MR-4-08-3216			411	1.95%					411	1.95%					0	0.00%		
MR-4-08-3217	104	0.00%	186	1.61%	1.04571	0	104	0.00%	186	1.61%	5	0	0	0.00%	0	0.00%	3.95429	0
MR-4-08-3341	21	23.81%	29088	37.80%	1.58560	0	21	23.81%	29172	37.87%	1.59165	0	0	0.00%	84	0.07%	0.00605	0
MR-4-08-3342	82	20.73%	29088	37.80%	3.44081	0	82	20.73%	29172	37.87%	3.45285	0	0	0.00%	84	0.07%	0.01204	0
MR-4-08-3343	8	25.00%	282	53.55%	1.99306	0	8	25.00%	282	44.68%	1.50075	0	0	0.00%	0	-8.87%	-0.49231	0
MR-4-08-3345			282	53.55%					282	44.68%					0	-8.87%		
MR-4-08-3550	687	21.54%	28912	37.84%	8.70595	0	687	21.54%	28996	37.91%	5	0	0	0.00%	84	0.07%	-3.70595	0
MR-4-08-5000																		

Table D-91 – MR-4 Trouble Duration Intervals – May 2003

May 2003	DCI calculation						Verizon C2C Reported Results						Discrepancy					
	CLEC		Retail		Stat. Score	Comp liance	CLEC		Retail		Stat. Score	Comp liance	CLEC		Retail		Stat. Score	Comp liance
SubMetric ID	#	MTTR	#	MTTR			#	MTTR	#	MTTR			#	MTTR	#	MTTR		
MR-4-01-2100	407	21:13:27	50193	26:52:48	4.33188	0	407	21:13:27	50346	26:56:17	4.35325	0	0	0:00:00	153	0:03:29	0.02137	0
MR-4-01-2216	8	3:30:15	434	4:43:38	0.82198	0	8	3:30:15	434	4:43:38		0	0	0:00:00	0	0:00:00		0
MR-4-01-2217	2	1:54:00	235	4:23:28			2	1:54:00	235	4:23:28			0	0:00:00	0	0:00:00		
MR-4-01-2341	10	16:52:12	196	23:20:37	0.52033	0	10	16:52:12	196	23:20:37		0	0	0:00:00	0	0:00:00		0
MR-4-01-3140	4213	26:08:07	50193	26:52:48	1.77004	0	4213	26:08:07	50346	26:56:17	1.89825	0	0	0:00:00	153	0:03:29	0.12821	0
MR-4-01-3216	1	3:51:00	434	4:43:38			1	3:51:00	434	4:43:38			0	0:00:00	0	0:00:00		
MR-4-01-3217	148	4:10:36	235	4:23:28	0.55257	0	148	4:10:36	235	4:23:28	0.55265	0	0	0:00:00	0	0:00:00	0.00008	0
MR-4-01-3341	20	23:20:12	50389	26:51:58	0.60024	0	20	23:20:12	50542	26:55:27		0	0	0:00:00	153	0:03:28		0
MR-4-01-3550	1058	18:04:03	50193	26:52:48	10.81323	0	1058	18:04:03	50346	26:56:17	10.82715	0	0	0:00:00	153	0:03:29	0.01392	0
MR-4-01-5000			9	0:57:33					9	0:57:33					0	0:00:00		
MR-4-02-2110	186	12:34:25	6086	13:45:50	0.82016	0	186	12:34:25	6086	13:45:50	0.82025	0	0	0:00:00	0	0:00:00	0.00009	0
MR-4-02-2120	183	32:29:31	39567	30:49:18	-0.84744	-1	183	32:29:31	39567	30:49:18	-0.84735	-1	0	0:00:00	0	0:00:00	0.00009	0
MR-4-02-2341	5	18:37:24	131	29:49:55			5	18:37:24	131	29:49:55			0	0:00:00	0	0:00:00		
MR-4-02-3144	776	12:57:34	6086	13:45:50	1.08241	0	776	12:57:34	6086	13:45:50	1.08245	0	0	0:00:00	0	0:00:00	0.00004	0
MR-4-02-3145	3174	30:27:18	39567	30:49:18	0.74730	0	3174	30:27:18	39567	30:49:18	0.74735	0	0	0:00:00	0	0:00:00	0.00005	0
MR-4-02-3341	19	23:52:06	45784	28:33:05	0.77067	0	19	23:52:06	45934	28:36:32		0	0	0:00:00	150	0:03:27		0
MR-4-02-3342	69	16:43:57	45784	28:33:05	3.70462	0	69	16:43:57	45934	28:36:32	3.70215	0	0	0:00:00	150	0:03:27	-0.00247	0
MR-4-02-3343	3	64:49:20	170	37:12:52			3	64:49:20	170	37:12:52			0	0:00:00	0	0:00:00		
MR-4-02-3345			170	37:12:52					170	37:12:52					0	0:00:00		
MR-4-02-3550	1006	18:12:03	45653	28:32:52	12.29062	0	1006	18:12:03	45803	28:36:19	12.29065	0	0	0:00:00	150	0:03:28	0.00003	0
MR-4-03-2110	23	5:52:13	1013	6:25:16	0.20905	0	23	5:52:13	1013	6:25:16		0	0	0:00:00	0	0:00:00		0
MR-4-03-2120	15	14:33:56	3527	11:10:12	-0.73761	0	15	14:33:56	3527	11:10:12	-0.73755	0	0	0:00:00	0	0:00:00	0.00006	0
MR-4-03-2341	5	15:07:00	65	10:16:01			5	15:07:00	65	10:16:01			0	0:00:00	0	0:00:00		
MR-4-03-3144	84	5:28:24	1013	6:25:16	0.66800	0	84	5:28:24	1013	6:25:16	0.66805	0	0	0:00:00	0	0:00:00	0.00005	0
MR-4-03-3145	179	16:21:13	3527	11:10:12	-3.80271	-2	179	16:21:13	3527	11:10:12	-3.80265	-2	0	0:00:00	0	0:00:00	0.00006	0
MR-4-03-3341	1	13:14:00	4605	10:06:45			1	13:14:00	4608	10:07:50			0	0:00:00	3	0:01:05		
MR-4-03-3342	14	13:02:21	4605	10:06:45	-0.64948	0	14	13:02:21	4608	10:07:50	-0.64445	0	0	0:00:00	3	0:01:05	0.00503	0
MR-4-03-3343	8	48:58:00	103	24:34:54	-2.74336	-2	8	48:58:00	103	24:34:54	-2.77735	-2	0	0:00:00	0	0:00:00	-0.03399	0
MR-4-03-3345			103	24:34:54					103	24:34:54					0	0:00:00		
MR-4-03-3550	52	15:29:20	4540	10:06:37	-2.28590	-2	37	12:20:10	4543	10:07:43	-0.79145	0	-15	-3:09:10	3	0:01:06	1.49445	2
MR-4-04-2100	407	71.25%	50193	58.97%	5.01576	0	407	71.25%	50346	58.92%	5	0	0	0.00%	153	-0.05%	-0.01576	0
MR-4-04-2216	8	100.00%	434	99.31%	0.23383	0	8	100.00%	434	99.31%	5	0	0	0.00%	0	0.00%	4.76617	0
MR-4-04-2217	2	100.00%	235	99.57%			2	100.00%	235	99.57%			0	0.00%	0	0.00%		
MR-4-04-2341	10	70.00%	196	70.41%	0.28265	0	10	70.00%	196	70.41%	0.28265	0	0	0.00%	0	0.00%	0.00000	0
MR-4-04-3140	4213	58.46%	50193	58.97%	-0.63360	0	4213	58.46%	50346	58.92%	-0.57005	0	0	0.00%	153	-0.05%	0.06355	0
MR-4-04-3216	1	100.00%	434	99.31%			1	100.00%	434	99.31%			0	0.00%	0	0.00%		
MR-4-04-3217	148	100.00%	235	99.57%	0.62296	0	148	100.00%	235	99.57%	5	0	0	0.00%	0	0.00%	4.37704	0
MR-4-04-3341	20	75.00%	50389	59.02%	1.72274	0	20	75.00%	50542	58.97%	1.72715	0	0	0.00%	153	-0.05%	0.00441	0

Table D-91 – MR-4 Trouble Duration Intervals – May 2003

May 2003	DCI calculation						Verizon C2C Reported Results						Discrepancy					
	CLEC		Retail		Stat. Score	Comp liance	CLEC		Retail		Stat. Score	Comp liance	CLEC		Retail		Stat. Score	Comp liance
SubMetric ID	#	MTTR	#	MTTR			#	MTTR	#	MTTR			#	MTTR	#	MTTR		
MR-4-04-3342	83	81.93%	50389	59.02%	4.24031	0	83	81.93%	50542	58.97%	4.61935	0	0	0.00%	153	-0.05%	0.37904	0
MR-4-04-3343	11	27.27%	273	38.10%	-0.38473	0	11	27.27%	273	53.85%	-1.42665	-1	0	0.00%	0	15.75%	-1.04192	-1
MR-4-04-3345			273	38.10%					273	53.85%					0	15.75%		
MR-4-04-3550	1058	76.94%	50193	58.97%	11.75544	0	1058	76.94%	50346	58.92%	5	0	0	0.00%	153	-0.05%	-6.75544	0
MR-4-04-5000			9	100.00%					9	100.00%					0	0.00%		
MR-4-05-5000			9	11.11%					9	11.11%					0	0.00%		
MR-4-06-2100	283	75.62%	32535	83.57%	3.49146	0	283	75.62%	32641	83.61%	3.50705	0	0	0.00%	106	0.03%	0.01559	0
MR-4-06-2216	7	28.57%	434	45.39%	1.28496	0	7	28.57%	434	45.39%	1.28495	0	0	0.00%	0	0.00%	-0.00001	0
MR-4-06-2217	2	0.00%	235	40.43%			2	0.00%	235	40.43%			0	0.00%	0	0.00%		
MR-4-06-3140	3056	85.54%	32535	83.57%	-2.81907	-2	3056	85.54%	32641	83.61%	-2.77445	-2	0	0.00%	106	0.03%	0.04462	0
MR-4-06-3216	1	0.00%	434	45.39%			1	0.00%	434	45.39%			0	0.00%	0	0.00%		
MR-4-06-3217	138	38.41%	235	40.43%	0.49293	0	138	38.41%	235	40.43%	0.49295	0	0	0.00%	0	0.00%	0.00002	0
MR-4-06-5000			9	0.00%					9	0.00%					0	0.00%		
MR-4-07-2100	283	55.48%	32535	69.48%	5.09177	0	283	55.48%	32641	69.53%	5	0	0	0.00%	106	0.05%	-0.09177	0
MR-4-07-2341	6	66.67%	142	54.23%	-0.16564	0	6	66.67%	142	54.23%	-0.16555	0	0	0.00%	0	0.00%	0.00009	0
MR-4-07-3140	3056	74.35%	32535	69.48%	-5.58904	-2	3056	74.35%	32641	69.53%	-5	-2	0	0.00%	106	0.05%	0.58904	0
MR-4-07-3341	16	75.00%	32677	69.41%	-0.17772	0	16	75.00%	32783	69.46%	-0.17295	0	0	0.00%	106	0.05%	0.00477	0
MR-4-07-3342	72	66.67%	32677	69.41%	0.64210	0	72	66.67%	32783	69.46%	0.65205	0	0	0.00%	106	0.05%	0.00995	0
MR-4-07-3343	10	70.00%	267	87.27%	1.85955	0	10	70.00%	267	73.41%	0.63495	0	0	0.00%	0	-13.86%	-1.22460	0
MR-4-07-3345			267	87.27%					267	73.41%					0	-13.86%		
MR-4-07-3550	753	62.15%	32535	69.48%	4.27231	0	753	62.15%	32641	69.53%	4.30275	0	0	0.00%	106	0.05%	0.03044	0
MR-4-07-5000			9	0.00%					9	0.00%					0	0.00%		
MR-4-08-2110	138	10.14%	4521	13.43%	1.26421	0	138	10.14%	4521	13.43%	1.26425	0	0	0.00%	0	0.00%	0.00004	0
MR-4-08-2120	145	47.59%	28014	43.49%	-0.90918	-1	145	47.59%	28014	43.49%	-0.90905	-1	0	0.00%	0	0.00%	0.00013	0
MR-4-08-2216	7	0.00%	434	0.69%	0.21898	0	7	0.00%	434	0.69%	5	0	0	0.00%	0	0.00%	4.78102	0
MR-4-08-2217	2	0.00%	235	0.43%			2	0.00%	235	0.43%			0	0.00%	0	0.00%		
MR-4-08-2341	6	33.33%	142	31.69%	0.30855	0	6	33.33%	142	31.69%	0.30855	0	0	0.00%	0	0.00%	0.00000	0
MR-4-08-3144	556	9.89%	4521	13.43%	2.47215	0	556	9.89%	4521	13.43%	2.47215	0	0	0.00%	0	0.00%	0.00000	0
MR-4-08-3145	2500	47.60%	28014	43.49%	-3.93949	-2	2500	47.60%	28014	43.49%	-3.93935	-2	0	0.00%	0	0.00%	0.00014	0
MR-4-08-3216	1	0.00%	434	0.69%			1	0.00%	434	0.69%			0	0.00%	0	0.00%		
MR-4-08-3217	138	0.00%	235	0.43%	0.60955	0	138	0.00%	235	0.43%	5	0	0	0.00%	0	0.00%	4.39045	0
MR-4-08-3341	16	18.75%	32677	39.28%	2.03264	0	16	18.75%	32783	39.33%	2.03675	0	0	0.00%	106	0.05%	0.00411	0
MR-4-08-3342	72	19.44%	32677	39.28%	3.73860	0	72	19.44%	32783	39.33%	3.74745	0	0	0.00%	106	0.05%	0.00885	0
MR-4-08-3343	10	70.00%	267	62.55%	-0.11706	0	10	70.00%	267	46.82%	-1.11855	-1	0	0.00%	0	-15.73%	-1.00149	-1
MR-4-08-3345			267	62.55%					267	46.82%					0	-15.73%		
MR-4-08-3550	753	23.51%	32535	39.31%	8.77860	0	753	23.51%	32641	39.36%	5	0	0	0.00%	106	0.05%	-3.77860	0
MR-4-08-5000			9	0.00%					9	0.00%					0	0.00%		

Table D-92 – MR-4 Trouble Duration Intervals – June 2003

June 2003	DCI calculation						Verizon C2C Reported Results						Discrepancy					
	CLEC		Retail		Stat.	Comp	CLEC		Retail		Stat.	Comp	CLEC		Retail		Stat.	Comp
SubMetric ID	#	MTTR	#	MTTR	Score	liance	#	MTTR	#	MTTR	Score	liance	#	MTTR	#	MTTR	Score	liance
MR-4-01-2100	472	23:27:48	62250	35:38:08	8.17780	0	472	23:27:48	62421	35:39:36	8.18655	0	0	0:00:00	171	0:01:28	0.00875	0
MR-4-01-2216	9	7:35:07	475	5:04:19	-1.67649	-2	9	7:35:07	475	5:04:19	-1.70075	-2	0	0:00:00	0	0:00:00	-0.02426	0
MR-4-01-2217			231	4:38:49					231	4:38:49					0	0:00:00		
MR-4-01-2341	5	23:46:12	215	25:15:03			5	23:46:12	215	25:15:03			0	0:00:00	0	0:00:00		
MR-4-01-3140	5348	30:20:31	62250	35:38:08	11.53177	0	5348	30:20:31	62421	35:39:36	11.57555	0	0	0:00:00	171	0:01:28	0.04378	0
MR-4-01-3216			475	5:04:19					475	5:04:19					0	0:00:00		
MR-4-01-3217	182	5:15:31	231	4:38:49	-1.45105	-1	182	5:15:31	231	4:38:49	-1.45105	-1	0	0:00:00	0	0:00:00	0.00000	0
MR-4-01-3341	16	25:40:53	62465	35:36:00	1.23093	0	16	25:40:53	62636	35:37:28		0	0	0:00:00	171	0:01:28		0
MR-4-01-3550	1167	18:55:06	62250	35:38:08	17.56306	0	1167	18:55:06	62421	35:39:36	17.57265	0	0	0:00:00	171	0:01:28	0.00959	0
MR-4-01-5000	1	0:36:00	2	0:27:30			1	0:36:00	2	0:27:30			0	0:00:00	0	0:00:00		
MR-4-02-2110	217	15:28:09	7009	15:40:06	0.13188	0	217	15:28:09	7009	15:40:06	0.13195	0	0	0:00:00	0	0:00:00	0.00007	0
MR-4-02-2120	230	32:22:54	50646	40:24:34	3.80263	0	230	32:22:54	50646	40:24:34	3.80265	0	0	0:00:00	0	0:00:00	0.00002	0
MR-4-02-2341	5	23:46:12	128	26:45:55			5	23:46:12	128	26:45:55			0	0:00:00	0	0:00:00		
MR-4-02-3144	1012	14:24:48	7009	15:40:06	1.70448	0	1012	14:24:48	7009	15:40:06	1.70455	0	0	0:00:00	0	0:00:00	0.00007	0
MR-4-02-3145	4092	35:07:24	50646	40:24:34	10.18191	0	4092	35:07:24	50646	40:24:34	10.18205	0	0	0:00:00	0	0:00:00	0.00014	0
MR-4-02-3341	16	25:40:53	57783	37:22:42	1.46498	0	16	25:40:53	57951	37:24:01		0	0	0:00:00	168	0:01:19		0
MR-4-02-3342	119	22:07:50	57783	37:22:42	5.20338	0	119	22:07:50	57951	37:24:01	5.20555	0	0	0:00:00	168	0:01:19	0.00217	0
MR-4-02-3343	4	45:41:00	174	38:00:49			4	45:41:00	174	38:00:49			0	0:00:00	0	0:00:00		
MR-4-02-3345			174	38:00:49					174	38:00:49					0	0:00:00		
MR-4-02-3550	1127	18:58:03	57655	37:24:07	19.18985	0	1127	18:58:03	57823	37:25:26	19.19355	0	0	0:00:00	168	0:01:19	0.00370	0
MR-4-03-2110	22	8:51:46	965	7:39:11	-0.19903	0	22	8:51:46	965	7:39:11	-0.19895	0	0	0:00:00	0	0:00:00	0.00008	0
MR-4-03-2120	3	25:02:00	3630	15:01:19			3	25:02:00	3630	15:01:19			0	0:00:00	0	0:00:00		
MR-4-03-2341			87	23:01:22					87	23:01:22					0	0:00:00		
MR-4-03-3144	71	6:50:08	965	7:39:11	0.23591	0	71	6:50:08	965	7:39:11	0.23595	0	0	0:00:00	0	0:00:00	0.00004	0
MR-4-03-3145	173	20:03:56	3630	15:01:19	-2.44443	-2	173	20:03:56	3630	15:01:19	-2.44435	-2	0	0:00:00	0	0:00:00	0.00008	0
MR-4-03-3341			4682	13:39:07					4685	13:39:23					3	0:00:16		
MR-4-03-3342	15	12:22:04	4682	13:39:07	0.18122	0	15	12:22:04	4685	13:39:23		0	0	0:00:00	3	0:00:16		0
MR-4-03-3343	10	13:14:18	180	33:02:44	1.44699	0	10	13:14:18	180	33:02:44		0	0	0:00:00	0	0:00:00		0
MR-4-03-3345	1	4:39:00	180	33:02:44			1	4:39:00	180	33:02:44			0	0:00:00	0	0:00:00		
MR-4-03-3550	40	17:31:51	4595	13:28:28	-0.94474	-1	24	19:25:12	4598	13:28:45	-1.07375	-1	-16	1:53:22	3	0:00:17	-0.12901	0
MR-4-04-2100	472	63.56%	62250	45.79%	7.71947	0	472	63.56%	62421	45.77%	5	0	0	0.00%	171	-0.02%	-2.71947	0
MR-4-04-2216	9	100.00%	475	99.58%	0.19325	0	9	100.00%	475	99.58%	5	0	0	0.00%	0	0.00%	4.80675	0
MR-4-04-2217			231	99.13%					231	99.13%					0	0.00%		
MR-4-04-2341	5	60.00%	215	68.84%			5	60.00%	215	68.84%			0	0.00%	0	0.00%		
MR-4-04-3140	5348	52.69%	62250	45.79%	9.72331	0	5348	52.69%	62421	45.77%	5	0	0	0.00%	171	-0.02%	-4.72331	0
MR-4-04-3216			475	99.58%					475	99.58%					0	0.00%		
MR-4-04-3217	182	99.45%	231	99.13%	0.93857	0	182	99.45%	231	99.13%	0.93855	0	0	0.00%	0	0.00%	-0.00002	0
MR-4-04-3341	16	75.00%	62465	45.87%	2.63110	0	16	75.00%	62636	45.85%	2.63255	0	0	0.00%	171	-0.02%	0.00145	0

Table D-92 – MR-4 Trouble Duration Intervals – June 2003

June 2003	DCI calculation						Verizon C2C Reported Results						Discrepancy					
	CLEC		Retail		Stat. Score	Compliance	CLEC		Retail		Stat. Score	Compliance	CLEC		Retail		Stat. Score	Compliance
SubMetric ID	#	MTTR	#	MTTR			#	MTTR	#	MTTR			#	MTTR	#	MTTR		
MR-4-04-3342	134	70.15%	62465	45.87%	5.63456	0	134	70.15%	62636	45.85%	5	0	0	0.00%	171	-0.02%	-0.63456	0
MR-4-04-3343	14	57.14%	354	37.85%	1.71432	0	14	57.14%	354	48.59%	0.89955	0	0	0.00%	0	10.73%	-0.81477	0
MR-4-04-3345	1	100.00%	354	37.85%			1	100.00%	354	48.59%			0	0.00%	0	10.73%		
MR-4-04-3550	1167	74.98%	62250	45.79%	19.82883	0	1167	74.98%	62421	45.77%	5	0	0	0.00%	171	-0.02%	-14.82883	0
MR-4-04-5000	1	100.00%	2	100.00%			1	100.00%	2	100.00%			0	0.00%	0	0.00%		
MR-4-05-5000	1	0.00%	2	0.00%			1	0.00%	2	0.00%			0	0.00%	0	0.00%		
MR-4-06-2100	319	77.12%	41375	88.13%	6.05546	0												
MR-4-06-2110							134	63.43%	5091	66.29%	0.78715							
MR-4-06-2120							185	87.03%	36284	91.19%	2.02055							
MR-4-06-2216	9	66.67%	475	48.00%	-0.77120	0	9	66.67%	475	48.00%	-0.77115	0	0	0.00%	0	0.00%	0.00005	0
MR-4-06-2217			229	41.92%					229	41.92%					0	0.00%		
MR-4-06-3140	3992	87.07%	41375	88.13%	1.96138	0												
MR-4-06-3144							751	67.78%	5091	66.29%	-0.76065							
MR-4-06-3145							3241	91.55%	36284	91.19%	-0.65105							
MR-4-06-3216			475	48.00%					475	48.00%					0	0.00%		
MR-4-06-3217	175	46.29%	229	41.92%	-0.77505	0	175	46.29%	229	41.92%	-0.77495	0	0	0.00%	0	0.00%	0.00010	0
MR-4-06-5000	1	0.00%	2	0.00%			1	0.00%	2	0.00%			0	0.00%	0	0.00%		
MR-4-07-2100	319	61.13%	41375	76.79%	6.60057	0												
MR-4-07-2110							134	45.52%	5091	42.98%	-0.50145							
MR-4-07-2120							185	72.43%	36284	81.53%	3.11995							
MR-4-07-2341	4	50.00%	139	53.24%			4	50.00%	139	53.24%			0	0.00%	0	0.00%		
MR-4-07-3140	3992	74.15%	41375	76.79%	3.77611	0												
MR-4-07-3144							751	44.74%	5091	42.98%	-0.87105							
MR-4-07-3145							3241	80.96%	36284	81.53%	0.82805							
MR-4-07-3341	16	81.25%	41514	76.71%	-0.07870	0	16	81.25%	41621	76.73%	-0.07675	0	0	0.00%	107	0.02%	0.00195	0
MR-4-07-3342	114	67.54%	41514	76.71%	2.34475	0	114	67.54%	41621	76.73%	2.34975	0	0	0.00%	107	0.02%	0.00500	0
MR-4-07-3343	12	58.33%	348	83.05%	2.33909	0	12	58.33%	348	73.56%	1.46135	0	0	0.00%	0	-9.48%	-0.87774	0
MR-4-07-3345	1	0.00%	348	83.05%			1	0.00%	348	73.56%			0	0.00%	0	-9.48%		
MR-4-07-3550	837	65.11%	41375	76.79%	7.92230	0	837	65.11%	40950	77.29%	5	0	0	0.00%	-425	0.50%	-2.92230	0
MR-4-07-5000	1	0.00%	2	0.00%			1	0.00%	2	0.00%			0	0.00%	0	0.00%		
MR-4-08-2110	134	16.42%	5091	16.32%	0.06373	0	134	16.42%	5091	16.32%	0.06375	0	0	0.00%	0	0.00%	0.00002	0
MR-4-08-2120	185	54.59%	36284	58.31%	1.09542	0	185	54.59%	36284	58.31%	1.09545	0	0	0.00%	0	0.00%	0.00003	0
MR-4-08-2216	9	0.00%	475	0.42%	0.19325	0	9	0.00%	475	0.42%	5	0	0	0.00%	0	0.00%	4.80675	0
MR-4-08-2217			229	0.87%					229	0.87%					0	0.00%		
MR-4-08-2341	4	50.00%	139	27.34%			4	50.00%	139	27.34%			0	0.00%	0	0.00%		
MR-4-08-3144	751	11.58%	5091	16.32%	3.49468	0	751	11.58%	5091	16.32%	3.49475	0	0	0.00%	0	0.00%	0.00007	0
MR-4-08-3145	3241	55.08%	36284	58.31%	3.58102	0	3241	55.08%	36284	58.31%	3.58095	0	0	0.00%	0	0.00%	-0.00007	0
MR-4-08-3216			475	0.42%					475	0.42%					0	0.00%		

Table D-92 – MR-4 Trouble Duration Intervals – June 2003

June 2003	DCI calculation						Verizon C2C Reported Results						Discrepancy					
	CLEC		Retail		Stat. Score	Comp liance	CLEC		Retail		Stat. Score	Comp liance	CLEC		Retail		Stat. Score	Comp liance
SubMetric ID	#	MTTR	#	MTTR			#	MTTR	#	MTTR			#	MTTR	#	MTTR		
MR-4-08-3217	175	0.57%	229	0.87%	0.91124	0	175	0.57%	229	0.87%	0.91125	0	0	0.00%	0	0.00%	0.00001	0
MR-4-08-3341	16	25.00%	41514	53.05%	2.54500	0	16	25.00%	41621	53.06%	2.54585	0	0	0.00%	107	0.01%	0.00085	0
MR-4-08-3342	114	29.82%	41514	53.05%	4.96301	0	114	29.82%	41621	53.06%	5	0	0	0.00%	107	0.01%	0.03699	0
MR-4-08-3343	12	41.67%	348	62.36%	1.72994	0	12	41.67%	348	51.44%	0.95835	0	0	0.00%	0	-10.92%	-0.77159	0
MR-4-08-3345	1	0.00%	348	62.36%			1	0.00%	348	51.44%			0	0.00%	0	-10.92%		
MR-4-08-3550	837	23.89%	41375	53.14%	16.78679	0	837	23.89%	40950	53.62%	5	0	0	0.00%	-425	0.48%	-11.78679	0
MR-4-08-5000	1	0.00%	2	0.00%			1	0.00%	2	0.00%			0	0.00%	0	0.00%		

Table D-92 – MR-4 Trouble Duration Intervals – June 2003

Due to electronic formatting, Tables D-90, D-91 and D-92 have shifted.

The shifting made this page blank in the electronic version.

MR-5: REPEAT TROUBLE REPORTS

Definition

This metric measures the percent of network troubes (disposition codes '03', '04', and '05') which occurred within 30 days of a previous trouble.

POTS Troubles

From the POTS Troubles Data Mart, those trouble records which are not globally excluded, and whose disposition code is '03', '04', or '05', and which meet the criteria for a reportable product disaggregation (see the product code table at the end of the POTS Troubles Data Mart section above), will be counted to obtain the MR-5 denominators, with the exception that records whose CLEC_ID field has the value "RTL9" are excluded from the CLEC results.

Such records flagged as repeat troubles (RPR_RPT_30DAY_IND = 'Y') which are not installation – related troubles (INST_RPT_IND <> 'Y') will also be counted in the MR-5 numerator. For records whose PRODUCT_IND is any of 'DIGITAL', 'LOOP', or 'LOOP XDSL', the original trouble is also required to not have been a misdirect – this filter is applied to the numerator only by requiring a value of "Y" in the NON_MISIDRECT_IND field.

Specials Troubles

From the Specials and Trunks Troubles Data Mart, those trouble records which are not globally excluded and have a value of 'FAC' (Facility) or 'CO' (Central Office) in the TROUBLE_CD field, and meet the criteria for a reportable product disaggregation (see the product code table at the end of the POTS Troubles Data Mart section above), will be counted to obtain the MR-5 denominators, with the exception that records whose CLEC_ID field has the value "RTL9" are excluded from the CLEC results.

Such records flagged as repeat troubles (RPR_RPT_30DAY_IND = 'Y') which are not installation – related troubles (INST_RPT_IND <> 'Y') will also be counted in the MR-5 numerator.

Sub-Metrics

The only sub-metric is MR-5-01, and its calculation is completely described by the process indicated above.

DCI Recalculation Process

DCI developed a SAS macro to calculate metric results based on a clear specification of the metrics definitions. DCI then implemented the information described in the pages immediately above into three SAS macro invocations, one for POTS troubles not filtering original trouble misdirects, one for POTS troubles filtering original trouble misdirects, and one for Specials and Trunks troubles. DCI then used these results of running this macro to obtain its metric

numerators, denominators, and results. DCI also automatically extracted Verizon PA's C2C report results to obtain Verizon PA's calculated numerators, denominators, and results. DCI's recalculation program then combines and compares DCI's results and Verizon PA's C2C reported results in an Excel spreadsheet.

DCI presents below the SAS macro invocation which is completely sufficient to calculate all the MR-5 results for POTS troubles not requiring the fitering out of original trouble misdirects:

SAS Macro Invocation 8: POTS Troubles MR-5 Calculation – Not Excluding Original Trouble Misdirects:

```
%pm_mr(  tbl=mr_dm_trbl_gen, yearmm=&report_month, metric=MR-5
        , glblcond=exclude_by_fst_ind in(0,.)
                        and corp_tel_ind eq 'N'
                        and admin_repeat_flag in('N', ' ')
                        and fGTE_ind eq 'N'
                        and report_category eq '1'
                        and service_level_cd eq 'P'
        , submetrics=01
        , sbpm_typ=Count
        , eligvars=MR_5_01_elig
        , valuvars= repeat
        , valucond= rpr_rpt_30day_ind eq 'Y' and inst_rpt_ind ne "Y"
        , eligcond= disposition_cd in('03','04','05') and clec_id ne 'RTL9' and test_acc_ind eq 'N'
        , eligcmpr= disposition_cd in('03','04','05')
        , sm_catgs=2100:3140:3343:3345
        , sm_conds=  product_ind eq 'SIMPLE' and provider_ind eq 'R' and res_bus_pub_ind in('R','B')
                        :product_ind eq 'PLATFORM' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
                        :product_ind eq 'LINESHARE' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
                        :product_ind eq 'LINESPLITTING' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
        , sm_cmprs=  product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
                        :product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
                        :product_ind eq 'LINESHARE' and provider_ind eq 'V' and res_bus_pub_ind in('R','B')
                        :product_ind eq 'LINESHARE' and provider_ind eq 'V' and res_bus_pub_ind in('R','B')
        )
```

DCI presents below the SAS macro invocation which is completely sufficient to calculate all the MR-5 results for POTS troubles requiring the fitering out of original trouble misdirects:

SAS Macro Invocation 9: POTS Troubles MR-5 Calculation – Excluding Original Trouble Misdirects:

```
%pm_mr(  tbl=mr_dm_trbl_gen, yearmm=&report_month, metric=MR-5
        , glblcond=exclude_by_fst_ind in(0,.)
                        and corp_tel_ind eq 'N'
                        and admin_repeat_flag in('N', ' ')
                        and fGTE_ind eq 'N'
                        and report_category eq '1'
                        and service_level_cd eq 'P'
        , submetrics=01
        , sbpm_typ=Count
        , eligvars=MR_5_01_elig
        , valuvars= repeat
        , valucond= rpr_rpt_30day_ind eq 'Y' and inst_rpt_ind ne "Y" and non_misdirect_ind eq 'Y'
        , eligcond= disposition_cd in('03','04','05') and clec_id ne 'RTL9' and test_acc_ind eq 'N'
        , eligcmpr= disposition_cd in('03','04','05')
        , sm_catgs=2341:3341:3342:3550
        , sm_conds=  product_ind eq 'DIGITAL' and provider_ind eq 'R' and res_bus_pub_ind in('R','B')
                        :product_ind eq 'DIGITAL' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
                        :product_ind eq 'LOOP XDSL' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
                        :product_ind eq 'LOOP' and provider_ind eq 'U' and res_bus_pub_ind in('R','B')
        , sm_cmprs=  product_ind eq 'DIGITAL' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
                        :product_ind NE 'XXXXXX' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
                        :product_ind NE 'XXXXXX' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
                        :product_ind eq 'SIMPLE' and provider_ind eq 'L' and res_bus_pub_ind in('R','B')
        )
```

DCI presents below the SAS macro invocation which is completely sufficient to calculate all the MR-5 results for Specials and Trunks troubles:

SAS Macro Invocation 10: Trunks Troubles MR-4 Calculation:

```
%pm_mr(  tbl=mr_dm_trbl_spc, yearmm=&report_month, metric=MR-5
         , glblcond=exclude_by_fst_ind in(0,.)
                         and corp_tel_ind eq 'N'
                         and admin_repeat_flag in('N', ' ')
                         and fGTE_ind eq 'N'
                         and report_category eq '1'
                         and access_excl_ind in('B','N')
                         and trouble_cd in('FAC','CO')

         , submetrics=01
         , sbpm_typ=Count
         , eligvars=MR_5_01_elig
         , valuvars= repeat
         , valucond= rpr_rpt_30day_ind eq 'Y' and inst_rpt_30day_ind ne "Y"
         , eligcond= 1
         , eligcmpr= 1
         , sm_catgs=2200:3200:5000
         , sm_conds=  service_level_cd eq 'S' and test_acc_ind in('N')
                             and provider_ind eq 'R' and clec_id ne 'RTL9'
                        :service_level_cd eq 'S' and test_acc_ind in('N')
                            and provider_ind eq 'U' and clec_id ne 'RTL9'
                        :service_level_cd eq 'M' and test_acc_ind in('N','V')  and provider_ind eq 'U'
         , sm_cmprs=  service_level_cd eq 'S' and test_acc_ind in('N')      and provider_ind eq 'L'
                        :service_level_cd eq 'S' and test_acc_ind in('N')      and provider_ind eq 'L'
                        :service_level_cd eq 'M' and test_acc_ind in('N','A')  and provider_ind eq 'U'
         )
```

The following 3 tables provide the results of DCI's MR-5-01 metric results recalculation and compare Verizon PA's C2C reported results with DCI's results for the month of April 2003:

Table D-93 – MR-5-01 % Repeat Trouble Reports – April 2003 – DCI Calculations

MR-5-01 DCI April 2003	CLEC			Retail			Stat. Score	Compliance Score
	Num	Denom	Result	Num	Denom	Result		
MR-5-01-2100	71	479	14.82%	6779	45432	14.92%	0.11014	0
MR-5-01-2200	0	6	0.00%	117	598	19.57%	1.20207	0
MR-5-01-2341	1	6	16.67%	52	246	21.14%	0.71073	0
MR-5-01-3140	588	3664	16.05%	6779	45432	14.92%	-1.80272	-2
MR-5-01-3200	26	124	20.97%	117	598	19.57%	-0.24821	0
MR-5-01-3341	4	23	17.39%	6754	45678	14.79%	-0.12877	0
MR-5-01-3342	7	95	7.37%	6754	45678	14.79%	2.35737	0
MR-5-01-3343	2	9	22.22%	118	298	39.60%	1.43838	0
MR-5-01-3345				118	298	39.60%		
MR-5-01-3550	147	1005	14.63%	6702	45432	14.75%	0.14547	0
MR-5-01-5000								

Table D-94 – MR-5-01 % Repeat Trouble Reports – April 2003 – C2C Reported Results

MR-5-01 C2C April 2003	CLEC			Retail			Stat. Score	Compliance Score
	Num	Denom	Result	Num	Denom	Result		
MR-5-01-2100	71	479	14.82%	6801	45570	14.92%	0.11205	0
MR-5-01-2200	0	6	0.00%	117	598	19.57%	5	0
MR-5-01-2341	1	6	16.67%	52	246	21.14%	0.71075	0
MR-5-01-3140	588	3664	16.05%	6801	45570	14.92%	-1.79775	-2
MR-5-01-3200	26	124	20.97%	117	598	19.57%	-0.24815	0
MR-5-01-3341	4	23	17.39%	6853	45816	14.96%	-0.10505	0
MR-5-01-3342	7	95	7.37%	6853	45816	14.96%	2.40035	0
MR-5-01-3343	2	9	22.22%	118	298	39.60%	1.43835	0
MR-5-01-3345				118	298	39.60%		
MR-5-01-3550	147	1005	14.63%	6801	45570	14.92%	0.29745	0
MR-5-01-5000								

Table D-95 – MR-5-01 % Repeat Trouble Reports – April 2003 – Discrepancies

MR-5-01 discrepancy April 2003	CLEC			Retail			Stat. Score	Compliance Score
	Num	Denom	Result	Num	Denom	Result		
MR-5-01-2100	0	0	0.00%	22	138	0.00%	0.00191	0
MR-5-01-2200	0	0	0.00%	0	0	0.00%	3.79793	0
MR-5-01-2341	0	0	0.00%	0	0	0.00%	0.00002	0
MR-5-01-3140	0	0	0.00%	22	138	0.00%	0.00497	0
MR-5-01-3200	0	0	0.00%	0	0	0.00%	0.00006	0
MR-5-01-3341	0	0	0.00%	99	138	0.17%	0.02372	0
MR-5-01-3342	0	0	0.00%	99	138	0.17%	0.04298	0
MR-5-01-3343	0	0	0.00%	0	0	0.00%	-0.00003	0
MR-5-01-3345				0	0	0.00%		
MR-5-01-3550	0	0	0.00%	99	138	0.17%	0.15198	0
MR-5-01-5000								

The following 3 tables provide the results of DCI's MR-5-01 metric results recalculation and compare Verizon PA's C2C reported results with DCI's results for the month of May 2003:

Table D-96 – MR-5-01 % Repeat Trouble Reports – May 2003 – DCI Calculations

MR-5-01 DCI May 2003	CLEC			Retail			Stat. Score	Compliance Score
	Num	Denom	Result	Num	Denom	Result		
MR-5-01-2100	51	407	12.53%	6984	50193	13.91%	0.87163	0
MR-5-01-2200	2	10	20.00%	141	669	21.08%	0.40499	0
MR-5-01-2341	1	10	10.00%	37	196	18.88%	1.15693	0
MR-5-01-3140	621	4213	14.74%	6984	50193	13.91%	-1.45641	-1
MR-5-01-3200	18	153	11.76%	141	669	21.08%	2.86684	0
MR-5-01-3341	1	20	5.00%	6944	50389	13.78%	1.63007	0
MR-5-01-3342	10	83	12.05%	6944	50389	13.78%	0.59220	0
MR-5-01-3343	3	11	27.27%	95	273	34.80%	0.82524	0
MR-5-01-3345				95	273	34.80%		
MR-5-01-3550	165	1058	15.60%	6907	50193	13.76%	-1.64993	-2
MR-5-01-5000								

Table D-97 – MR-5-01 % Repeat Trouble Reports – May 2003 – C2C Reported Results

MR-5-01 C2C May 2003	CLEC			Retail			Stat. Score	Compliance Score
	Num	Denom	Result	Num	Denom	Result		
MR-5-01-2100	51	407	12.53%	7004	50346	13.91%	0.87015	0
MR-5-01-2200	2	10	20.00%	141	669	21.08%	0.40495	0
MR-5-01-2341	1	10	10.00%	38	196	19.39%	1.19375	0
MR-5-01-3140	621	4213	14.74%	7004	50346	13.91%	-1.46115	-1
MR-5-01-3200	18	153	11.76%	141	669	21.08%	2.86685	0
MR-5-01-3341	1	20	5.00%	7042	50542	13.93%	1.64725	0
MR-5-01-3342	10	83	12.05%	7042	50542	13.93%	0.63155	0
MR-5-01-3343	3	11	27.27%	95	273	34.80%	0.82525	0
MR-5-01-3345				95	273	34.80%		
MR-5-01-3550	165	1058	15.60%	7004	50346	13.91%	-1.50695	-1
MR-5-01-5000				2	9	22.22%		

Table D-98 – MR-5-01 % Repeat Trouble Reports – May 2003 – Discrepancies

MR-5-01 discrepancy May 2003	CLEC			Retail			Stat. Score	Compliance Score
	Num	Denom	Result	Num	Denom	Result		
MR-5-01-2100	0	0	0.00%	20	153	0.00%	-0.00148	0
MR-5-01-2200	0	0	0.00%	0	0	0.00%	-0.00004	0
MR-5-01-2341	0	0	0.00%	1	0	0.51%	0.03682	0
MR-5-01-3140	0	0	0.00%	20	153	0.00%	-0.00474	0
MR-5-01-3200	0	0	0.00%	0	0	0.00%	0.00001	0
MR-5-01-3341	0	0	0.00%	98	153	0.15%	0.01718	0
MR-5-01-3342	0	0	0.00%	98	153	0.15%	0.03935	0
MR-5-01-3343	0	0	0.00%	0	0	0.00%	0.00001	0
MR-5-01-3345				0	0	0.00%		
MR-5-01-3550	0	0	0.00%	97	153	0.15%	0.14298	1
MR-5-01-5000								

The following 3 tables provide the results of DCI's MR-5-01 metric results recalculation and compare Verizon PA's C2C reported results with DCI's results for the month of June 2003:

Table D-99 – MR-5-01 % Repeat Trouble Reports – June 2003 – DCI Calculations

MR-5-01 DCI June 2003	CLEC			Retail			Stat. Score	Compliance Score
	Num	Denom	Result	Num	Denom	Result		
MR-5-01-2100	70	472	14.83%	9928	62250	15.95%	0.71745	0
MR-5-01-2200	1	9	11.11%	153	706	21.67%	1.22051	0
MR-5-01-2341	3	5	60.00%	31	215	14.42%		
MR-5-01-3140	846	5348	15.82%	9928	62250	15.95%	0.26447	0
MR-5-01-3200	39	182	21.43%	153	706	21.67%	0.16083	0
MR-5-01-3341	0	16	0.00%	9850	62465	15.77%	1.73048	0
MR-5-01-3342	20	134	14.93%	9850	62465	15.77%	0.36275	0
MR-5-01-3343	2	14	14.29%	100	354	28.25%	1.52166	0
MR-5-01-3345	0	1	0.00%	100	354	28.25%		
MR-5-01-3550	149	1167	12.77%	9819	62250	15.77%	2.90498	0
MR-5-01-5000	0	1	0.00%	0	1	0.00%		

Table D-100 – MR-5-01 % Repeat Trouble Reports – June 2003 – C2C Reported Results

| MR-5-01 C2C | CLEC | | | Retail | | | Stat. | Compliance |
June 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-5-01-2100	70	472	14.83%	9956	62421	15.95%	0.71815	0
MR-5-01-2200	1	9	11.11%	153	706	21.67%	1.22055	0
MR-5-01-2341	3	5	60.00%	31	215	14.42%		
MR-5-01-3140	846	5348	15.82%	9956	62421	15.95%	0.26675	0
MR-5-01-3200	39	182	21.43%	153	706	21.67%	0.16085	0
MR-5-01-3341	0	16	0.00%	9987	62636	15.94%	5	0
MR-5-01-3342	20	134	14.93%	9987	62636	15.94%	0.41795	0
MR-5-01-3343	2	14	14.29%	100	354	28.25%	1.52165	0
MR-5-01-3345	0	1	0.00%	100	354	28.25%		
MR-5-01-3550	149	1167	12.77%	9956	62421	15.95%	3.06395	0
MR-5-01-5000	0	1	0.00%	0	2	0.00%		

Table D-101 – MR-5-01 % Repeat Trouble Reports – June 2003 – Discrepancies

| MR-5-01 discrepancy | CLEC | | | Retail | | | Stat. | Compliance |
June 2003	Num	Denom	Result	Num	Denom	Result	Score	Score
MR-5-01-2100	0	0	0.00%	28	171	0.00%	0.00070	0
MR-5-01-2200	0	0	0.00%	0	0	0.00%	0.00004	0
MR-5-01-2341	0	0	0.00%	0	0	0.00%		
MR-5-01-3140	0	0	0.00%	28	171	0.00%	0.00228	0
MR-5-01-3200	0	0	0.00%	0	0	0.00%	0.00002	0
MR-5-01-3341	0	0	0.00%	137	171	0.18%	3.26952	0
MR-5-01-3342	0	0	0.00%	137	171	0.18%	0.05520	0
MR-5-01-3343	0	0	0.00%	0	0	0.00%	-0.00001	0
MR-5-01-3345	0	0	0.00%	0	0	0.00%		
MR-5-01-3550	0	0	0.00%	137	171	0.18%	0.15897	0
MR-5-01-5000	0	0	0.00%	0	1	0.00%		

C – FINDINGS

MR-1 FINDINGS

1. **Verizon PA Is Performing An Entitlement Time Calculation In The MR-1 Response Time OSS Maintenance Interface Metric That Is Not Clear From The C2C Guidelines.**

The performance standard for MR-1 is Parity with Retail plus not more that four (4) seconds. Four (4) second difference allows for variations in functionality.

However, in MR-1, Verizon PA makes an adjustment to certain transactions that involve a security login to the LMOS. This is something that is not necessary on the retail side (the parity measurement). DCI's interpretation of the C2C Guidelines is that difference would have already been allowed for in the "Four second difference to allow for variations in functionality."   DCI's review of the C2C Guidelines did not find any clear allowance for such a calculation.

2. **MR-1 Formulas Provided By Verizon PA Failed To Provide Results Against The Provided Data Set, Requiring DCI To Make Changes To SQL Statements To Generate Results.**

The formulas, as supplied by Verizon PA, would not yield results on the supplied data set; therefore, the following changes were made by DCI to SQL statements in the formulas associated with this metric:[18]

- All instances of MONTH_ID and TB_MONTH_DIMENSION were removed from the query due to failure by Verizon PA to provide an associated table.

- All instances of REPORT_PERIOD set to "200304", "200305", or "200306" for April, May, or June 2003 results, respectively.

- To yield the CLEC aggregate value, all instances of CLEC_ID were removed from the query.

3. **Discrepancies In MR-1 Numerators Existed Between CLEC And Verizon PA Metric Algorithms.**

In CLEC algorithms for submetrics MR-1-01-2000, MR-1-02-2000, MR-1-03-2000, MR-1-04-2000, MR-1-05-2000, and MR-1-06-2000, two values (ENTITLE_TIME4 and ENTITLE_TIME5) are summed as part of the numerator. These values are not summed in Verizon PA algorithms for respective submetrics.

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[18] Verizon PA Carrier-to-Carrier Metric Algorithms, PA May 2003. (C-043: Metric Algorithms-May2003-PA-MR_07-31-03_03-59-28pm_draft.pdf, Page 2)

For MR-1-01-2000 between April 2003 and June 2003, 83 of 99 records, or 83% had zero values for either ENTITLE_TIME4 and ENTITLE_TIME5, whereas the remaining records had non-zero values. An analysis of ENTITLE_TIME4 and ENTITLE_TIME5 for CLEC results in April 2003 is shown Table 103.

Table D-102 – Entitle Time Analysis - MR-1-01-2000 - Average Response Time (Create Trouble) - April 2003

Verizon				5.45				
				CLEC Individual				
				RESPONSE_TIME			**ENTITLE 4-5 /**	**RESPONSE_TIME**
STATE_CODE	**CLEC_ID**	**REPORT_PERIOD**	**MR101**	**Sum**	**ENTITLE_TIME4**	**ENTITLE_TIME5**	**RESPONSE**	**Count**
PN		200304	2.11	48.456	0	0	0.00%	23
PN		200304	2.35	7.047	0	0	0.00%	3
PN		200304	2.14	6.421	0	0	0.00%	3
PN		200304	2.17	54.248	0	0	0.00%	25
PN		200304	2.16	28.13	0	0	0.00%	13
PN		200304	2.11	42.248	0	0	0.00%	20
PN		200304	2.28	127.854	0	0	0.00%	56
PN		200304	2.29	98.314	0	0	0.00%	43
PN		200304	2.29	11.429	0	0	0.00%	5
PN		200304	2.21	430.794	7.18	10.11	**4.01%**	203
PN		200304	2.03	79.297	0	0	0.00%	39
PN		200304	2.26	259.785	1.71	3.11	**1.86%**	117
PN		200304	2.23	13.381	0	0	0.00%	6
PN		200304	2.15	4.302	0	0	0.00%	2
PN		200304	2.16	15.104	0	0	0.00%	7
PN		200304	2.19	10.933	0	0	0.00%	5
PN		200304	1.95	1.945	0	0	0.00%	1
PN		200304	2.49	1113.856	5.08	5.42	**0.94%**	451
PN		200304	2.39	4479.314	20.69	27.44	**1.07%**	1894
PN		200304	2.36	216.463	1.99	3.11	**2.36%**	94
PN		200304	2.42	36.287	0	0	0.00%	15
PN		200304	2.73	2.732	0	0	0.00%	1
PN		200304	2.16	12.942	0	0	0.00%	6
PN		200304	2.16	2.155	0	0	0.00%	1
PN		200304	2.53	50.684	0	0	0.00%	20
PN		200304	2.22	62.123	0	0	0.00%	28
PN		200304	2.13	25.605	0	0	0.00%	12
PN		200304	1.87	1.87	0	0	0.00%	1
PN		200304	2.30	4.593	0	0	0.00%	2

4. **Review Values For MR-1-01 Average Response Time (Create Trouble) Were Identical To Reported Values For April 2003, But Varied Slightly For May 2003 And June 2003.**

MR-1-01-2000 review results for April, May, and June of 2003 are shown in Tables D-103, D-104, and D-105. The slight variation between review and reported values in May 2003 and June 2003 is due either to a failure by Verizon PA to provide DCI correct algorithms or correct data. Due to the small degree of deviation in the results, the more likely cause is incorrect or incomplete data provision.

Table D-103 – MR-1-01-2000 - April 2003 Results

	Reported Value	Review Value	Difference
Verizon	5.45	5.45	0.00
CLEC	2.37	2.37	0.00
Difference	-3.08	-3.08	

Table D-104 – MR-1-01-2000 - May 2003 Results

	Reported Value	Review Value	Difference
Verizon	5.32	5.28	-0.04
CLEC	2.52	2.43	-0.09
Difference	-2.80	-2.85	

Table D-105 – MR-1-01-2000 - June 2003 Results

	Reported Value	Review Value	Difference
Verizon	6.05	5.96	-0.09
CLEC	2.70	2.58	-0.12
Difference	-3.35	-3.38	

Verizon PA personnel have subsequently indicated that they had provided an incorrect data set for our analysis. They subsequently provided a revised data set; however, DCI was unable to incorporate this data set into our analysis due to time constraints.

5. Review Values For MR-1-02 Average Response Time (Status Trouble) Varied Slightly For The CLEC Aggregate Metric And Varied Significantly For The Verizon PA Metric.

MR-1-02-2000 review results for April, May, and June of 2003 are shown on Tables D-106, D-107, and D-108. The slight variation between review and reported CLEC aggregate values is due either to a failure by Verizon PA to provide DCI correct algorithms or correct data. Due to the small degree of deviation in the results, the more likely cause is incorrect or incomplete data provision.

The significant variation between review and reported Verizon PA values is due either to a failure by Verizon PA to provide DCI correct algorithms or correct data.

Table D-106 –MR-1-02-2000 - April 2003 Results

	Reported Value	Review Value	Difference
Verizon	2.16	3.17	1.01
CLEC	2.22	2.22	0.00
Difference	0.06	-0.95	

Table D-107 – MR-1-02-2000 - May 2003 Results

	Reported Value	Review Value	Difference
Verizon	2.05	3.00	0.95
CLEC	2.52	2.66	0.14
Difference	0.47	-0.34	

Table D-108 – MR-1-02-2000 - June 2003 Results

	Reported Value	Review Value	Difference
Verizon	1.93	3.45	1.52
CLEC	2.61	2.63	0.02
Difference	0.68	-0.82	

Verizon PA personnel have subsequently indicated that they had provided an incorrect data set for our analysis. They subsequently provided a revised data set; however, DCI was unable to incorporate this data set into our analysis due to time constraints.

6. Review Values For MR-1-03 Average Response Time (Modify Trouble) Were Identical To Reported Values For April 2003, But Varied Slightly For May 2003 And June 2003.

MR-1-03-2000 review results for April, May, and June of 2003 are shown on Tables D-109, D-110, and D-111. The slight variation between review and reported values in May 2003 and June 2003 is due either to a failure by Verizon PA to provide DCI correct algorithms or correct data. Due to the small degree of deviation in the results, the more likely cause is incorrect or incomplete data provision.

Table D-109 – MR-1-03-2000 - April 2003 Results

	Reported Value	Review Value	Difference
Verizon	5.40	5.40	0.00
CLEC	2.17	2.17	0.00
Difference	-3.23	-3.23	

Table D-110 – MR-1-03-2000 -May 2003 Results

	Reported Value	Review Value	Difference
Verizon	5.28	5.21	-0.07
CLEC	3.16	2.91	-0.25
Difference	-2.12	-2.29	

Table D-111 – MR-1-03-2000 - June 2003 Results

	Reported Value	Review Value	Difference
Verizon	6.00	5.90	-0.10
CLEC	3.29	3.25	-0.04
Difference	-2.71	-2.65	

Verizon PA personnel have subsequently indicated that they had provided an incorrect data set for our analysis. They subsequently provided a revised data set; however, DCI was unable to incorporate this data set into our analysis due to time constraints.

7. Review Values For MR-1-04 Average Response Time (Request Cancellation Of Trouble) Were Identical To Reported Values For April 2003, But Varied Slightly For May 2003 And June 2003.

MR-1-04-2000 review results for April, May, and June of 2003 are shown on Tables D-112, D-113, and D-114. The slight variation between review and reported values in May 2003 and June 2003 is due either to a failure by Verizon PA to provide DCI correct algorithms or correct data. Due to the small degree of deviation in the results, the more likely cause is incorrect or incomplete data provision.

Table D-112 – MR-1-04-2000 - April 2003 Results

	Reported Value	Review Audit	Difference
Verizon	6.34	6.34	0.00
CLEC	0.85	0.85	0.00
Difference	-5.49	-5.49	

Table D-113 – MR-1-04-2000 - May 2003 Results

	Reported Value	Review Value	Difference
Verizon	6.23	6.18	-0.05
CLEC	1.37	1.26	-0.11
Difference	-4.86	-4.91	

Table D-114 – MR-1-04-2000 - June 2003 Results

	Reported Value	Review Value	Difference
Verizon	7.10	6.98	-0.12
CLEC	0.67	0.68	0.01
Difference	-6.43	-6.30	

Verizon PA personnel have subsequently indicated that they had provided an incorrect data set for our analysis. They subsequently provided a revised data set; however, DCI was unable to incorporate this data set into our analysis due to time constraints.

8. Review Values For MR-1-05 Average Response Time (Trouble Report History (By Tn/Circuit)) Were Identical To Reported Values For April 2003, But Varied Slightly For May 2003 And June 2003.

MR-1-05-2000 review results for April, May, and June of 2003 are shown on Tables D-115, D-116, and D-117. The slight variation between review and reported values in May 2003 and June 2003 is due either to a failure by Verizon PA to provide DCI correct algorithms or correct data. Due to the small degree of deviation in the results, the more likely cause is incorrect or incomplete data provision.

Table D-115 – MR-1-05-2000 -April 2003 Results

	Reported Value	Review Value	Difference
Verizon	0.48	0.48	0.00
CLEC	1.05	1.05	0.00
Difference	0.57	0.57	

Table D-116 – MR-1-05-2000 -May 2003 Results

	Reported Value	Review Audit	Difference
Verizon	0.46	0.51	0.05
CLEC	1.31	1.25	-0.06
Difference	0.85	0.74	

Table D-117 – MR-1-05-2000 -June 2003 Results

	Reported Value	Review Audit	Difference
Verizon	0.56	0.63	0.07
CLEC	1.29	1.26	-0.03
Difference	0.73	0.63	

Verizon PA personnel have subsequently indicated that they had provided an incorrect data set for our analysis. They subsequently provided a revised data set; however, DCI was unable to incorporate this data set into our analysis due to time constraints.

9. Review Values For MR-1-06 Average Response Time (Test Trouble (POTS Only)) Were Identical To Reported Values For April 2003, Varied Slightly For May 2003, And Varied Significantly For June 2003.

MR-1-06-2000 reivew results for April, May, and June of 2003 are shown on Tables D-118, D-119, and D-120. The variation between review and reported values is due either to a failure by Verizon PA to provide DCI correct algorithms or correct data. Due to the small degree of deviation in the May 2003 results, the likely cause is incorrect or incomplete data provision.

Table D-118 – MR-1-06-2000 - April 2003 Results

	Reported Value	Review Value	Difference
Verizon	63.85	63.85	0.00
CLEC	51.55	51.55	0.00
Difference	-12.30	-12.30	

Table D-119 – MR-1-06-2000 - May 2003 Results

	Reported Value	Review Value	Difference
Verizon	57.56	57.34	-0.22
CLEC	53.87	53.76	-0.11
Difference	-3.69	-3.58	

Table D-120 – MR-1-06-2000 - June 2003 Results

	Reported Value	Review Value	Difference
Verizon	66.67	57.53	-9.14
CLEC	56.34	52.56	-3.78
Difference	-10.33	-4.97	

Verizon PA personnel have subsequently indicated that they had provided an incorrect data set for our analysis. They subsequently provided a revised data set; however, DCI was unable to incorporate this data set into our analysis due to time constraints.

MR-2 FINDINGS

1. The Documentation Provided By Verizon PA For The MR-2 Trouble Report Rate Is Extremely Cumbersome.

The Metrics calculation process for MR-2 is completely and clearly described in pages 1 through 17 of this Appendix A.9.2. Of this, pages 1 through 15 are general and need not be repeated for other metrics. Only pages 16 through 17 relate specifically to MR-2. Contrast this clear, concise[19] and complete documentation with the 112 separate MR-2 algorithms on

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[19] A large portion of these 17 pages discusses DCI analyses, so an objective comparison would pit 8-9 pages of the above DCI documentation versus the 75+ pages Verizon PA uses to document its measurement calculation processes for just MR-2. While the nuggets of information required to produce the DCI documentation are (mostly) all contained in the Verizon PA CMA, FACT Table Layouts and C2C Guidelines, it takes substantial work to analyze and extract them.

pages 16 through 71 of the Maintenance CMA's, and about 10 pages each of Guidelines and FACT Table documentation. Consider that the additional information contained in 96 separate MR-3 algorithms on pages 72 through 119 of the Maintenance CMA's will require only 1 additional page using the documentation format presented here. Similarly, the additional information contained in about 400 separate MR-4 algorithms on pages 120 through 326 of the Maintenance CMA's will require only 2-3 additional pages, and the information contained in 44 separate MR-5 algorithms on pages 327 through 348 of the Maintenance CMA's will require only 1 additional page using the documentation format presented here.

While a CLEC could use the current CMA's, FACT Table Layouts, and C2C Guidelines to recalculate an individual metric result, e.g. MR-2-01-2200, from their data as supplied to them by Verizon PA, this provides very little understanding into Verizon PA's general metric calculation processes. If a CLEC wanted to recalculate all, or most, of its metric results, it would face a daunting task. In addition to the documentation currently provided, were Verizon PA to develop and provide documentation of all their metric calculation processes in the form described earlier in this Appendix D, it would resolve this issue.

2.   Most Discrepancies In The MR-2 Retail Numerators For POTS Troubles Are Due To Verizon PA's Inclusion Of Payphones In The Metric Results (DR D-017).

Although no explicit exclusion of Coin phones is mentioned in the C2C Guidelines, such an exclusion could be inferred from the fact that when metrics are disaggregated into Business and Residence categories, there is no disaggregation for payphones. DCI's perspective is that payphones should not be included in the C2C results calculation as they bias the comparison between what CLECs order (Business and Residence) and what retail customers order (Business, Residence and Payphones) by inflating the retail comparative, potentially allowing parity conclusions in potential disparity situations. Therefore, DCI did not include payphones in its calculations.

In response to DR-017, which asked Verizon PA to indicate the basis and justification for including payphones in the calculations, Verizon PA responded:

> "Per the "Product Identification Description" section in the guideline: POTS-Total for Maintenance includes Class of Service 08/09/19 which are Coin. The inclusion of Coin is per the guidelines."

Were the Guidelines modified to exclude payphones, this issue would be resolved.

3.   MR-2 2w xDSL Line Counts Incorrectly Include LineSharing Loops (ER D-035).

In calculating Line Counts for xDSL Loops (MR-2-02-3342, MR-2-03-3342, and MR-2-05-3342 denominators), Verizon PA has incorrectly included LineSharing line counts, as is apparent from the following table:

Table D-121

Month	Metric	DCI Calculated LineCount	VZ C2C reported LineCount	VZ overcount
April 2003	MR-2-xx-3342 2w xDSL Loops	18152	23282	5130
	MR-2-xx-3343 LineSharing	5130	5130	0
May 2003	MR-2-xx-3342 2w xDSL Loops	18363	24041	5678
	MR-2-xx-3343 LineSharing	5678	5678	0
June 2003	MR-2-xx-3342 2w xDSL Loops	18693	25272	6579
	MR-2-xx-3343 LineSharing	6579	6579	0

Verizon PA correctly does not include LineSharing troubles in the numerators. The error of including LineShare inventory together with xDSL therefore leads these metrics to be substantially understated by about 30% (in a relative, not an absolute, sense).

In its response, Verizon PA agreed with DCI's finding and indicated this error would be corrected via the Change Control process. Verizon PA stressed that the affected metrics are not penalty bearing metrics and the incorrect metric results would not have affected parity determinations in these three months, supplying an impact determination worksheet.

DCI checked this worksheet, and found several errors in the formulas used to calculate Z-scores. DCI corrected these formulas and determined that, although the Z-scores were very different from those obtained by Verizon PA, Verizon PA's overall conclusion that parity would not have been affected in these three months is correct. However this is no guarantee that parity would not have been affected in other months.

4. Troubles Are Excluded In MR-2 Trouble Rate Calculations.

There are many other discrepancies in the MR-2 numerators indicated in the above tables, mostly with Verizon PA counting fewer troubles than DCI. Mostly these do not affect parity determinations. However, for MR-2-03, POTS Central Office Trouble Rate, parity results for both Linesharing and Linesplitting are affected by these discrepancies. DCI notes that a possible explanation for part of such discrepancies on xDSL Loops and Line Sharing and Line Splitting (retail comparative only) is that DCI did not exclude Installation troubles from its calculation.

5. MR-2-04 (% Subsequent Reports) Denominators Are Calculated Incorrectly (ER D-034).

Verizon PA counts both initial and subsequent reports in the MR-2-04 Denominator. Only initial reports should be counted in the MR-2-04 denominators. In a followup response to ER D-034, Verizon PA attempts to justify their practice with the following argument:

> "The Exclusion section of the Carrier-to-Carrier Guidelines specifies that subsequent reports are to be excluded from "report rate" measures. MR 2-04, % Subsequent Reports, is not a report rate metric. Therefore,

subsequents are not excluded from this metric. The specific exclusion is below:

- Report rate excludes subsequent reports (additional customer calls while the trouble is pending)"

Verizon PA misinterprets the Guidelines. The Guidelines state in the Denominator Calculation section of MR-2-04:

"Number of Total Disposition Codes 03, 04, and 05 troubles reported (Per MR-2-01)."

The inclusion of the parenthetical phrase (Per MR-2-01) clearly indicates that the intent of the Guidelines was that MR-2-04 was to measure the rate of subsequent reports per initial reports (only initial reports are counted in MR-2-01), as is common practice for other ILECs.

The impact of incorrectly counting subsequents in the denominator depends on the rate of subsequents, and can be quite large. For example, in June, the correct MR-2-04 result for POTS Loops (MR-2-04-3550) is 61.01. Due to Verizon PA's inclusion of subsequents, the reported C2C result was 37.89.

The intent of the Guidelines would be made even more clear by changing the name of the sub-metric from "% Subsequent Reports" to "Rate of Subsequent Reports per Initial Reports".

6.   Verizon PA Incorrectly Includes Certain Trouble Code Values For Specials In MR-2-05.

Verizon PA determines which submetric a Special Trouble will be reported under based on the value of the TROUBLE_CD field. If 'FAC' or 'CO', it is reported in MR-2-01. All other values are reported in MR-2-05. The intent of the Guidelines, however, is that MR-2-05 report CPE, TOK, FOK, and NTF situations only. The following tables indicate the distribution of TROUBLE_CD by PROVIDER_IND throughout the three months audited:

MR-Specials Troubles: Product by Provider 200304 After global exclusions removed

TROUBLE_CD (TROUBLE_CD)
       PROVIDER_IND (PROVIDER_IND)

Frequency Col Pct	L	R	U	Total
	0 0.00	0 0.00	1 0.04	1
CC	1 0.04	0 0.00	0 0.00	1
CO	378 14.86	8 50.00	119 4.95	505
CPE	752 29.56	5 31.25	929 38.66	1686
FAC	486 19.10	1 6.25	1193 49.65	1680
INF	297 11.67	0 0.00	120 4.99	417
NTF	624 24.53	2 12.50	41 1.71	667
TOK	6 0.24	0 0.00	0 0.00	6
Total	2544	16	2403	4963

MR-Specials Troubles: Product by Provider 200305 After global exclusions removed

TROUBLE_CD(TROUBLE_CD)
       PROVIDER_IND(PROVIDER_IND)

Frequency Col Pct	L	R	U	Total
	0 0.00	0 0.00	3 0.12	3
CC	1 0.04	0 0.00	2 0.08	3
CO	434 16.29	10 29.41	167 6.68	611
CPE	725 27.20	8 23.53	968 38.70	1701
FAC	551 20.68	2 5.88	1231 49.22	1784
INF	312 11.71	4 11.76	98 3.92	414
NTF	634 23.79	10 29.41	32 1.28	676
TOK	8 0.30	0 0.00	0 0.00	8
Total	2665	34	2501	5200

MR-Specials Troubles: Product by Provider 200306 After global exclusions removed

TROUBLE_CD(TROUBLE_CD)
            PROVIDER_IND(PROVIDER_IND)

Frequency Col Pct	L	R	U	Total
	0 0.00	0 0.00	1 0.03	1
CO	348 11.91	4 12.12	127 4.23	479
CPE	863 29.53	10 30.30	1220 40.68	2093
FAC	661 22.62	6 18.18	1445 48.18	2112
IEC	0 0.00	0 0.00	1 0.03	1
INF	311 10.64	1 3.03	160 5.34	472
NTF	727 24.88	12 36.36	44 1.47	783
TOK	12 0.41	0 0.00	1 0.03	13
Total	2922	33	2999	5954

As seen from the above tables, Verizon PA is including in the MR-2-05 results troubles with the following trouble codes other than those specified in the Guidelines:

- CC – Came Clear
- IEC – Interexchange Carrier
- INF – Information
- " " - Unspecified

While "Informational" tickets were supposedly excluded via restricting the REPORT_CATEGORY field to a value of "1", these tickets with a trouble code of "INF" do have a REPORT_CATEGORY of "1", so they are being included in the results. The MR-2-05 result tables above do not show the impact of this as DCI also selected all trouble records with a TROUBLE_CD other than "FAC" or "CO" when performing its calculation. The impact of including these tickets has been to inflate the MR-2-05 CLEC results by about 10% overall. If MR-2-05 had been reported similarly for Retail troubles, the impact would have been an inflation of about 25% on the Retail results.

7. **With One Exception, Verizon PA Correctly Calculates The MR-2 Metrics From The Perspective Of Its (Sometimes Incorrect) Interpretations Of The Guidelines.**

With the exception of Finding #3, (Incorrect inclusion of Linesharing in xDSL line counts), all of the above issues are related to Guidelines interpretation. While DCI disagrees with

Verizon PA's interpretations, Verizon PA's calculations are correct from the perspective of Verizon PA's interpretations.

MR-3 – FINDINGS

1. **Most Discrepancies In The MR-3 Retail Denominators Are Due To Verizon PA's Inclusion Of Payphones In The Metric Results (DR D-017).**

See discussion on Page D-80 for Finding 2 re Metric MR-2

2. **PA Maintenance CMA Algorithms For POTS Loop (MR-3-xx-3550) Do Not Contain Code To Implement The Exclusion Of Redirected Troubles.**

Verizon PA uses the code segment: ©[20]

```
and (not (a11.DISPATCH_IN_CNT <= 1
and a11.DISPATCH_OUT_CNT = 1))
```

to implement the exclusion of redirected troubles. However this code does not appear in the MR-3-xx-3550 CMA algorithms (including the June PA CMA). DCI believes that Verizon PA has actually implemented this code in its MR-3-xx-3550 calculations, as this would explain the discrepancies observed in the above MR-3 result tables for the POTS Loop disaggregations. While DCI considers this code segment to incorrectly exclude much more than redirected troubles (see next finding), the issue of this finding is that the exclusion is not indicated in the CMA code.

3. **MR-3 POTS Loop Exclusion Of Redirects Implemented Incorrectly (ER D-032).**

Verizon PA uses the code segment: ©[21]

```
and (not (a11.DISPATCH_IN_CNT <= 1
and a11.DISPATCH_OUT_CNT = 1))
```

to implement the exclusion of redirected troubles. DCI does not consider this code to properly implement the required exclusion which is

> "A trouble ticket is considered a redirect if it was dispatched **IN** once and **OUT** once, and the trouble was found on the second dispatch (due to a CLEC error in the initial dispatch direction)."

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The above code would exclude any ticket which was dispatched **OUT** once, as long as it had not been dispatched **IN** more than once. ***Therefore tickets which had never been dispatched IN would be incorrectly excluded by this code***. In addition, nothing in this code restricts the exclusion to the second dispatch. DCI considers the exclusion much too broad.

Restricting the exclusion to operate only when a ticket had been dispatched **IN** once could be accomplished by changing the DISPATCH_IN_CNT <= 1 to DISPATCH_IN_CNT = 1. DCI considers such tickets "possible redirects". Those which had DISPATCH_IN_CNT = 0 are not even candidates for redirects and certainly should not be excluded. Among the "possible redirects" the trouble may or may not have been found on the second dispatch, so not necessarily are all "possible redirects" definitely redirects and not necessarily all "possible redirects" should be excluded.

The following table indicates the impact of Verizon PA's incorrect implementation of the redirects exclusion on MR-3-02-3550 in May 2003.

Table D-122 – **MR-3-02-3550 Missed Repair Appointments – Central Office – POTS Loop**

May 2003	CLEC			Retail			Stat. Score	Compliance Score
	Num	Denom	Result	Num	Denom	Result		
VZ PA C2C report excludes 15 "redirects"	6	37	16.22%	323	4543	7.11%	-1.685	-2
DCI calc. excluding 5 possible redirects	6	47	12.77%	322	4540	7.09%	-1.196	-1
DCI calc. not excluding possible redirects	8	52	15.38%	322	4540	7.09%	-1.874	-2

This indicates that incorrect exclusion of records which were never dispatched **IN** as misidentified redirects could have substantial and material impact to the C2C results and PA PAP payment calculations derived therefrom.

Verizon PA's response to ER D-032 (received 11/10/03) dealt with a language change to the June Guidelines which added the sentence "Reports with multiple dispatches in the same direction are not excluded". While this language clarification agrees with the code Verizon PA uses (in that dispatch counts higher than 1 in either direction are not excluded), Verizon PA did not address the case of reports which are never dispatched **IN** being incorrectly excluded. DCI believes that Verizon PA's implementation is incorrect.

4. **With One Exception, Verizon PA Correctly Calculates The MR-3 Metrics From The Perspective Of Its (Sometimes Incorrect) Interpretations Of The Guidelines.**

With the exception of Finding 3, MR-4, (Incorrect implementation of POTS Loop Redirects Exclusion), the only other MR-3 discrepancies relate to whether payphones should be included, which is a Guidelines interpretation issue. While DCI disagrees with Verizon PA's interpretation, Verizon PA's calculations are correct (other than the POTS Loop Redirect exclusion) from the perspective of Verizon PA's interpretation.

MR-4 FINDINGS

1. **Most Discrepancies In The MR-4 Retail Denominators Are Due To Verizon PA's Inclusion Of Payphones In The Metric Results (DR D-017).**

See discussion on Page D-80 for Finding 2 re Metric MR-2

2. **The PA April/May Maintenance CMA Was Incomplete (ER D-030).**

The Pennsylvania April/May Maintenance CMA (provided by Verizon PA on August 1) was very incomplete. No algorithms were provided for the MR-4-06, MR-4-07, MR-4-08 and MR-5-01 submetrics. Verizon PA agreed and indicated they would provide these algorithms in the June CMA's. DCI received these in late September, and the missing algorithms were provided therein. The algorithms for these sub-metrics currently occupy pages 233 through 348 of the June Maintenance CMA, thereby constituting 33% of the June Maintenance CMA.

3. **MR-4 POTS Loop Exclusion Of Redirects Is Implemented Incorrectly (ER D-032).**

Verizon PA uses the code segment: ©[22]

```
and (not (a11.DISPATCH_IN_CNT <= 1
and a11.DISPATCH_OUT_CNT = 1))
```

to implement the exclusion of redirected troubles. DCI does not consider this code to properly implement the required exclusion which is

> "A trouble ticket is considered a redirect if it was dispatched **IN** once and **OUT** once, and the trouble was found on the second dispatch (due to a CLEC error in the initial dispatch direction)."

The above code would exclude any ticket which was dispatched **OUT** once, as long as it had not been dispatched **IN** more than once. *Therefore tickets which had never been dispatched IN would be incorrectly excluded by this code*. In addition, nothing in this code restricts the exclusion to the second dispatch. DCI considers the exclusion much too broad.
Restricting the exclusion to operate only when a ticket had been dispatched **IN** once could be accomplished by changing the DISPATCH_IN_CNT <= 1 to DISPATCH_IN_CNT = 1. DCI considers such tickets "possible redirects". Those which had DISPATCH_IN_CNT = 0 are not even candidates for redirects and certainly should not be excluded. Among the "possible redirects" the trouble may or may not have been found on the second dispatch, so not necessarily are all "possible redirects" definitely redirects and not necessarily all "possible redirects" should be excluded.

The following table indicates the impact of Verizon PA's incorrect implementation of the redirects exclusion on MR-4-03-3550 in May 2003.

---

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Table D-123 –MR-4-03-3550: Trouble Duration Intervals – Central Office – POTS Loop

May 2003	CLEC		Retail		Stat. Score	Compliance Score
	Troubles	**MTTR**	**Troubles**	**MTTR**		
VZ PA C2C report excludes 15 "redirects"	37	12:20:10	4543	10:07:44	- .791	0
DCI calc. excluding 5 possible redirects	47	13:47:28	4540	10:06:37	-1.488	-1
DCI calc. not excluding possible redirects	52	15:29:20	4540	10:06:37	-2.286	-2

This indicates that incorrect exclusion of records which were never dispatched **IN** as misidentified redirects could have substantial and material impact to the C2C results and PA PAP payment calculations derived therefrom.

Verizon PA's response to ER D-032 (received 11/10/03) dealt with a language change to the June Guidelines which added the sentence "Reports with multiple dispatches in the same direction are not excluded". While this language clarification agrees with the code Verizon PA uses (in that dispatch counts higher than 1 in either direction are not excluded), Verizon PA did not address the case of reports which are never dispatched **IN** being incorrectly excluded. DCI believes that Verizon PA's implementation is incorrect.

4. **The PA Maintenance CMA Contains Several Incorrect Implementations Of "Limited Stop-Clock" Usage For MR-4 Trouble Duration Intervals (ER D-031).**

The PA CMA Maintenance Algorithms contain several incorrect implementations of the following statement in the definition of the MR-4 Trouble Duration Intervals in the C2C Guidelines:

> "For **UNE Loop, UNE 2Wire Digital Loop, and UNE 2Wire xDSL Loop** products, trouble duration intervals are measured on a limited *stop clock* basis. A *stop clock* is used when the customer premises access, provided by the CLEC and its end user, is after the offered repair interval. For example, if customer premises access is not available on a weekend, the clock stops at 5:00 PM Friday, and resumes at 08:00AM Monday. This applies to dispatched out tickets only."

DCI implemented the above by making a copy of the table in which the following modification was made:

```
if provider_ind='U' and dispatch_out_cnt > 0
    and product_ind in('DIGITAL','LOOP XDSL','LOOP','LINESHARE')
then actual_duration_run = actual_duration_stop;
```

DCI then used the (modified) actual_duration_run field in its calculations.

An alternative more in keeping with the style of the Verizon PA algorithms would consist in using the following code segment in the numerator algorithms only:

```
and (   (a11.ACTUAL_DURATION_STOP <= 1440 and a11.DISPATCH_OUT_CNT > 0)
    or (a11.ACTUAL_DURATION_RUN   <= 1440 and a11.DISPATCH_OUT_CNT = 0)  )
```

However, Verizon PA seems to have instead calculated two separate numerators in each disaggregation, one for dispatched out tickets only (based on actual_duration_stop) and another for tickets which have not been dispatched out (based on actual_duration_run). Verizon PA then adds these two numerators and divides by a denominator which includes all eligible tickets whether dispatched out or not.

All three of these approaches are expected to provide the same answer, and in fact, Verizon PA results and DCI's independent calculations match in all the relevant disaggregations except POTS LOOP.

However, Verizon PA's PA CMA incorrectly documents what Verizon PA has done, as follows:

a. In the CLEC algorithms for the following metrics, Verizon PA incorrectly excludes all dispatched-out tickets from the numerator, but not from the denominator:

- MR-4-01-3341
- MR-4-01-3550
- MR-4-02-3341
- MR-4-02-3342
- MR-4-02-3343
- MR-4-02-3550
- MR-4-03-3341
- MR-4-03-3342
- MR-4-03-3343
- MR-4-03-3345

If this algorithm had actually been implemented, the calculated CLEC trouble durations would have been based on shorter non-dispatched-out tickets only, whereas the retail comparatives would have included the longer dispatched-out tickets as well, leading to virtually certain parity determinations even under potential large disparity situations.

b. In both CLEC and Retail numerator algorithms for MR-4-02-3345, only the dispatched-out tickets are included, whereas this restriction is not applied to the denominators. If this algorithm were actually implemented this error would cause both CLEC and Retail results to appear shorter than they actually were.

c. Unlike the previous two situations (#1 & #2 immediately above), the CLEC numerator algorithms for MR-4-04-3341, MR-4-04-3342, MR-4-04-3343 and MR-4-04-3345 correctly show two numerator algorithms each, one for dispatched-out tickets (based on actual_duration_stop) and one for other tickets (based on actual_duration_run). However, they incorrectly indicate that the formula is

(Numerator 1 / Denominator 1) * 100.

In fact the formula should be stated as:

((Numerator 0 + Numerator 2) / Denominator 0) * 100, in the case of MR-4-04-3341,

and as

((Numerator 1 + Numerator 2) / Denominator 0) * 100, in the case of MR-4-04-3342.

The second numerator is not labeled in the algorithms for MR-4-04-3343 and MR-4-04-3345. If it were labeled and its label incorporated into the formula as indicated above for 3341 and 3342 the issue would be resolved.

d. The CLEC denominator formula for MR-4-04-3343 incorrectly restricts to non-dispatched-out tickets only. If it had been implemented, (it wasn't), this would have incorrectly reduced the denominator without impacting the numerator, causing the CLEC results to appear longer than they actually were, and potentially leading to disparity determinations even when parity service was being provided.

e. From the results, as well as from the algorithms, it appears that the *stop clock* is also being used for **Line Sharing** and **Line Splitting** product categories as well. If this is appropriate, it should be indicated in the C2C Guidelines.

Verizon PA responded to ER D-031, agreeing with the documentation issues (a) thru (d). Verizon PA agreed with DCI's assessment that these were documentation-only issues, and did not affect the actual code run or the calculated results. Verizon PA indicated that these issues would be corrected in the June CMA.

DCI has checked the June CMA, and found that the issues identified have been corrected for the following algorithms:

- MR-4-01-3341
- MR-4-01-3550
- MR-4-02-3341
- MR-4-02-3342
- MR-4-02-3343
- MR-4-04-3341
- MR-4-04-3342
- MR-4-04-3343
- MR-4-04-3345

However, they have not been corrected for:

- MR-4-02-3550
- MR-4-03-3341

- MR-4-03-3342
- MR-4-03-3343
- MR-4-03-3345

In addition, the June algorithm provided for MR-4-03-3550 does not implement the stop clock.

Regarding issue (e), Verizon PA indicated in their response to ER D-031 that stop clock times are in fact appropriate for Line Sharing and Line Splitting, and that this is included in the June Guidelines via changing the term *UNE 2 Wire xDSL Loop products* to *UNE 2 Wire xDSL products,* which includes xDSL products for Loops, Line Sharing and Line Splitting.

DCI finds the June Guidelines change unclear. The list of products for which a provision applies is not stated in terms of the products reported or separately for each relevant sub-metric. In this case, since UNE 2wire xDSL Loops, UNE Line Sharing, and UNE Line Splitting are all reported separately, the Guidelines should indicate the applicability of the limited stop-clock basis for these products in a manner in which the products are individually identified.

5. MR-4 Retail Comparatives For UNE Loop, UNE 2 Wire Digital Loop, And UNE 2 Wire xDSL Products (Loop, Lineshare, Linesplitting) Are Inappropriate.

Where the CLEC measurement is based on a limited stop clock for dispatched out tickets, the retail comparative measurement used in parity determinations should also be based on using a limited stop clock for dispatched out tickets. Otherwise the retail comparatives will be inflated for the dispatched out tickets, as the run clock times used in the trouble duration intervals will generally be substantially longer than the stop clock times. This will lead to potential disparity situations being masked in the measurement results. This affects all the MR-4 submetrics for the indicated UNE Loop product disaggregations. It appears that correction of this issue may necessitate a Guideline change. (DCI notes that the June PA CMA shows the retail comparatives for Line Sharing and Line Splitting using a limited stop clock for MR-4-04, but not for MR-4-01, MR-4-02, or MR-4-03. DCI has not yet examined the June CMA MR-4-06, MR-4-07, and MR-4-08 algorithms in this regard.)

6. MR-4-01-2216 Standard Deviation Is Calculated Incorrectly (ER D-033).

DCI independently calculated Verizon PA's statistical scores using the results, denominators and retail standard deviations provided on the C2C reports. DCI also performed this calculation independently from the FACT Table. In this MR-4 metric result, MR-4-01-2216, the results and denominators matched perfectly, yet the statistical scores did not. The only explanation for this is that the standard deviations were not calculated similarly. As illustrated in the table below, this anomaly occurred repeatedly for all three months April, May, and June:

Table D-124 – MR-4-01-2216: Trouble Duration Intervals – Specials NonDS & DS0

Month	Determination	CLEC		Retail		
		Troubles	**MTTR**	**Troubles**	**MTTR**	**St. Dev.**
April 2003	VZ C2C	6	6:55:00	412	5:00:54	**5:08:39**
	DCI calc	6	6:55:00	412	5:00:54	**5:13:34**
May 2003	VZ C2C	8	3:30:15	434	4:43:37	**4:00:35**
	DCI calc	8	3:30:15	434	4:43:37	**4:10:13**
June 2003	VZ C2C	9	7:35:07	475	5:04:43	**4:23:29**
	DCI calc	9	7:35:07	475	5:04:43	**4:27:18**

DCI's standard deviation is calculated by the same piece of code that gets executed regardless of whether MR-4-01, MR-4-02, or MR-4-03 is being processed, and regardless of which product disaggregation is analyzed. In many other disaggregations and submetrics, DCI's numerators and denominators match perfectly with Verizon PA's reported results, and in all those cases the calculated statistical scores also match reasonably closely (with some allowance for roundoff error).

In addition, the retail comparative for MR-4-01-3216 is the same as that for MR-4-01-2216, and Verizon PA's reported standard deviation for MR-4-01-3216 does match the DCI calculated standard deviation for both MR-4-01-2216 and MR-4-01-3216, and similarly does not match Verizon PA's reported standard deviation for MR-4-01-2216, even though both were purportedly calculated on the exact same data elements.

For the above reasons, DCI is forced to conclude that Verizon PA has a separate calculation for the retail standard deviation of MR-4-01-2216, and that the algorithm used to calculate this standard deviation is incorrect.

DCI considers it therefore likely that Verizon PA's system design is such that each standard deviation has an algorithm separate from each other, and that there are insufficient safeguards built in to the system design to ensure that a standard deviation is being calculated on the same variable and on the same set of records, as the mean and record count it is supposed to relate to.

Verizon PA responded to ER D-033 as follows:

> "Verizon agrees with the issue but the impact to the result is insignificant. Please see attached impact.
>
> DCI's understanding of the standard deviation calculation is correct. The standard deviation reported for Maintenance and Repair domain is calculated via a separate MicroStrategy algorithm.
>
> a. Verizon uses the STDDEV function available in Oracle to calculate standard deviation.
>
> b. Listed below is the algorithm that produces the standard deviation for the retail MR-4-01-2216 and MR-4-01-3216 metrics. Due to a mapping error for MR-4-01-2216, the result of this query was not

included on the C2C report. This will be corrected following Verizon's change control process.

```
SELECT a11.STATE_CD,
     STDDEV(a11.ACTUAL_DURATION_STOP)
FROM      TB_DM_MNR_TRBL_FACT_SPL a11
WHERE     (NVL(a11.EXCLUDE_BY_FST_IND,0) = 0
 and a11.TEST_ACC_IND = 'N'
 and a11.STATE_CD in ('PA')
 and a11.ACCESS_EXCL_IND in ('B','N')
 and a11.REPORT_PERIOD = '200306'
 and a11.CORP_TEL_IND = 'N'
 and NVL(a11.ADMIN_REPEAT_FLAG,'N') = 'N'
 and a11.FGTE_IND = 'N'
 and a11.REPORT_CATEGORY = '1'
 and a11.TROUBLE_CD in ('FAC', 'CO')
 and a11.DS_LEVEL = 'DS0'
 and a11.SERVICE_LEVEL_CD = 'S'
 and a11.PROVIDER_IND = 'L')
GROUP BY   a11.STATE_CD"
```

DCI reiterates its finding that Verizon PA's system design is such that each standard deviation has an algorithm separate from each other, and that there are insufficient safeguards built in to the system design to ensure that a standard deviation is being calculated on the same variable and on the same set of records, as the mean and record count it is supposed to relate to.

7. MR-4-04-2216 Statistical Scores Are Unrealistic.

DCI independently calculated Verizon PA's statistical scores using the results, denominators, and retail standard deviations provided on the C2C reports. DCI also performed this calculation independently from the FACT Table. For MR-4-04-2216, the calculation resulting from the hypergeometric distribution resulted in a cumulative distribution function value higher than .999995, so DCI performed its calculation using the normal approximation to the binomial instead. In this instance, Verizon PA's result was ">5.0000" for all three months.

Table D-125 – **MR-4-04-2216 % Troubles cleared within 24 hours – Specials – DS0 and Non DS0/DS1/DS3**

Month		CLEC			Retail			Stat.	Compliance
		Num	Denom	Result	Num	Denom	Result	Score	Score
April	DCI calculation	6	6	100%	404	412	98.06%	0.34221	0
	VZ C2C Results	6	6	100%	404	412	98.06%	> 5.000	0
May	DCI calculation	8	8	100%	431	434	99.31%	0.23383	0
	VZ C2C Results	8	8	100%	431	434	99.31%	> 5.000	0
June	DCI calculation	9	9	100%	473	475	99.58%	0.19325	0
	VZ C2C Results	9	9	100%	473	475	99.58%	> 5.000	0

In all of these cases, DCI and Verizon PA are completely in agreement regarding the underlying data. However, the statistical scores are wildly different. DCI considers the statistical scores provided using Verizon PA's methodology completely unrealistic for these data. Specifically, consider an event that has .9958 probability of occurring. The chance that it will occur on each of 9 independent trials is $(.9958)^9$, or .9627. This is nowhere near so unlikely as to result in a statistical score of >5, which would be reasonable only if this chance had been so small as .000001 or so.

While this example involves a case where performance provided the CLECs is slightly better than that provided Retail, DCI considers the opposite situation will also result in unrealistic statistical scores, indicating disparities where none exist. Verizon PA should implement a statistical methodology which is more robust at results close to 0% and 100%.

MR-5 FINDINGS

1. Most Discrepancies In The MR-5 Retail Numerators And Denominators Are Due To Verizon PA's Inclusion Of Payphones In The Metric Results (DR D-017).

See discussion on Page D-80 for Finding 2 re Metric MR-2

2. The PA April/May Maintenance CMA Was Incomplete (ER D-030).

The Pennsylvania April/May Maintenance CMA (provided by Verizon PA on August 1) was very incomplete. No algorithms were provided for the MR-4-06, MR-4-07, MR-4-08 and MR-5-01 submetrics. Verizon PA agreed and indicated they would provide these algorithms in the June CMA's. DCI received these in late September, and the missing algorithms were provided therein. The algorithms for these submetrics currently occupy pages 233 through 348 of the June Maintenance CMA, thereby constituting 33% of the June Maintenance CMA.

3. MR-5 POTS Loop Exclusion Of Redirects Implemented Incorrectly (ER D-032).

Verizon PA uses the code segment: ©[23]

```
and (not (a11.DISPATCH_IN_CNT <= 1
and a11.DISPATCH_OUT_CNT = 1))
```

to implement the exclusion of redirected troubles. DCI does not consider this code to properly implement the required exclusion which is

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"A trouble ticket is considered a redirect if it was dispatched **IN** once and **OUT** once, and the trouble was found on the second dispatch (due to a CLEC error in the initial dispatch direction)."

The above code would exclude any ticket which was dispatched **OUT** once, as long as it had not been dispatched **IN** more than once. ***Therefore tickets which had never been dispatched IN would be incorrectly excluded by this code***. In addition, nothing in this code restricts the exclusion to the second dispatch. DCI considers the exclusion much too broad.

Restricting the exclusion to operate only when a ticket had been dispatched **IN** once could be accomplished by changing the DISPATCH_IN_CNT <= 1 to DISPATCH_IN_CNT = 1. DCI considers such tickets "possible redirects". Those which had DISPATCH_IN_CNT = 0 are not even candidates for redirects and certainly should not be excluded. Among the "possible redirects" the trouble may or may not have been found on the second dispatch, so not necessarily are all "possible redirects" definitely redirects and not necessarily all "possible redirects" should be excluded.

The above discussion applies to the determination of whether a ticket is a redirect. In regard to MR-5, the redirect status of the repeat ticket is not a cause for exclusion. Rather, the Data Warehouse to Data Mart Spool Procedure evaluates whether the original ticket is a misdirect. If that is the case, then the NON_MISDIRECT_IND field is set to "N" on the repeat ticket, and the metric calculation algorithms exclude such records from counting in the MR-5 numerators.

DCI's concern is that if misdirect identification was implemented in an overly broad fashion in the spool procedure, as it was in the case of the POTS LOOP redirect exclusion in MR-3 and MR-4, then many original tickets which were never dispatched IN, and are therefore not misdirect candidates, will have been incorrectly identified as misdirects, resulting in repeat tickets being excluded from the MR-5 results.

Verizon PA's response to ER D-032 (received 11/10/03) dealt with a language change to the June Guidelines which added the sentence "Reports with multiple dispatches in the same direction are not excluded". While this language clarification agrees with the code Verizon PA uses (in that dispatch counts higher than 1 in either direction are not excluded), Verizon PA did not address the case of reports which are never dispatched **IN** being incorrectly excluded. DCI maintains that Verizon PA's implementation in the metric calculation procedures is incorrect. DCI suspects that Verizon PA used the same logic in the spool procedure but has not determined this to be the case yet.

4. <u>MR-5 Certain Records Are Excluded From The Numerator Which Are Not Excluded From The Denominator.</u>

The Guidelines call for trouble tickets not to be counted as repeats if either (a) a No Access situation is encountered, or (b) the original ticket was misdirected. In these cases, the repeat ticket is not counted as a repeat, but is counted in the denominator. DCI considers that when measuring an attribute, anything, other than the absence of the measured attribute itself, which prevents consideration for that attribute should be a cause for excluding the transaction from

both numerator and denominator. In this case, if No Access or original misdirect are conditions which make whether the ticket is a repeat or not irrelevant, then No access tickets and original misdirects should be removed from the pool of tickets being considered completely, and therefore be excluded from the denominator just as they are from the numerator. Otherwise the measurement result is misleading. Correction of this issue would appear to require a change to the Guidelines.

5. The MR-5 Calculated Measurement Results Are Generally Accurate.

With the exception of the inclusion of Payphones and the possible incorrect implementation of original misdirects, Verizon PA's calculated MR-5 results have been implemented correctly.

D – RECOMMENDATIONS

Recommendations which address Maintenance and Repair Metrics, including those related to findings listed in Appendix D, are located in Chapter IV – Measurement Calculations and Chapter V – Measurement Results. In some instances they have been subsumed into broader recommendations.

APPENDIX E – MISCELLANEOUS METRICS

APPENDIX E – MISCELLANEOUS METRICS

A – INTRODUCTION

This Appendix describes a series of Verizon PA currently used metrics which do not fall within the five principal domains of Pre-Ordering, Ordering, Provisioning, Maintenance & Repair and Billing. They do not share common data-bases, nor are the processes for data collection, calculation and reporting alike. However, they are all important metrics; and are listed below:

- **NP-1:** Percent Final Trunk Group Blockage
- **NP-2:** Collocation Performance
- **OD-1:** Operator Services/Directory Assistance Speed of Answer
- **GE-1:** Directory Listing Verification Reports
- **GE-3:** Timely and Accurate Provisioning of White Page Directory Listings LSRs and DSRs

The following sections provide complete descriptions for data collection, processing and reporting each metric. Findings and related recommendations, as appropriate, are provided.

B – SPECIFIC METRICS

NP-1: PERCENT FINAL TRUNK GROUP BLOCKAGE

Definition

This metric captures the percent of Final Trunk Groups (FTGs) that exceed the blocking design threshold. An FTG does not overflow to an alternate route trunk group for purposes of call completion. It is the last choice group of common interoffice communications channels for the routing of local, operator, and/or toll calls. When an all trunks busy condition exists, calls are typically routed to an announcement or a 120 Impulses Per Minute (IPM) tone. The blocking design threshold is set forth in tables that specify the number of trunks required to handle an offered traffic load, generally identified in hundred call seconds (CCS). If the offered load exceeds the designed level, there is a statistical probability that the service threshold will also be exceeded, and the trunk group will need to be adjusted through servicing action. For Verizon Pennsylvania (Verizon PA) the design service threshold criteria is at .005% probability of blocking, or approximately 2.0% blocking.

This metric compares the Verizon PA retail FTG blocking to that for similar Competitive Local Exchange Carrier (CLEC) trunks. Verizon PA retail trunks are Common FTGs that carry local traffic between offices. Typically, these would be between end offices and access tandems.[1] The intent of this metric is to measure the groups for which Verizon PA is responsible for the sizing and timing. These are referred to as reciprocal trunks, and are dedicated FTGs that carry traffic from the Verizon PA tandem switch to the CLEC.[2]

Sub-metrics[3]

Metric NP-1 has four sub metrics:

- **NP-1-01:** Percent Final Trunk Groups Exceeding Blocking Standard
- **NP-1-02:** Percent Final Trunk Groups Exceeding Blocking Standard (No Exceptions)
- **NP-1-03:** Number Final Trunk Groups Exceeding Blocking Standard-Two (2) Months
- **NP-1-04:** Number Final Trunk Groups Exceeding Blocking Standard-Three (3) Months

Exclusions

Certain types of trunks are not included in this measurement. The Carrier-to-Carrier (C2C) Guidelines address two specific types: Interexchange (IXC) dedicated trunks and common trunks carrying only IXC traffic. However, as noted in the definition above, groups defined as reciprocal trunks are included. Consequently, groups such as Operator Services, E911, and Busy Line

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[1] Verizon PA C2C Guidelines NP-1 Percent Final Trunk Group Blockage, page 88
[2] B-027 Interview Summary
[3] Verizon PA C2C Guidelines NP-1 Percent Final Trunk Group Blockage, page 89

Verification are not included.[4] Certain situations will cause trunk groups to be excluded on a month to month basis. In general, the following trunk groups will be excluded:

- Trunks blocked due to CLEC network failure
- Trunks that actually overflow to a final group, but are not designated as an overflow group
- Trunks blocked where CLEC order for augmentation is overdue
- Trunks blocked where CLEC has not responded to or has denied Verizon PA request for augmentation
- Trunks blocked due to other CLEC trunk network rearrangements

Procedures call for Verizon PA to electronically notify the CLEC operational trunk staff when it believes one or more of the conditions noted above has been identified on a particular trunk group, and that the trunk group should be excluded from Verizon PA's performance. "Unless the CLEC responds back with documentation that the information on the condition is inaccurate, the trunk group will be excluded."[5]

The Verizon PA CLEC Forecasting Guidelines state: "On a semi-annual basis (quarterly where Statement of Generally Available Terms and Conditions (SGAT) or specific contracts between Verizon PA and individual companies state quarterly forecasts as a requirement or where a significant change in demand occurs between forecast periods), CLECs will be requested to provide Verizon PA with a current year plus two-year detailed forecast of traffic and volume requirements for all Interconnection Trunking."[6] However, DCI was advised that no exclusions are done for untimely or inaccurate forecasts.[7]

Formula[8]

- **NP-1-01:** Number of FTGs that exceed blocking threshold for one (1) month exclusive of trunks that block due to CLEC network problems as agreed by CLECs/Total number of FTGs.

- **NP-1-02:** Number of FTGs that exceed blocking threshold/Total number of FTGs.

- **NP-1-03:** Number of FTGs that exceed blocking threshold for two (2) consecutive months, exclusive of trunks that block due to CLEC network problems as agreed by CLECs. (Since this is reported as a number, there is no denominator.)

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[4] Ibid
[5] Verizon PA C2C Guidelines NP-1 Percent Final Trunk Group Blockage, page 88
[6] Verizon CLEC Forecasting Guidelines, page 2
[7] B-027 Interview Summary
[8] Verizon PA C2C Guidelines NP-1 Percent Final Trunk Group Blockage, page 89

- **NP-1-04:** Number of FTGs that exceed blocking threshold for three (3) consecutive months, exclusive of trunks that block due to CLEC network problems as agreed by CLECs. (Since this is reported as a number, there is no denominator.)

Report Dimension

The NP-1 metric report is published monthly and includes the performance for the Verizon PA retail trunks and the CLEC trunks carrying traffic from the Verizon PA tandems to the CLEC. Results are provided with (NP-1-01) and without (NP-1-02) those groups that are excluded under the guidelines as noted in the "Exclusions" section above. Also shown each month are the quantities of CLEC groups that exceed the blocking threshold for two and three consecutive months respectively (exclusive of trunks that block due to CLEC network problems as agreed by CLECs).   The base numbers for the trunk groups used in the metric calculations are shown for both Verizon PA and the CLECs in aggregate.

Performance Standard

The Verizon PA retail trunks are Common Final Trunks carrying local traffic between offices, typically end-offices and access tandems. Because common trunks carry both retail and CLEC traffic, there will be parity with retail on common groups. "For individual trunk groups carrying traffic between Verizon PA and CLECs, Verizon PA will provide an explanation (and action plan if necessary) on individual trunks (sic) blocking for two months consecutively. An individual trunk (sic) should not be blocked for three consecutive months."[9]   Consequently, the standard for measurement NP-1-04 is zero. "For Percent Final Trunk Group Blockages, a Service Inquiry Report shall automatically be filed whenever performance is not at or better than 3.0 per cent for three consecutive months."[10]

For the review period, the following were the results:[11]

Table E-1

	April		May		June	
	Verizon PA	CLEC	Verizon PA	CLEC	Verizon PA	CLEC
NP-1-01	0.48	0.00	3.83	0.00	0.48	0.00
NP-1-02	0.48	2.14	3.83	2.93	0.48	0.83
NP-1-03	N/A	0	N/A	0	N/A	0
NP-1-04	N/A	0	N/A	0	N/A	0
Base Trunk Groups	209	234	209	239	209	241

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[9] Verizon PA C2C Guidelines NP-1 Percent Final Trunk Group Blockage, page 88
[10] Ibid
[11] C2C Performance Standards and Reports, Verizon PA, April, May, June, 2003

A review of the raw data files (see description below) that supported the metric calculations, shows that one Verizon PA FTG exceeded the blocking threshold in April and June, and eight in May (all attributable to switch equipment failure at the PHLAPAMK92T local tandem). Consequently, the reported results calculations are correct. A similar review of the raw data files for the CLEC groups reveals five groups in April, seven in May, and two in June exceeded the blocking threshold, again indicating the reported results calculations are correct. All were coded with an "F" action code in the Standard Remarks (STD RMK) field (see below), thus excluding them from the NP-1-01, NP-1-03, and NP-1-04 metrics as "Telecom carrier dependencies, to include all CLEC caused blockages". Further review of the raw data files, indicates one of the excluded trunk groups exceeded the blocking threshold for three consecutive months, while another three of the excluded groups exceeded the blocking threshold for two consecutive months.[12]

Metric Creation

Data for the compilation of the NP-1 metric are captured in the central office switches. The Traffic Data Measurement System (TDMS) is utilized to retrieve the raw data from the switches and aggregate it. The Traffic Network Data System-TK (TNDS-TK) uses the Trunk Servicing System (TSS), a sub-system within TNDS-TK, to perform the calculations on the raw data from TDMS to obtain weekly and monthly data. This information includes actual traffic measurements, the A-Z locations of the trunk groups (the identification of the originating and terminating central offices as identified by common language location identifier (CLLI) codes), and the number of trunks in service. In this system, an FTG is identified by an indicator in the data base, so the required data can be extracted for the NP-01 metric calculations.

DCI was advised that this indicator is populated by the Trunk Capacity Management (TCM) engineer, who is in the Network Engineering organization. This is important to ensure inclusion of all appropriate groups in the measurement. DCI was advised that a weekly report is furnished to the TCM organization that identifies the trunk groups that have the indicator, plus those that are potential candidates. However, no feedback loop is provided for TCM to validate that the number of groups is correct.[13] As can be seen from the report above, there were no month to month variations in the number of Verizon PA groups in the metric. (The number of groups for Verizon PA appears reasonable, as DCI determined there are 197 Verizon PA end offices in Pennsylvania.)[14] Of further note, there were variations in the number of CLEC groups, but they were relatively small.

Raw data files are built from the information discussed above for all of the FTGs, and sent to the appropriate TCM group for investigation of those groups that exceed the threshold criteria (one month at 2.0%). The TCM engineer is responsible for populating a four character STD RMK field, based on the results of their investigation. This field is a key determinant in those groups that will be excluded from the NP-1-01, NP-1-03, and NP-1-04 sub-metrics. The first character of the STD RMK field is the action code, and indicates what action Verizon PA is taking, or is planning, for a particular trunk group. The second character indicates the validity of the study period data, the third

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[12] Data Request B-058, B-058 SUPP, and B-087 Responses
[13] B-027 Interview Summary
[14] Data Request B-086 Response

character shows why the FTG blocked, and the fourth indicates the number of consecutive months excessive blocking has occurred.   The action codes are A-F, as defined below:

- A-Relief pending
- B-Relief provided
- C-Group under investigation
- D-No action required
- E-No data or invalid data for the period under investigation
- F-Telecomm carrier dependencies, to include all CLEC caused blockages (See Exclusion Section above)[15]

DCI was advised that the Managers of the TCM engineers perform weekly reviews of trunk groups that exceed the blocking threshold and validate the coding placed in the STD RMK field. When the TCM engineers complete their work, the files are returned to the systems group for merger with the rest of the data.[16] A determination is made that all groups that exceeded the threshold have remarks in the STD RMK field, and the raw data file is updated. A spread sheet is developed that captures all the relevant data and forwarded to the TCM group for a final validation. DCI was advised that if something is found that appears to be incorrect, it is reworked from the raw data files to ensure it is properly corrected. After the final review by the TCM Engineer, the raw data files are forwarded to the Network Metrics Platform (NMP) for calculating and publishing the metrics.[17]

The identification of the Time Consistent Busy Hour (TCBH) is integral to the determination of the blocking level for a given trunk group, and consequent metric calculation.   While it could be assumed that the development of the blocking levels are based on twenty-four hour per day, seven day a week measurements, that is not the case. Instead, TNDS-TK utilizes data from the switch to produce a TCBH for each of the FTGs. A program in this system collects peg count (the number of calls), overflows (the calls that could not be completed because of an all trunk busy condition), message usage measured in CCS, and maintenance usage measured in CCS for all 24 hours per day. The system performs internal validations on the data.

Another program in TNDS-TK utilizes the hourly data to calculate the offered load in CCS for each hour for Monday through Friday, the five day measurement period, or study week. The blocking percent is also calculated in the same manner for the study week (overflows/peg count). The offered load and the blocking percent are averaged for each hour for the study week (hour 00=12 midnight to 1:00a.m., through hour 23=11:00p.m.to 12 midnight).

For monthly reporting, a four week weighted average (the study period), is developed from the sum of four or fewer of the most recently measured study weeks in a nine week span. The highest average blocking hour for the study period is the TCBH, and becomes the basis for the metric reporting. Should there be no blocking for a particular FTG, the highest average calculated offered load is used to define the TCBH.[18] DCI was furnished a June, 2003, TNDS-TSS report for trunk

[15] B-027 Interview Summary
[16] B-028 Interview Summary
[17] B-027 Interview Summary
[18] B-027 Interview Summary

group AA156152, PHLAPAMK92T-PHLAPAMKN41, and from this report verified the calculations as described.[19]   Moreover, the report indicated blocking of 5.93% for hour 21, and further review of the raw data files for June showed this trunk group with blocking of 5.93%. Based on the STD RMK field entry of FOTO, it was excluded from NP-1-01, but included in NP-1-02 of the published metrics.[20]

NP-2: COLLOCATION PERFORMANCE

Definition

This metric includes collocation arrangements ordered via both the state and federal tariffs. Regardless of which tariff is used for ordering, the collocation arrangements are provisioned per the intervals listed in the state tariffs. There are two basic intervals specified: (1) the response interval, which is the elapsed time in business days (per the C2C Guidelines) between the order application date and the notification of space availability (the response date), and (2) the completion interval, which is the elapsed time in business days from the order application date to the completion date. The order application date is defined as the date a valid service request (one that is populated in accordance with the collocation instructions published at a web site accessible by the CLECs) is received. A collocation case is considered completed when the arrangement is suitable for use by the CLEC, and the necessary cable assignment information has been furnished. The NP-2 metric provides the results for Verizon PA in meeting the response intervals and the completion intervals. Separate reports are rendered for new requests and requests for augments to existing locations.[21]

Pennsylvania Tariff P.U.C.–No.218, Section 2 specifies the response and completion intervals to which Verizon must adhere. Applications must be responded to within ten calendar days after receipt to inform the CLEC whether space is available to meet the CLECs request. Should the application be found deficient, Verizon must respond in writing within eight business days specifying the information that is needed to complete the application. The tariff also provides standard intervals for completion of the various collocation arrangements. The interval to establish a caged Physical Collocation arrangement is 90 days (the tariff is not specific as to calendar or business days), and an initial Secured Open Collocation Environment (SCOPE) is 90 calendar days. The interval for Cageless Collocation-Open Environment (CCOE) is 60 calendar days where Verizon's equipment is secure, and 70 calendar days where Verizon's equipment is unsecured. To establish additional SCOPE arrangements at the same central office location, the interval is 60 calendar days. The interval to establish a Virtual Collocation arrangement is 60 business days.[22] For metric reporting purposes, caged Physical, SCOPE, and CCOE are reported as physical arrangements.

Sub-metrics

There are a number of sub metrics within NP-2 which are shown below by new and augment categories.

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[19] Data Request B-058, Question 5 Response
[20] Data Request B-087 Response
[21] Verizon PA C2C Guidelines NP-2 Collocation Performance, page 90
[22] Pennsylvania Tariff P.U.C.-No. 218, Section 2, Sheets 4 and 9

Collocation Performance-New[23]

- **NP-2-01:** % On Time Response to Request for Physical Collocation
- **NP-2-02:** % On Time Response to Request for Virtual Collocation
- **NP-2-03:** Average Interval –Physical Collocation
- **NP-2-04:** Average Interval-Virtual Collocation
- **NP-2-05:** % On Time-Physical Collocation
- **NP-2-06:** % On Time-Virtual Collocation
- **NP-2-07:** Average Delay Days-Physical Collocation
- **NP-2-08:** Average Delay Days-Virtual Collocation

Collocation Performance-Augments[24]

- **NP-2-01:** % On Time Response to Request for Physical Collocation
- **NP-2-02:** % On Time Response to Request for Virtual Collocation
- **NP-2-03:** Average Interval-Physical Collocation-76 Days and 45 Days
- **NP-2-04:** Average Interval-Virtual Collocation
- **NP-2-05:** % On Time-Physical Collocation-76 Days and 45 Days
- **NP-2-06:** % On Time-Virtual Collocation
- **NP-2-07:** Average Delay Days-Physical Collocation
- **NP-2-08:** Average Delay Days-Virtual Collocation

Exclusions

When a collocation request is delayed due to a CLEC caused issue, a CLEC jeopardy is initiated in the Customer Business Services/Customer Network Engineering (CBS/CNE) system, a data base used to track collocation application information. The jeopardy continues in effect for the duration of the delay. The Local Collocation Coordinator (LCC) has the responsibility for notifying the CLEC that the jeopardy has been started. The jeopardy codes in use are as follows:

- C1 CLEC Requests Delay
- C2 CLEC Equipment Delay
- C3 CLEC Vendor Delay
- C4 CLEC Monies Not Received
- C5 Waiting for CLEC Approval
- C6 CLEC Controls Installation
- C7 CLEC No Forecast
- C8 CLEC High Application Volume (+20)

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[23] C2C Performance Standards and Reports, Verizon PA, Network Performance-NP-2
[24] Ibid

- C9 CLEC Changed or Revised
- C10 CLEC Application Missing
- C11 CLEC Not Reviewed
- C12 CLEC Bankruptcy

As will be discussed below as part of the metric creation, there is in place a "stop clock" procedure that is used to deduct the time from when Verizon PA indicates that a collocation arrangement is jeopardized for CLEC reasons until the jeopardy is stopped.[25]

Formula[26]

- **NP-2-01 and NP-2-02:** The number of requests for Physical or Virtual Collocation arrangements respectively where a response to the request was due in the report period and was answered on time/the number of requests for Physical or Virtual Collocation respectively where the initial response was due in the report period.

- **NP-2-03 and NP-2-04:** Sum of the duration from application date to completion date for Physical or Virtual Collocation arrangements respectively completed during the report period, excluding time for CLEC milestone misses/the number of Physical or Virtual Collocation arrangements respectively completed.

- **NP-2-05 and NP-2-06:** The number of Physical or Virtual Collocation arrangements respectively completed on or before the due date (adjusted for DD extensions resulting from CLEC milestone misses)/the number of Physical or Virtual Collocation arrangements respectively completed.

- **NP-2-07 and NP-2-08:** The sum of the duration between actual Physical or Virtual Collocation arrangements respectively completions and the due date for missed Collocation arrangements (adjusted for DD extensions resulting from CLEC milestone misses)/the number of missed Physical or Virtual Collocation arrangements respectively.

DCI Derived Metric Statement

Not Applicable

Report Dimension

This report is rendered monthly for CLEC specific and for the CLECs in aggregate for Pennsylvania. Separate reports are issued for new applications and for augments. A summary of the applications included in the aggregate level metric report follows. For the review period of April, May, and June there were five requests for new physical collocation, and no new requests for virtual collocation. Augment requests during this period were 112 for physical arrangements, and two for virtual arrangements. Also reported for the review period were completions for seven new physical

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[25] Response to Data Request B-059
[26] Verizon PA C2C Guidelines NP-2 Collocation Performance, pp 90,91

arrangements and one new virtual arrangement. There were 93 augment completions for 76 day physical arrangements, none for 45 day physical arrangements (the 76 and 45 day phenomenon is discussed at length in Finding NP-2:2 below), and none for virtual arrangements. A data request was issued to obtain information on the use of "stop clock" time for the job completions intervals, specifically to identify those jobs where a CLEC disputed the jeopardy, or the stop and start time for the jeopardy.[27] The response indicated no applications were determined to be in this situation for the review period.[28] An additional data request identified two applications where the due date (DD) was changed from that automatically entered in the system based on the Pennsylvania tariff. For application 121689, a physical augment, it was determined that Verizon PA could meet an earlier DD, so the CLEC was given June 19, 2003, rather than the regulatory date of July 10, 2003. For application 119561, a physical augment, it was determined that the system had assigned a 60 day interval, rather than the 90 days allowed by the Pennsylvania tariff. Consequently, the date was changed to reflect the proper interval.[29]

Performance Standard

For NP-2-01, NP-2-02, NP-2-05, and NP-2-06 the performance standard is 95% on time. NP-2-03, NP-2-04, NP-2-07 and NP-2-08 do not have a standard, since they are average calculations that show the average intervals achieved. However, the applicable intervals are listed in the state tariff.[30] For the review period, the results are listed on the following two tables: (For ease of reference, the numbers in parentheses reflect the number of applications in the metric for the reporting period.)[31]

Table E-2 – NP-2-01, 02, 05 and 06

New Applications	April	May	June
Standard	95% On Time	95% On Time	95% On Time
NP-2-01	100.00 (2)	100.00 (2)	100.00 (1)
NP-2-02	N/A (0)	N/A (0)	N/A (0)
NP-2-05	100.00 (3)	100.00 (3)	100.00 (1)
NP-2-06	N/A (0)	100.0 (1)	N/A (0)
Augment Applications	April	May	June
Standard	95% On Time	95% On Time	95% On Time
NP-2-01	100.00 (45)	97.82 (42)	100.00 (25)
NP-2-02	N/A (0)	100.00 (1)	100.00 (1)
NP-2-05	100.00 (24)	100.00 (24)	100.00 (45)
NP-2-06	N/A (0)	N/A (0)	N/A (0)

[27] Document Request Data Request B-072
[28] Response to Data Request B-069
[29] Response to Data Request B-070
[30] Verizon PA C2C Guidelines NP-2 Collocation Performance, page 91
[31] C2C Performance Standards and Reports, Verizon PA, Network Performance-NP-2

Table E-3 – NP-2-03, 04, 07 and 08

New Applications	April	May	June
Standard	None	None	None
NP-2-03	46.66	56.33	49.00
NP-2-04	N/A	56.00	N/A
NP-2-07	N/A	N/A	N/A
NP-2-08	N/A	N/A	N/A
Augment Applications	April	May	June
Standard	None	None	None
NP-2-03	65.13	47.63	46.56
NP-2-04	N/A	N/A	N/A
NP-2-07	N/A	N/A	N/A
NP-2-08	N/A	N/A	N/A

Metric Creation

The collocation process begins with the application, which can be accessed via a web site. The application must be completed and sent to the Collocation organization in Wholesale Network Services with appropriate fees. DCI was advised that most of them are sent via Email. When received, the Collocation group acknowledges the receipt to the sending CLEC, advising if additional information or fees are needed. Within the Collocation organization, the applications processing group makes the determination that the application is complete, correct, and fees are in hand. With this step in the process completed, the CLEC is notified, and the clock is started. The application may already have been loaded for tracking in the CBS/CNE data base. If so, it is updated with the start date; if not, it is entered with all information. CBS/CNE is used by Central Office Engineering to track a number of things, and it has a module exclusively for collocation. The system automatically calculates a due date (DD) based on the type of application and the applicable state tariff.

The system automatically forwards the application to the appropriate LCC, who is in the Network Engineering organization. Internally, the LCC is given seven days to respond to the CLEC that the request can or cannot be met, though the Pennsylvania tariff allows ten calendar days for a response. The original DD cannot be changed, but the LCC can document to Wholesale Network Services that there are insurmountable problems that require a change in the complete date. The CLEC is notified, agreement is reached on a complete date, and this date becomes the official measurement date for meeting the request. As noted above, two DD's were modified during the review period, both of which appear to be reasonable and proper.

At this time, the LCC issues a Telephone Equipment Order (TEO) to get the necessary work accomplished. The TEO establishes an internal ready date that is three weeks earlier than the official DD, and DD minus three weeks is used for all internal tracking. A site visit is made by a Verizon PA representative at scheduled TEO completion to ensure that the location is complete. If everything is satisfactory, the job is shown complete in CBS-CNE with the actual complete date (this

is called the unconfirmed completion date), and a site visit is scheduled with the CLEC for acceptance. When the CLEC representative cannot make an immediate site visit, the LCC enters a CLEC jeopardy code (C11) in the data base that causes a "stop clock" condition to be in place until the CLEC can visit the site and accept it, which is then entered in the system as a confirmed date. For calculation of the PA PAP metric, the stop clock time for any CLEC jeopardy code associated with the application is subtracted from the overall interval, and the calculated date is then compared with the committed date to determine whether the DD was met or not.[32] DCI requested information on all collocation jobs during the review period with unconfirmed completion dates that were contested by the CLEC, thus requiring additional work and potential changes in stop clock time. DCI was advised that there were no applications of this nature during April, May, and June of 2003.[33]

As a further review of the use of the "stop clock" process, DCI requested information on all applications that had CLEC jeopardies issued against them during the review period. Twenty-seven applications were furnished for analysis. Of the twenty-seven, four were found to have two CLEC delays. The jeopardy codes used were as follows: 1-C2, CLEC Equipment Delay; 5-C11, CLEC Not Reviewed; 11-C10, CLEC Application Missing Information; and 14-C6, CLEC Controls Installation. Included in this analysis was a review of the documentation supporting the jeopardy start and stop dates, since these dates define the time deducted from the overall completion interval, thus becoming a key determinant in meeting the committed due date. The analysis showed applications with documentation that supported jeopardy start and stop dates (13), applications with verifiable documentation for start dates, with none for stop dates (10), applications with documentation for stop dates, with none for start dates (2), and applications with no documentation (6).

Some specific examples will serve to illustrate the difficulties associated with this process. Application 1221942 was given a C6 jeopardy (CLEC controls installation) of May 12, 2003, and was shown with a jeopardy stop date of June 2, 2003. There was no documentation on the start date, and the stop date was supported by an E-mail dated June 2, 2003 to the CLEC stating that the job would complete "shortly". Thus the date of the E-mail became the stop date. Application 122438 was given a C11 jeopardy (CLEC not reviewed), with a start date of June 23, 2003 and a stop date of July 7, 2003, and no documentation for either.[34] The Verizon PA C2C Guidelines state "Verizon PA will not be deemed to have completed work on a collocation case until the arrangement is suitable for use by the CLEC, and the cable assignment information necessary to use the facility has been provided to the CLEC."[35] A last example is Application 109309, shown with a C6 jeopardy start date of November 18, 2002, and stop date of July 17, 2003. Supporting documentation consists of an E-mail dated November 25, 2002 that states the application is "to be completed as expected", and another one dated July 22, 2003 stating that the application "has been completed".[36]

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[32] Interview Summaries B-019 and B-023
[33] Response to Data Request B-069
[34] Response to Data Request B-072
[35] Verizon PA C2C Guidelines NP-2 Collocation Performance, page 90
[36] Response to Data Request B-072

For the April and May results, the metric group in the Collocation organization made manual calculations using data from CBS-CNE to prepare the metrics for NP-2. For the June results, the data were sent to the Network Metrics Platform (NMP) for calculation of the metrics. The metric team reviews the data on each job prior to sending the information to NMP each month, and then reviews the NMP calculations prior to the results being published.[37]

OD-1: OPERATOR SERVICES/DIRECTORY ASSISTANCE SPEED OF ANSWER

Definition

Metric OD-1 measures speed of answer for calls to Operator Services and Directory Assistance for Verizon PA retail (and Resale) customers and for Pennsylvania customers served by CLECs (facility based and Unbundled Network Element – Platform (UNE-P)). The performance standard is average speed of answer at parity with Verizon PA retail (and Resale). There are no exclusions to the metric.[38]

Sub-metrics

- **OD-1-01:** Measures Average Speed of Answer (ASA) for calls to Call Completion Services.
- **OD-1-02:** Measures ASA for calls to Directory Assistance.

Exclusions

There are no exclusions.[39]

Formula

- **OD-1-01:** This metric determines the ASA for Call Completion Services, or Operator Services (OS), the common usage term. The ASA is developed from a numerator determination that is the sum of call answer times for calls to Operator Services. The duration is measured from the time the calls are placed in queue until answered by an operator. The denominator is derived from a count of calls to OS that are answered. By definition, abandoned and deflected calls (a deflected call is one that is sent to a recording during periods of heavy load) are not included in this metric.[40]

- **OD-1-02:** This metric determines the ASA for calls to Directory Assistance (DA). The numerator for this metric is developed from the sum of call answer time based on the elapsed time from when the calls are placed in queue until answered by an operator. The

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[37] Interview Summary B-019
[38] Data response B-060 (Metric Overview page1) and C2C Guidelines, OD-1 Operator Services/Directory Assistance Speed of Answer
[39] Verizon PA C2C Guidelines, OD-1 Operator Services/Directory Assistance Speed of Answer
[40] Data Response B-060 (Metric Overview page 3) and B-020 Interview Follow-up

denominator is derived from a count of calls to DA that are answered. Again, by definition, abandoned and deflected calls are not included in this metric.[41]

DCI Derived Metric Statement

Not Applicable.

Report Dimension

OD-01 is reported for Verizon PA retail and resale customers. While the C2C Guidelines specify that the standard is ASA provided at parity with Verizon PA retail, it is noted in the Report Dimensions that the measurement is for Pennsylvania retail and resale. DCI was advised that "Verizon is unable to identify and separate calls originating from resold lines at the Traffic Operator Position System (TOPS) switch."[42] In many cases the reseller uses the same customer ID code as Verizon PA, thus rendering the switch unable to differentiate between retail and resale customers. Other customers in Pennsylvania served by CLECs (facility based and UNE-P) can be separately identified and are reported in aggregate. Aggregate reporting is used for CLEC ASA metrics because of the difficulty in maintaining separate queues for each of the CLECs serving customers in Pennsylvania.

Performance Standard

Average speed of answer provided at parity with Verizon PA retail, is the stated performance standard. However, as was discussed above, Pennsylvania retail for metric purposes includes resale as well. For the review period, the results are shown in the table below.[43] As can be seen, the Verizon PA results were substantially higher (longer wait times) than the CLECs, for both DA and OS. Given the common pool of operators that are used to answer the calls regardless of origination, this seemed to be a much wider variation than would be expected. DCI was advised that the metrics are correct, and the variation is because CLEC identified calls will be answered first whenever there are calls in queue. The TOPS switch is programmed to do this. The Verizon PA rationale provided was that owing to the relatively small number of CLEC calls, receipt of only a few of them during periods of heavy traffic (and longer ASA) would make it virtually impossible to achieve parity. Consequently, CLEC calls are given priority at all times.[44]

For the review period, Table E-4 shows the following results:

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[41] Ibid
[42] Data Response B-067 (Calculations)
[43] C2C Performance Standards and Reports Verizon PA (April, May, June)
[44] Interview Summary B-020 Follow-Up

Table E-4

OD-1-01	April	May	June
Verizon PA	4.6	4.45	4.02
CLEC Aggregate	.32	.32	.31
OD-1-02	**April**	**May**	**June**
Verizon PA	10.85	10.45	10.82
CLEC Aggregate	4.42	4.25	5.81

Metric Creation

There are seven DA call centers handling calls for Pennsylvania customers, six of which are physically located in the State. The seventh is located in Delaware, and handles calls for both Delaware and Pennsylvania. The operators working in these centers are treated as a common pool for the answering of DA calls. A separate call queue is provided, so that average speed of answer can be calculated separately for DA and OS calls originated in each of the States. Three OS call completion call centers are located in Pennsylvania, but handle calls originated in Delaware as well. The operators working in these centers are treated as a common pool for the answering of OS calls. Both DA and OS calls are served by six Nortel DMS 200 TOPS switches, all located in Pennsylvania. (Delaware end offices are routed to one of these switches, located in Philadelphia.) The switches and the call receipt centers are managed by the National Force Management Center located in Framingham, Massachusetts.

Call processing operates as follows. An end user customer originates an OS call or a DA call from an end office, which routes the call based on the digits dialed to the TOPS switch via an interoffice trunk. The TOPS switch makes the determination that an operator is needed, and places the call in the appropriate queue based on the digits received. (Some OS calls, 0+ calls, for example, where the end user customer dials the appropriate digits for calling card and collect calls, do not require an operator. Since these calls are processed mechanically and no operator is involved, they are not included in the metric calculation.) Some CLECs have dedicated trunk groups that allow identification of their calls, while others use shared transport groups that carry multiple CLEC traffic, as well as calls for Verizon PA retail and resale end user customers. For shared transport groups, the TOPS switch uses the Line Information Data Base (LIDB), where each line has a customer ID code to identify the service provider for the line placing the call. With this information, separate ASA can be determined and reported for calls for CLEC end user customers (facility based and UNE-P), and for Verizon PA retail and resale customers.[45]

The TOPS switch uses the Queue Management Information System (QMIS) to collect data on the call events, which are continuously fed into the Force Management System (FMS). There are two types of call events: call queue events and position events. Call queue events occur when a call arrives at a queue, is abandoned or deflected, or is presented to an operator. Since the algorithms for deflected calls are controlled by the Verizon PA team managing OS and DA, DCI asked for a count

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[45] Interview Summary B-020

of the number of calls deflected for April, May, and June, 2003. The counts were provided by queue, and to gain perspective on their relative importance, were compared to the number of calls answered during the same period previous years. For OS, .244% of the calls answered were deflected for Pennsylvania Retail, and none were deflected for Pennsylvania CLEC. For DA, 1.34% of the calls answered were deflected for Pennsylvania Retail, and .072% of the calls answered were deflected for Pennsylvania CLECs.[46]

The message types sent from TOPS contain the information needed to identify the calls for placement in the correct queue, and provide the time-in-queue and time stamps associated with each call. Abandoned calls are uniquely identified, which allows FMS to exclude them from the calculations. Queue time, or wait time, is the elapsed time in seconds from when a call is placed in queue until an operator position is attached. Position events occur when the operator changes state, for example, to take a call, enter or exit the "make busy" state, or logs in or out. Data collection software (cqsvr) in FMS performs the counting, sorting, and summarization for queues, positions, agents, and offices based on data base setups. Data are accumulated for quarter hours, and summaries can be provided quarter hourly, hourly, by session, daily, or monthly.[47]

The data contained in FMS provide the information needed to calculate the monthly OD-1 metrics. To accomplish this, FMS is queried for the OD-1 metrics information. The appropriate call queues are then identified for Verizon PA and the CLECs, and file transferred to the NMP. NMP performs the metric calculations, generates and publishes the results.[48]

The Verizon PA C2C Guidelines for this metric states: "Operator Services CLEC results are reported combined for PA/DE. When Verizon implements state specific reporting capability for Operator Services in DE, results will be implemented for PA only."[49] DCI was advised that this was changed in September 2002, and the results have been reported for Pennsylvania since that time. It was further noted, that the Verizon compare results were reported separately from the inception.[50]

GE-1: DIRECTORY LISTING VERIFICATION REPORTS

Definition

Metric GE-1 measures the timeliness and accuracy of the directory listing verification reports (DLVRs) and corrections to the electronically transmitted DLVR that the CLECs submit to correct any errors that may be contained therein. For the purposes of this metric, the due date for a directory listing verification report is designated as the date that is 30 business days prior to the close out date for the directory. The due date for CLEC submissions of corrections is 15 calendar days prior to the closeout date for the directory. The due date for Verizon PA's corrected DLVR to the CLECs is 10 calendar days prior to the close out date for the directory. The process for obtaining listing

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[46] Data Response B-088 (Count of Deflected Calls)
[47] Data Response B-060 (Metric Overview page 3), and Interview Summary B-020
[48] Interview Summary B-020
[49] Verizon PA C2C Guidelines, OD-1 Operator Services/Directory Assistance Speed of Answer
[50] Interview Summary B-020 Follow-Up

verification reports is documented in Verizon PA's CLEC and Reseller Handbooks, as supplemented by this performance metric. This metric also measures the completeness and accuracy of the listings contained in Verizon PA's white pages directory.[51]

For the purpose of this standard, the following definitions are used:[52]

- "Error" is defined as any omission of a directory listing for which the CLEC requested the inclusion of the listing in the directory; the inclusion of a directory listing for which the CLEC requested the exclusion of a listing in the directory; incorrect telephone number; incorrect address; or incorrect name.
- "Incorrect" is defined as any deviation from the listing information contained in the Local Service Request (LSR) or DSR.

Metric GE-1 examines a statistically valid random sample of each individual CLECs white pages listings contained in each DLVR to determine whether those listings were provisioned accurately in accordance with the CLECs DSR/LSR. For LSR/DSR orders that select the "retain as is" or "ERL" field, Verizon PA must examine the listing information contained in the database prior to processing the CLEC order and subsequent to processing the CLEC order, to determine whether the CLEC order was provisioned accurately.[53]

Sub-metrics

- **GE-1-01:** Measures the percentage of directory listing verification reports furnished on time.
- **GE-1-02:** Measures the percentage accuracy of DSR/LSR inclusion in DLVRs.
- **GE-1-03:** Measures the percentage of DLVR corrections that are furnished on time.
- **GE-1-04:** Measures the percentage accuracy of DLVR corrections.
- **GE-1-05:** Measures white pages errors and omissions.

Formula

- **GE-1-01:** This metric measures the percentage of directory listing verification reports that are furnished on time. The metric is developed from a numerator that is the number of DLVRs due in the reporting period that are transmitted on or before the due date. The denominator is the total number of DLVRs due in the reporting period.[54]

- **GE-1-02:** This metric measures the percentage accuracy of DSR/LSR inclusion in DLVRs. The metric is developed from a numerator that is the number of CLEC-specific listings included in the random sample of listings contained in each DLVR transmitted within the

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[51] Verizon PA C2C Performance Standards
[52] Verizon PA C2C Performance Standards
[53] Verizon PA C2C Performance Standards
[54] Verizon PA C2C Performance Standards

reporting period or the prior reporting period for which the due date for the submissions of DLVRs is within the reporting period, that were provisioned accurately in accordance with the original DLR/LSR. The denominator is derived from the total number of sampled CLEC-specific listings.[55]

- **GE-1-03:** This metric measures the percentage of DLVR corrections that are furnished on time. The metric is developed from a numerator that is the number of DLVR revisions in the reporting period that are transmitted on or before the due date to the CLEC. The denominator is the total number of DLVRs revisions due in the reporting period provided to Verizon PA by the CLEC.[56]

- **GE-1-04:** This metric measures the percentage accuracy of the DLVR corrections. The metric is developed from a numerator that is the number of DLVR corrections for which no further CLEC request for correction is submitted within the reporting month. The denominator is the total number of DLVR corrections transmitted during the reporting month.[57]

- **GE-1-05:** This metric measures white pages errors and omissions. The metric is developed from a numerator that is the number of lines of white pages errors in the white pages directories previously identified in LVR on a per CLEC, per directory basis. The denominator is the total number of CLEC white pages listing lines in the white pages directories appearing in an LVR for each directory on a per CLEC, per directory basis.[58]

DCI Derived Metric Statement

Not Applicable

Report Dimensions

GE-1 is reported for the Verizon PA service territory based on the following company dimensions:

- CLEC aggregate
- CLEC specific
- Verizon affiliate aggregate
- Verizon affiliate specific

Exclusions

The applicable exclusions are as follows:

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[55] Verizon PA C2C Performance Standards
[56] Verizon PA C2C Performance Standards
[57] Verizon PA C2C Performance Standards
[58] Verizon PA C2C Performance Standards

- Reports that the CLEC has requested be transmitted less than 30 business days prior to the close out date for the directory.
- GE-1-02 directory listings that were provisioned accurately in accordance with the original DSR or LSR.

Performance Standard

GE-1 is a tracking metric for a trial period after which it will be evaluated to determine if it captures the appropriate performance and measures it meaningfully. Therefore this metric was not reported on in the April, May, and June 2003 timeframe.[59]

The applicable performance standards as they exist in the Verizon PA C2C Guidelines are as shown on Table E-5.[60]

Table E-5

GE-1-01	95% of DLVRs transmitted on or before the due date
GE-1-02	98% accuracy of DLVRs
GE-1-03	98% of DLVR revisions transmitted on or before the due date
GE-1-04	98% accuracy on DLVRs revisions
GE-1-05	99% accuracy of White Page listings

Metric Creation

The metric was in the trial stages during the review period and as such was not reviewed in detail.

GE-3: TIMELY AND ACCURATE PROVISIONING OF WHITE PAGE DIRECTORY LISTINGS LSRs AND DSRs

Definition

Metric GE-3 measures the timely and accurate provisioning of the LSR and DSR orders that result in the update of the directory assistance database and the database used for the publication of the directory white pages. This measurement is based on a statistically valid monthly sampling of all LSR and DSR orders for each CLEC individually to determine whether the orders were provisioned in a timely and accurately manner. Verizon PA and the CLECs must mutually agree on the random sampling methodology that is employed.[61]

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[59] Verizon PA C2C Performance Standards
[60] Verizon PA C2C Performance Standards
[61] Verizon PA C2C Guidelines

Sub-metrics

- **GE-3-01:** Measures the percentage of the number of orders that are processed on time for updates to the directory assistance/white page listing database.[62]

- **GE-3-02:** Measures the percentage of the number of lines in the sample for each CLEC that are processed accurately, when compared to the CLEC DSR/LSR.[63]

Formula

- **GE-3-01:** This metric measures percentage of the number of orders that are processed on time for updates to the directory assistance/white page listing database. The metric is developed from a numerator that is the number of orders processed for update to the directory assistance/white pages listing database on time. The denominator is the number of orders pulled for a random sample on a per CLEC basis in a single month.[64]

- **GE-3-02:** This metric measures the percentage of the number of lines in the sample for each CLEC that are processed accurately, when compared to the CLEC DSR/LSR. The numerator for this metric is developed from the number of lines in the sample for each CLEC that are without errors when compared with the CLEC DSR/LSR. The denominator is derived from the number of orders pulled for a random sample on a per CLEC basis in a single month.[65]

DCI Derived Metric Statement

Not Applicable

Report Dimensions

GE-03 is reported for the Verizon PA service territory based on the following company dimensions:[66]

- CLEC aggregate
- CLEC specific
- Verizon affiliate aggregate
- Verizon affiliate specific

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[62] Verizon PA C2C Guidelines
[63] Verizon PA C2C Guidelines
[64] Verizon PA C2C Guidelines
[65] Verizon PA C2C Guidelines
[66] Verizon PA C2C Guidelines

Exclusions

The applicable exclusions are as follows:[67]

- Verizon test orders.
- Orders submitted by a means other than EDI or Web GUI (e.g., faxed or mailed orders), unless EDI or GUI is unavailable.

Performance Standard

GE-3 is a tracking metric for a trial period after which it will be evaluated to determine if it captures the appropriate performance and measures it meaningfully. Therefore this metric was not reported on in the April, May, and June 2003 timeframe.[68] The applicable performance standards as they exist in the Verizon PA C2C standards are as follows:[69]

Table E-6

GE-3-01	95% are on time
GE-3-02	98% of orders are provisioned accurately

Metric Creation

Not Applicable

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[67] Verizon PA C2C Guidelines
[68] Verizon PA C2C Guidelines
[69] Verizon PA C2C Guidelines

C – FINDINGS

NP-1 FINDINGS

1. Verizon PA Has No Process In Place To Notify CLECs That A Trunk Group Has Exceeded The Blocking Threshold And Is To Be Excluded From The NP-1 Metric.

The Verizon PA C2C Guidelines state, "Verizon PA will electronically notify CLECs (operational trunk staffs), of the following situations for blocked trunks. This notification will identify that Verizon PA has identified a blocked trunk group and that the trunk group should be excluded from Verizon PA performance. Unless the CLEC responds back with documentation that the information on the condition is inaccurate the trunk group will be excluded:

- Trunks blocked due to CLEC network failure
- Trunks that actually overflow to a final trunk, but are not designated as an overflow trunk
- Trunks blocked when CLEC order for augmentation is overdue
- Trunks blocked where CLEC has not responded to or has denied Verizon PA request for augmentation
- Trunks blocked due to other CLEC trunk network rearrangements."

These same guidelines state in the metric calculation section, that applicable metrics (NP-1-01, NP-1-03 and NP-1-04) will be determined "exclusive of trunks that block due to CLEC network problems *as agreed by CLECs"* , emphasis added by DCI.[70]

In a Data Request, DCI asked for the notification documentation for those trunks excluded during the review period, and was advised that "Verizon does not notify the CLEC party in regards to whether a trunk group that has exceeded the blocking threshold is excluded from the NP-1 metric."[71] A second Data Request requesting clarification of this response states, "Verizon does not have a process in place to notify the CLEC party in regards to whether a trunk group that has exceeded the blocking threshold is excluded from the NP-1 metric."[72] This clearly does not follow the exclusions portion of the Guidelines quoted above, nor does it adhere to the definitions for the metric calculations for three of the four sub-metrics.

2. The Verizon PA C2C Guidelines Do Not Clearly Identify The Trunk Groups That Are To Be Excluded From The Metric Calculations.

The Guidelines state that "IXC Dedicated Trunks" and "Common Trunks carrying only IXC traffic" are not included; however, there are other types of FTGs that are excluded. In addition, the Performance Standard section of the Guidelines has language that needs clarification. For example, "individual trunks blocking", and "An individual trunk should not be blocked for three consecutive

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[70] Verizon PA C2C Guidelines NP-1 Percent Final Trunk Group Blockage, pages 88 and 89
[71] Data Request B-058, Question 7 Response
[72] Data Request B-091, Question 1 Response

months". Moreover, the End User Standard section has references to apparent paragraph numbers that are not identified as to source document.[73]

NP-2 FINDINGS

1. The Guidelines Do Not Adequately Document The Usage And Definition Of The NP-2 "Stop Clock".

The Verizon PA C2C Guidelines state that "Verizon PA will not be deemed to have completed work on a collocation case until the arrangement is suitable for use by the CLEC, and the cable assignment information necessary to use the facility has been provided to the CLEC."[74] Pennsylvania Tariff P.U.C.-No. 218, section 2, states, "The Telephone Company will use reasonable efforts to provide occupancy of the space(s) on the agreed date and will keep the CLEC advised of any delays. The interval clock will stop, and the final due date will be adjusted accordingly, for each day the CLEC delays in providing information to the Telephone Company or otherwise fails to meet its obligations."[75] The "stop clock" adjustments are referenced in the Guidelines for sub-metric calculations NP-2-03 through NP-2-08 for both new and augment applications.[76]

During the review period there were 101 applications shown as completed, with 23 having one CLEC jeopardy placed on them, while four of them had two. There were 2,036 total calendar delay days associated with these 27 applications, and the documentation for them is discussed at length above.[77] DCI requested documentation on procedures for "stop clock" usage, to include who makes the decision to implement. The response states, "There are no documented procedures on the use of the "stop clocks". However, the implementation practice is, when (sic) collocation request is delayed due to a CLEC caused issue, Verizon PA initiates a CLEC jeopardy in CBS/CNE for the duration of the delay. The CLEC is contacted by the LCC upon initiation of the jeopardy."[78]

2. The Published Results For NP-2 Are Incorrect And Should Be Rerun.

The C2C Performance Standards and Reports, Verizon PA for April, May, and June, 2003, reports Augment results for NP-2-03-6702: Average Interval-Physical Collocation-76 days and NP-2-03-6712: Average Interval-Physical Colocation-45 days. Also, NP-2-05-6702: % On Time-Physical Collocation-76 days and NP-2-05-6712: % On Time-Physical Collocation-45 days is reported for Augment results.[79] Pennsylvania Tariff P.U.C.-No.218, Section 2, addresses intervals of 90 days to establish a caged physical arrangement, 60 or 70 days for CCOE where Verizon PA's equipment is secured or unsecured respectively, and 90 days to establish a SCOPE arrangement, with 60 days for additions to an existing SCOPE arrangement.[80] The C2C Guidelines do not address intervals per se,

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[73] Verizon PA C2C Guidelines NP-1 Percent Final Trunk Group Blockage, page 88
[74] Verizon PA C2C Guidelines NP-2 Collocation Performance, page 90
[75] Pennsylvania Tariff P.U.C.-No. 218, Section 2, Sheet 4
[76] Verizon PA C2C Guidelines NP-2 Collocation Performance, pages 91,92
[77] Response to Data Request B-072
[78] Response to Data Request B-059, Question 5
[79] C2C Performance Standards and Reports, Verizon PA, Network Performance-NP-2
[80] Pennsylvania Tariff P.U.C.-No.218, Section 2, Sheet 4

but make reference to a web site where state-specific tariffs can be found. No reference to either 76-day or 45-day intervals for Pennsylvania could be located, even though these intervals were reported as noted in the official report for the NP-2 metrics.

A Data Request was issued to request an explanation of this apparent incongruity. The response states, "There was a mispopulation of the New York naming scheme in the Pennsylvania C2C template, when Verizon PA implemented the adoption of the NY C2C guidelines in PA. This issue however was uncovered in July 2003, which resulted in Change Control Request (CCR) # 10,261 with an effective date of the August 2003 data month."[81] CCR # 10,261 was reviewed, and it does address the issue raised, showing the data months of April, May, June, and July, 2003, as being affected before the change was implemented. Further, the CCR indicates that there will be no impact on metric reporting, since all pertinent information was summarized under NP-2-03-6702 and NP-2-05-6702.

3. **The Verizon PA C2C Guidelines Do Not Address The Type Of Collocation Application Exclusions Or Inclusions Per Se, Though In The Sub-Metrics Section Under Calculations, It Is Noted That Time Is Excluded For CLEC Milestone Misses.**

The April C2C Guidelines state that, "This metric includes collocation arrangements ordered via the state and federal tariffs."[82] However, there are a number of collocation arrangements that are addressed by the Pennsylvania Tariff P.U.C.-No. 218 that are not included in the metric. Some examples of these include Competitive Alternate Access Transport Terminals, Collocation Remote Terminal Equipment Enclosures, Feeder/Distribution Interconnection Interfaces, Line Sharing, Shared/Sub-leased Cages, Transfer of Ownership Applications, Notice of Terminations, Records Only, and Reductions. In response to a data request, Verizon PA advised that these are treated as exclusions since "they do not fall within the identified list of metric inclusions. The supporting documentation is the C2C Guidelines …"[83] Further, the Guidelines address new and augment applications (products) for sub-metrics NP-2-01, NP-2-02, NP-2-04, and NP-2-05; new applications for NP-2-03; but specify no products for NP-2-06, NP-2-07, and NP-2-08.[84]

OD-1 FINDINGS

1. **The Verizon PA April C2C Guidelines Did Not Accurately Reflect What Is Being Reported For The OS CLEC Results.**

The April C2C Guidelines stated that OS results were for Pennsylvania and Delaware combined, when in fact, the results have been separately reported since September 2002. Thus, they no longer reflect what the PA PUC has ordered, or what is being reported.

GE-1 AND GE-3 FINDINGS

None.

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[81] Response to Data Request B-089 SUPP
[82] Verizon PA C2C Guidelines NP-2 Collocation Performance, page 90
[83] Response to Data Request B-090, Question 2
[84] Verizon PA C2C Guidelines NP-2 Collocation Performance, pages 90,91

D – RECOMMENDATIONS

NP-1 RECOMMENDATIONS

1. **Verizon PA Should Immediately Develop And Implement A Notification Process To Notify And Elicit A Response From The CLEC Party When It Is Determined That A Trunk Group Exceeding The Blocking Threshold Is To Be Excluded. (Refers to Finding 1, Metric NP-1)**

Such a procedure should provide a reasonable time for the CLEC to respond, with the time clearly defined. Since the metric calculation indicates the CLEC must agree to the exclusion, provisions for dispute resolution should also be included with binding time frames for the involved parties.

2. **The Process Developed Above Should Be Used For The Five CLEC Trunk Groups Excluded In April, The Seven In May, And The Two In June. (Refers to Finding 1, NP-1)**

DCI believes the NP-1-01, NP-1-03, and NP-1-04 metrics for the review period are not valid, in that the proper notification was not made per the C2C Guidelines. Assuming a worst case scenario, Verizon PA would be out of parity for two of the three months for NP-1-01, and would have four trunk groups in May that exceeded the blocking threshold for two consecutive months, and one group in June that exceeded the blocking threshold for three consecutive months. To gain validity for these measurements, the process developed above should be used for the five CLEC trunk groups excluded in April, the seven in May, and the two in June. From the outcome of the process, the metrics may stand as published. If there are groups with which the CLEC parties disagree, then the dispute resolution process should be followed. If this process results in groups that should not be excluded, the metrics should be withdrawn and re-published.

3. **This Section Of The Guidelines Should Be Revised To Include A Definitive List Of The Types Of FTGs That Are Not Included. (Refers to Finding 2, NP-1)**

This section of the Guidelines should be revised to include a definitive list of the types of FTGs that are not included, such as 911 trunks, Operator Services trunks, final two-way dedicated trunk groups, etc. Language in the Performance Standard section should be clarified, and appropriate references cited. Further, pertinent information from the process developed in Recommendation No. 1 - NP-1 should be added to the Guidelines.

NP-2 RECOMMENDATIONS

1. **Verizon PA Should Develop And Implement Guidelines For The Use Of All CLEC Jeopardies, To Include Documentation Requirements With Retention Intervals Clearly Spelled Out. (Refer to Finding 1, NP-2)**

As noted in Finding No. 1 – NP-2, above, the amount of "stop clock" time attributable to the jeopardies can be substantial, with major potential impact on the percent on time accomplishments.

Documented procedures are essential to ensure that the jeopardies are used appropriately, started and stopped on a timely basis, and that the involved CLEC is consistently notified per the C2C Guidelines, and the Pennsylvania tariff.

2. **With CC # 10261 In Place The Metrics Should Be Rerun For The Affected Months And The Results Should Be Re-Published. (Refer to Finding 2, NP-2)**

While DCI agrees that the reported metric results should not change, the report format will change. A re-published NP-2 result will provide for consistency from the inception of the PA PAP, providing a definitive base for future analysis and reviews.

3. **The C2C Guidelines Should Be Revised To Accurately Reflect The Intent, In That The Metric Results As They Are Presently Published Do Not Include All Collocation Arrangements Ordered Via The State And Federal Tariffs. (Refer to Finding 3, NP-2)**

Since the Guidelines do not contain a list of metric inclusions, clarity requires that those arrangements that are excluded be specifically identified. Further, the Guidelines should be revised to accurately reflect the product types that are measured by each sub-metric. The Verizon PA C2C Performance Standards and Reports, provide for reporting NP-2-01 through NP-2-08 results for both new and augment applications, but the PA C2C Guidelines do not accurately reflect this.

APPENDIX F – BILLING METRICS

APPENDIX F – BILLING METRICS

A – INTRODUCTION

BILLING DOMAIN GENERAL SUMMARY

The billing domain in Pennsylvania (PA) consists of six metrics with a total of 13 sub-metrics in the PA Carrier-to-Carrier Guidelines adopted in June 2003. The metrics and the number of sub-metrics are:

- **BI-1:** Timeliness of Daily Usage Feeds (1)
- **BI-2:** Timeliness of Carrier Bill (1)
- **BI-3:** Billing Accuracy and Claims Processing (5)
- **BI-6:** Completeness of Usage Charges (2)
- **BI-7:** Completeness of Fractional Recurring Charges (2)
- **BI-8:** Non-Recurring Charge Completeness (2)

For purposes of the Pennsylvania Performance Assurance Plan (PA PAP), only one Billing sub-measure is included. This is BI-1-02 percent Daily Usage Feed (DUF) in four days, which is reported for both Unbundled Network Element (UNE) and Resale.

To the extent possible throughout the Verizon PA review, DCI attempted to recreate Verizon PA results from source data all the way through to the computation and reporting of metrics. In the billing domain, the amount of the data involved, such as DUF files, made it impractical to perform a "cradle to grave" metric evaluation. DCI also assumed from our previous experience that the billing systems would have received a great deal of attention during the Operations Support System (OSS) testing which was a 'cradle to grave" review. Further, much of the data originates in legacy systems, in particular the Carrier Access Billing Systems (CABS) and Customer Record Information System (CRIS) both of which are difficult to extract data from for sampling purposes. DCI was able to utilize data from the Data Mart to replicate Verizon PA results. DCI was able to validate substantially all Verizon PA reported results. This involved a review of all algorithms used by Verizon PA, DCI Structured Query Language (SQL) coding to replicate the Verizon PA data, validation of exclusions and calculation of aggregate and sample Competitive Local Exchange Carriers (CLEC) specific metrics where possible.

DCI also relied upon CLEC input to determine if there were problems in the billing domain requiring additional scrutiny. DCI solicited from all the cooperating CLECs (see Chapter XI – CLEC participation for a list) and received input from several. No CLEC reported issues or concerns with the Billing Metrics, or billing in general, and the answering CLECs responded definitively that they had no problems in the billing area.[1]

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[1] However after completing the review, some CLECs described DUF issues.

April/May – June Plan Changes

Two sub-metrics were added to the billing domain in the June plan. These two metrics are:

- **BI-3-04:** % CLEC Billing Claims Acknowledged within two Business Days
- **BI-3-05:** % CLEC Billing Claims Resolved within 28 Calendar Days After Acknowledgement

Six sub-metrics were dropped from the plan in June. These metrics were:

- **BI-1-01:** Customer Service Record – Electronic Data Interchange (EDI)
- **BI-1-03:** Customer Service Record - WEB Graphical User Interface (GUI)
- **BI-1-04:** % DUF in 8 Business Days
- **BI-4-01:** Address Validation -CORBA
- **BI-4-02:** % Corrected Usage Records Delivered On Time
- **BI-5-01:** % Accuracy of Mechanized Bill Feed

Systems Overview

All of the billing domain metrics derive initially from either Service Order Processors or Billing Switches which are captured in CRIS and CABS billing systems. CABS and CRIS generate the Wholesale Bills and also the Daily Usage Feeds (DUF). A simplified chart of this is shown on Table F-1.

Table F-1 – Simplified Bill Metric Flow[2]
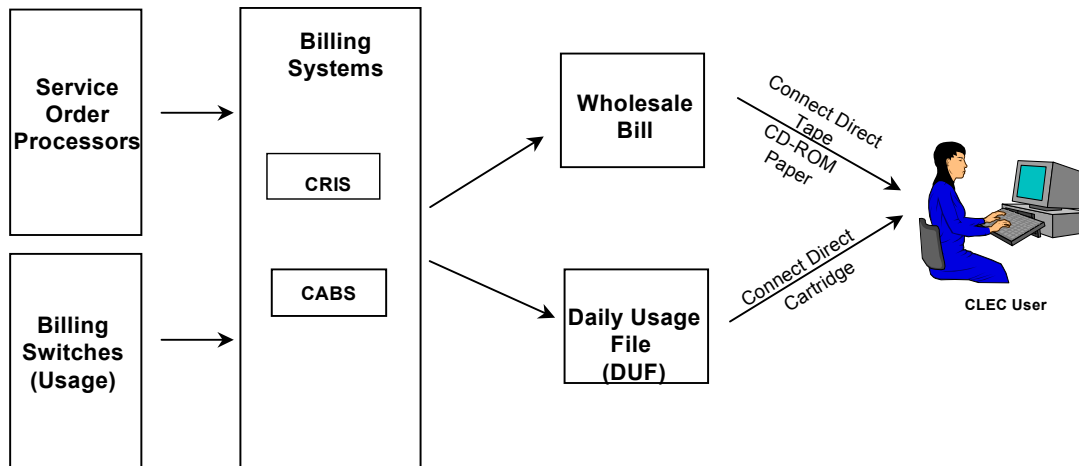
CLEC Comments On Billing

As noted in the summary section, DCI requested comments from participating CLECs regarding billing issues, error and concerns. Most CLECs did not respond, but those that did indicated that there were no issues of note.[3]

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[2] Billing Workshop- Doc1a-Billing Process Flows –Verizon PA Confidential

[3] AT&T responded that "At this time, AT&T has not had any significant billing problems in PA with Verizon PA wholesale billing system."

B – SPECIFIC METRICS

BI-1: TIMELINESS OF DAILY USAGE FEEDS

Definition

The sub-metrics within BI-1 report the number of business days from the creation of the billing message to the date that the information is made available by Verizon PA to the CLEC(s) via a Daily Usage Feed (DUF). In Pennsylvania the only sub-metric reported within BI-1 is DUF presented within four business days. The Standard is 95% of DUFs reported in 4 Business Days.

The calculation process starts with collection of the data from the switch.[4] For CLECs requesting this service, usage records are to be provided each business day. However, not all offices poll usage every business day. Also, weekend and holiday usage is captured on the next business day.   Usage for all CLECs is collected at the same time as Verizon PA.

Sub-Metrics

- **BI-1-02:** % DUF in Four (4) Business Days

Formula

BI-1-02: Carrier-to-Carrier (C2C) formula is defined as: (Total usage records in "y" days divided by the total records on files) multiplied by 100. "y" = 4

The Carrier Metric Algorithm (CMA) further defines the formula as:

- **Numerator:** Number of usage records on daily usage feed tapes processed during the month, where the difference between current date and call date is four (4) days or less.

- **Denominator:** Number of usage records on DUF tapes processed during the month.

DCI Derived Metric Statement

For BI-1-02, DCI sought to validate the count of usage records on the daily usage feeds for three months. This was to determine if all records required to be processed were being included in metric calculations. DCI also verified that the program was properly calculating the difference between the recorded call date and the measurement date which is defined as being four days or less. DCI then verified the calculations against the total number of DUF records processed for one month.

DCI Derived Metric Statement (SQL) BI-1-02-2030 CLEC Numerator UNE

```
select a11.TEST_ACC_IND TEST_ACC_IND,
a11.STATE_CODE STATE_CODE,
```

---

[4] IR B-022 and C2C guidelines

```
a11.REPORT_PERIOD REPORT_PERIOD,
a11.NMP_CLEC_ID NMP_CLEC_ID,
sum(a11.UNE_COUNT) BI102_C_N1
from TB_DM_BIL_MBF_DUF_DTL_FMT a11
where ((a11.TEST_ACC_IND = 'N'
or a11.TEST_ACC_IND = 'V')
and a11.NMP_CLEC_ID <> 'RTL9'
and a11.DAY_COUNT_UNE = 4
and to_char(a11.FILE_SENT_DATE,'YYYYMM') =
a11.REPORT_PERIOD
and a11.SYSTEM_ID in ('A', 'P')
and a11.REC_TYPE in (35))
group by a11.TEST_ACC_IND,
a11.STATE_CODE,
a11.REPORT_PERIOD,
a11.NMP_CLEC_ID
```

DCI Derived Metric Statement (SQL) BI-1-02-2030 CLEC Numerator 2 Reseller

```
select a11.TEST_ACC_IND TEST_ACC_IND,
a11.STATE_CODE STATE_CODE,
a11.REPORT_PERIOD REPORT_PERIOD,
a11.NMP_CLEC_ID NMP_CLEC_ID,
sum(a11.RESELLER_COUNT) BI102_C_N2
from TB_DM_BIL_MBF_DUF_DTL_FMT a11
where ((a11.TEST_ACC_IND = 'N'
or a11.TEST_ACC_IND = 'V')
and a11.NMP_CLEC_ID <> 'RTL9'
and a11.DAY_COUNT_RESELLER = 4
and to_char(a11.FILE_SENT_DATE,'YYYYMM') =
a11.REPORT_PERIOD
and a11.SYSTEM_ID in ('A', 'P')
and a11.REC_TYPE in (35))
group by a11.TEST_ACC_IND,
a11.STATE_CODE,
a11.REPORT_PERIOD,
a11.NMP_CLEC_ID
```

DCI then summed the CLEC numerators as shown in the following.

DCI Derived Statement For The Summary Numerator:

```
BI-1-02-2030 CLEC Numerator 1 + Numerator 2
DCI Derived Metric Statement (SQL)
VW_BI_1_02_PA0503_C_NS
select nu.TEST_ACC_IND,
nu.STATE_CODE,
nu.REPORT_PERIOD,
nu.NMP_CLEC_ID,
sum(nu.BI102_C_NU) BI102_C_NS
from VW_BI_1_02_2030_PA0503_C_NU nu
WHERE nu.BI102_C_NU IS NOT NULL
GROUP BY
nu.TEST_ACC_IND,
nu.STATE_CODE,
nu.REPORT_PERIOD,
nu.NMP_CLEC_ID
```

DCI then derived the denominator for both CLEC UNE and Reseller.

DCI Derived Metric Statement (SQL) BI-1-02-2030 CLEC Denominator 1 UNE

```
select a11.TEST_ACC_IND TEST_ACC_IND,
a11.STATE_CODE STATE_CODE,
a11.REPORT_PERIOD REPORT_PERIOD,
a11.NMP_CLEC_ID NMP_CLEC_ID,
sum(a11.UNE_COUNT) BI102_C_D1
from TB_DM_BIL_MBF_DUF_DTL_FMT a11
where ((a11.TEST_ACC_IND = 'N'
or a11.TEST_ACC_IND = 'V')
and a11.NMP_CLEC_ID <> 'RTL9'
and a11.DAY_COUNT_UNE = 0
and to_char(a11.FILE_SENT_DATE,'YYYYMM') =
a11.REPORT_PERIOD
and a11.SYSTEM_ID in ('A', 'P')
and a11.REC_TYPE in (35))
group by a11.TEST_ACC_IND,
a11.STATE_CODE,
a11.REPORT_PERIOD,
a11.NMP_CLEC_ID
```

DCI Derived Metric Statement (SQL) BI-1-02-2030 CLEC Denominator 2 Reseller

```
select a11.TEST_ACC_IND TEST_ACC_IND,
a11.STATE_CODE STATE_CODE,
a11.REPORT_PERIOD REPORT_PERIOD,
a11.NMP_CLEC_ID NMP_CLEC_ID,
sum(a11.RESELLER_COUNT) BI102_C_D2
from TB_DM_BIL_MBF_DUF_DTL_FMT a11
where ((a11.TEST_ACC_IND = 'N'
or a11.TEST_ACC_IND = 'V')
and a11.NMP_CLEC_ID <> 'RTL9'
and a11.DAY_COUNT_RESELLER = 0
and to_char(a11.FILE_SENT_DATE,'YYYYMM') =
a11.REPORT_PERIOD
and a11.SYSTEM_ID in ('A', 'P')
and a11.REC_TYPE in (35))
group by a11.TEST_ACC_IND,
a11.STATE_CODE,
a11.REPORT_PERIOD,
a11.NMP_CLEC_ID
```

DCI then summed the CLEC denominators as shown in the following.

DCI Derived Statement For The Summary Denominator:

```
BI-1-02-2030 CLEC Denominator 1 + Denominator 2
DCI Derived Metric Statement (SQL)
VW_BI_1_02_PA0503_C_DS
select du.TEST_ACC_IND,
du.STATE_CODE,
du.REPORT_PERIOD,
du.NMP_CLEC_ID,
```

```
sum(du.BI102_C_DU) BI102_D_DS
from VW_BI_1_02_2030_PA0503_C_DU du
WHERE du.BI102_C_DU IS NOT NULL
GROUP BY
du.TEST_ACC_IND,
du.STATE_CODE,
du.REPORT_PERIOD,
du.NMP_CLEC_ID
```

The results of the DCI derived SQL metric calculation and division are shown on Table F-2:

<div align="center">

Table F – 2 – DCI Derived Metric Results[5]

	Numerator	Denominator	Result
April	157191579	172675039	91.03%
May	170945573	174403969	98.02%
June	177862191	178459599	99.67%

</div>

Report Dimension

BI-1: CLEC Aggregate And Specific

- April/May PA PAP MOE Resale, MOE UNE
- June MOE Resale, Mode of Entry (MOE) UNE-P

Exclusions

The only exclusions are Verizon PA test orders.

Performance Standard

The performance standard of BI-1 is 95% DUF files delivered within four business days
For the review period, the following were the results for PA aggregate, as shown on Table F-3:

<div align="center">

Table F – 3

</div>

	April	May	June
Standard	95%	95%	95%
Verizon PA Reported	91.03%	98.02%	99.67%
DCI Calculated	91.03%	98.02%	99.67%

Metric Creation

Usage data for CLEC customers is collected via polling from Verizon PA switches. A subsystem of CRIS, the Bell Atlantic Usage Interface (BAUI) is responsible for distribution of Resale, UNE and UNE Access DUF files. Information is sent daily to Network Metric Platform (NMP) where all the

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[5] DCI file BI-1-02-2030.xls

Verizon PA metric calculations are performed. The entire process is automated with no intervention with the exception of Post Completion Discrepancies (PCDs) which require manual intervention.

The NMP files for BI-1 are:

- SO.BAUI101.DUFDTL.DLY.TXT
- SO.BAUI102.DUFDTL.DLY.TXT
- SO.BAUI103.DUFDTL.DLY.TXT
- SO.BAUI104.DUFDTL.DLY.TXT

All of these files are received daily.

BI-2 TIMELINESS OF CARRIER BILLS

Definition

The percent of carrier bills sent to the carrier, unless the CLEC requests special treatment, within 10 business days of the bill date. The bill date is the end of the billing period for recurring, non-recurring and usage charges. The start date for the metric is the next business day following the close of the billing cycle.[6] Wholesale and retails bills are combined within a cycle. (i.e. there are no Wholesale cycles)

Sub-metrics

- **BI-2:** There are no sub-metrics within BI-2.

Formula

Both the PA April/May CMA and the PA April/May C2C guidelines provide the following formula.

- **Numerator:** Number of carrier bills sent to CLEC within 10 business days of bill date

- **Denominator:** Number of carrier bills distributed

DCI Derived Metric Statement

DCI validated the algorithms used to calculate BI-02 by validating the number of carrier bills sent within 10 business days of the bill date against the total number of bills distributed for the month.

DCI first extracted Numerator 1 and Denominator 1 for UNE and then did the same for numerator 2 and denominator 2, which are for Resale.

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[6] Interview B-022

Table F-4 – DCI Derived Metric Statement (SQL)

BI-1-02-2030 CLEC Numerator 1	BI-1-02-2030 CLEC Numerator 2
select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(distinct a11.ACC_KEY‖a11.STATE_CODE‖a11.NMP_CLEC_ID‖to_char(a11.B ILL_DIST_DATE,'MMDDYYYY')‖a11.BILL_MEDIA‖a11.BILL_TYP E) BI201_C_N1 from TB_DM_BIL_TIMELINESS_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REC_TYPE in (14) and to_char(a11.BILL_DIST_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.SYSTEM_ID in ('E', 'F', 'G', 'N', 'S') and ((a11.BILL_MEDIA in ('D', 'P') and a11.STATE_CODE = 'PN') or (a11.BILL_MEDIA = 'P' and a11.STATE_CODE = 'PA')) and a11.BILL_PERIOD_IND = 'Y' and a11.PRODUCT_IND = 'U' and a11.EBILL_IND = 'N') group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(distinct a11.ACC_KEY‖a11.STATE_CODE‖a11.NMP_CLEC_ID‖to_char(a11.B ILL_DIST_DATE,'MMDDYYYY')‖a11.BILL_MEDIA‖a11.BILL_TYP E) BI201_C_N2 from TB_DM_BIL_TIMELINESS_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REC_TYPE in (14) and to_char(a11.BILL_DIST_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('E', 'F', 'G', 'N', 'S') and ((a11.BILL_MEDIA in ('D', 'P') and a11.STATE_CODE = 'PN') or (a11.BILL_MEDIA = 'P'and a11.STATE_CODE='PA')) and a11.BILL_PERIOD_IND = 'Y' and a11.EBILL_IND = 'N') group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

DCI then summed the numerators using:

BI-2-01-2030 CLEC Numerator 1 + Numerator 2

```
select nu.TEST_ACC_IND,
nu.STATE_CODE,
nu.REPORT_PERIOD,
nu.NMP_CLEC_ID,
sum(nu.BI201_C_NU) BI201_C_NS
from VW_BI_2_01_2030_PA0503_C_NU nu
WHERE nu.BI201_C_NU IS NOT NULL
GROUP BY
nu.TEST_ACC_IND,
nu.STATE_CODE,
nu.REPORT_PERIOD,
nu.NMP_CLEC_ID
```

Table F-5 - DCI Derived Metric Statement (SQL)

BI-1-02-2030 CLEC Denominator 1	BI-1-02-2030 CLEC Denominator 2
select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(distinct a11.ACC_KEY‖a11.STATE_CODE‖a11.NMP_CLEC_ID‖to_char(a11.B ILL_DIST_DATE,'MMDDYYYY')‖a11.BILL_MEDIA‖a11.BILL_TYP E) BI201_C_D1 from TB_DM_BIL_TIMELINESS_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REC_TYPE in (14) and to_char(a11.BILL_DIST_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.SYSTEM_ID in ('E', 'F', 'G', 'N', 'S') and ((a11.BILL_MEDIA in ('D', 'P') and a11.STATE_CODE = 'PN') or (a11.BILL_MEDIA = 'P'and a11.STATE_CODE ='PA')) and a11.PRODUCT_IND = 'U' and a11.EBILL_IND = 'N') group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(distinct a11.ACC_KEY‖a11.STATE_CODE‖a11.NMP_CLEC_ID‖to_char(a11.B ILL_DIST_DATE,'MMDDYYYY')‖a11.BILL_MEDIA‖a11.BILL_TYP E) BI201_C_D2 from TB_DM_BIL_TIMELINESS_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REC_TYPE in (14) and to_char(a11.BILL_DIST_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('E', 'F', 'G', 'N', 'S') and ((a11.BILL_MEDIA in ('D', 'P') or a11.STATE_CODE = 'PN') or (a11.BILL_MEDIA = 'P' and a11.STATE_CODE='PA')) and a11.EBILL_IND = 'N') group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

DCI then summed the CLEC denominators using the following SQL statement.

BI-2-01-2030 CLEC Denominator 1 + Denominator 2

DCI Derived Metric Statement (SQL)
VW_BI_2_01_PA0503_C_DS

```
select du.TEST_ACC_IND,
du.STATE_CODE,
du.REPORT_PERIOD,
du.NMP_CLEC_ID,
sum(du.BI201_C_DU) BI201_D_DS
from VW_BI_2_01_2030_PA0503_C_DU du
WHERE du.BI201_C_DU IS NOT NULL
GROUP BY
du.TEST_ACC_IND,
du.STATE_CODE,
du.REPORT_PERIOD,
du.NMP_CLEC_ID
```

DCI Calculations For BI-2-01-2030 CLEC Aggregate

DCI then took the sum of the numerators and divided by the sum of the denominators and multiplied times 100 with the following result:

Table F-6 – BI-2-01-2030 CLEC Aggregate

	April	May	June
Verizon PA Reported	100%	100%	100%
DCI results	100%	100%	100%

DCI Derived Metric Statement (SQL) For BI-2-01-2030 Individual CLECs

DCI also developed a metric statement for individual CLEC results, but since BI-2 is not reported at an individual level, no comparison was performed at that level.

Report Dimension

BI-2 CLEC aggregate is reported in the C2C report for April , May and June but is not included in the PAP.

Exclusions

Verizon PA test orders are excluded.

Performance Standard

The performance standard for BI-2 is 98% within ten business days.

Metric Creation

BI-2 is a totally automated metric with no intervention in the calculation. Primary systems and subsystems are CABS and Bill Reformat System (BRS). These systems supply the data for the FACT Table TB_DM_BIL_TIMELINESS_FACT. All of the actual metric calculations are then performed within NMP.

BI-3: BILLING ACCURACY & CLAIMS PROCESSING

BI-3 Billing Accuracy and Claims Processing have five sub-metrics which fall into one of the two categories. Sub metrics BI- 1,2 and 3 measure billing accuracy including dollar magnitude and the absolute number of adjustments. BI-4 and 5 measure claims processing or more accurately, Verizon PA responsiveness to claims and their processing.

Definition

For sub-metrics BI-3-01, BI-02 and BI-3-03 the definition is the percentage of carrier bill Verizon PA charges adjusted due to billing errors. Performance is reported by CLEC based upon bill of record.

For sub-metrics BI-3-04 and BI-3-05 These sub-metrics measure the promptness with which Verizon PA acknowledges and resolves CLEC billing adjustment claims.

- Business hours for receipt of billing claims are Monday through Friday, 8:00AM until 5:00PM, excluding Verizon PA legal holidays;

- CLEC billing adjustment claims received outside these business hours shall be considered received at 8:00AM on the first business day thereafter.

- Day of receipt shall be considered Day zero (0) for computing acknowledgement performance.

- Day of acknowledgement of a billing claim is considered Day zero (0) for computing resolution performance.

Sub-Metrics

- **BI-3-01:** % Billing Adjustments- Paper Bills (CRIS & CABS combined)
- **BI-3-02:** % Billing Adjustments – Number of Adjustments
- **BI-3-03:** % Billing Adjustments- Electronic Bills
- **BI-3-04:** % CLEC Billing Claims Acknowledged within two (2) Business Days
- **BI-3-05:** % CLEC Billing Claims Resolved within 28 Calendar Days After Acknowledgement

Formula

Table F-7

Metric	Numerator	Denominator
BI-3-01	Count of dollars adjusted for billing errors on paper bill	Total Dollars Billed on paper bill
BI-3-02	Count of adjustments for billing errors	Total Bills
BI-3-03	Count of dollars adjusted for billing errors on electronic bill	Total Dollars Billed on electronic bill
BI-3-04	Number of billing claims acknowledged during the month within two business days.	Total number of valid/complete billing adjustment claims acknowledged during the month.
BI-3-05	Number of billing adjustment claims during the month resolved within 28 calendar days after acknowledgement.	Total number of billing adjustment claims resolved during the month.

DCI Derived Metric Statement

BI-3-01:

Table F-8 – DCI Derived Metric Statement

BI-3-01-2030 CLEC Numerator 1	BI-3-01-2030 CLEC Numerator 2
SELECT A11.TEST_ACC_IND TEST_ACC_IND, A11.STATE_CODE STATE_CODE, A11.REPORT_PERIOD REPORT_PERIOD, A11.NMP_CLEC_ID NMP_CLEC_ID, SUM(ABS(A11.ADJ_AMT)) BI301RESALEN, SUM(ABS(A11.ADJ_AMT)) BI301_C_N1 FROM TB_DM_BIL_ADJ_FMT A11 WHERE ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and ((a11.STATE_CODE <> 'PA' and a11.REC_TYPE in (22, 23)) or (a11.STATE_CODE = 'PA' and a11.REC_TYPE in (22))) and (a11.STATE_CODE not in ('PA', 'NJ') or (a11.STATE_CODE in ('PA', 'NJ') and a11.EBILL_IND = 'N')) and a11.STATE_CODE in ('NJ', 'PA') and to_char(a11.ADJ_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'M', 'N', 'S', 'V', 'W')) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, sum(ABS(a11.ADJ_AMT)) BI301UNENUME, sum(ABS(a11.ADJ_AMT)) BI301_C_N2 from TB_DM_BIL_ADJ_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and (a11.STATE_CODE not in ('PA', 'NJ') or (a11.STATE_CODE in ('PA', 'NJ') and a11.EBILL_IND = 'N')) and ((a11.STATE_CODE <> 'PA' and a11.REC_TYPE in (22, 23)) or (a11.STATE_CODE = 'PA' and a11.REC_TYPE in (22))) and a11.STATE_CODE in ('NJ', 'PA') and to_char(a11.ADJ_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'M', 'N', 'S', 'V', 'W') and a11.PRODUCT_IND = 'U') group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

Table F-9 – DCI Derived Metric Statement

BI-3-01-2030 CLEC Denominator 1	BI-3-01-2030 CLEC Denominator 2
SELECT A11.TEST_ACC_IND TEST_ACC_IND, A11.STATE_CODE STATE_CODE, A11.REPORT_PERIOD REPORT_PERIOD, A11.NMP_CLEC_ID NMP_CLEC_ID, SUM(ABS(A11.ADJ_AMT)) BI301RESALEN, SUM(ABS(A11.ADJ_AMT)) BI301_C_N1 FROM TB_DM_BIL_ADJ_FMT A11 WHERE ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and ((a11.STATE_CODE <> 'PA' and a11.REC_TYPE in (22, 23)) or (a11.STATE_CODE = 'PA' and a11.REC_TYPE in (22))) and (a11.STATE_CODE not in ('PA', 'NJ') or (a11.STATE_CODE in ('PA', 'NJ') and a11.EBILL_IND = 'N')) and a11.STATE_CODE in ('NJ', 'PA') and to_char(a11.ADJ_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'M', 'N', 'S', 'V', 'W')) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, sum(ABS(a11.ADJ_AMT)) BI301UNENUME, sum(ABS(a11.ADJ_AMT)) BI301_C_N2 from TB_DM_BIL_ADJ_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and (a11.STATE_CODE not in ('PA', 'NJ') or (a11.STATE_CODE in ('PA', 'NJ') and a11.EBILL_IND = 'N')) and ((a11.STATE_CODE <> 'PA' and a11.REC_TYPE in (22, 23)) or (a11.STATE_CODE = 'PA' and a11.REC_TYPE in (22))) and a11.STATE_CODE in ('NJ', 'PA') and to_char(a11.ADJ_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'M', 'N', 'S', 'V', 'W') and a11.PRODUCT_IND = 'U') group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

Table F-10 – DCI Derived Metric Statement

BI-3-01-2030 Verizon Numerator	BI-3-01-2030 Verizon Denominator
elect a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, sum(ABS(a11.ADJ_AMT)) BI301RETAILN, sum(ABS(a11.ADJ_AMT)) BI301_V_N1 from TB_DM_BIL_ADJ_FMT a11 where (a11.NMP_CLEC_ID = 'RTL9' and ((a11.STATE_CODE <> 'PA' and a11.REC_TYPE in (22, 23)) or (a11.STATE_CODE = 'PA' and a11.REC_TYPE in (22))) and (a11.STATE_CODE not in ('PA', 'NJ') or (a11.STATE_CODE in ('PA', 'NJ') and a11.EBILL_IND = 'N')) and a11.STATE_CODE in ('NJ', 'PA') and to_char(a11.ADJ_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'M', 'N', 'S', 'V', 'W') and a11.PRODUCT_IND = 'E') group by a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, sum(ABS(a11.BILL_AMT)) BI301RETAILD, sum(ABS(a11.BILL_AMT)) BI301_V_D1 from TB_DM_BIL_DETAIL_FMT a11 where (a11.NMP_CLEC_ID = 'RTL9' and (a11.STATE_CODE not in ('PA', 'NJ') or (a11.STATE_CODE in ('PA', 'NJ') and a11.EBILL_IND = 'N')) and ((a11.STATE_CODE <> 'PA' and a11.REC_TYPE in (11, 12, 13, 15, 16, 17)) or (a11.STATE_CODE = 'PA'and a11.REC_TYPE in (11, 12, 13, 17))) and a11.STATE_CODE in ('NJ', 'PA') and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'M', 'N', 'S', 'V', 'W') and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'E') group by a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

DCI was able to exactly replicate Verizon PA reported results for both Verizon PA and CLECs.

BI-3-02:

Table F-11 – DCI Derived Metric Statement

CLEC Numerator 1	CLEC Numerator 2
select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(a11.ACC_KEY) BI302RESALEN, count(a11.ACC_KEY) BI302_C_N1 from TB_DM_BIL_ADJ_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.STATE_CODE = 'PA' and a11.REC_TYPE in (22, 23) and to_char(a11.ADJ_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'M', 'N', 'S', 'V', 'W')) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	BI-3-02-2030 CLEC Numerator 2 DCI Derived Metric Statement (SQL) VW_BI_3_02_PA0503_C_N2 select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(a11.ACC_KEY) BI302UNENUME, count(a11.ACC_KEY) BI302_C_N2 from TB_DM_BIL_ADJ_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.STATE_CODE = 'PA' and a11.REC_TYPE in (22, 23) and to_char(a11.ADJ_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'M', 'N', 'S', 'V', 'W')) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

Table F-12 – DCI Derived Metric Statement

CLEC Numerator 1	CLEC Denominator 2
select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(distinct a11.ACC_KEY‖a11.STATE_CODE‖a11.NMP_CLEC_ID‖to_char(a11.B ILL_DATE,'MMDDYYYY')) BI302RESALED, count(distinct a11.ACC_KEY‖a11.STATE_CODE‖a11.NMP_CLEC_ID‖to_char(a11.B ILL_DATE,'MMDDYYYY')) BI302_C_D1 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.STATE_CODE = 'PA' and a11.REC_TYPE in (11, 12, 13, 15, 16, 17) and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'M', 'N', 'S', 'V', 'W')) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(distinct a11.ACC_KEY‖a11.STATE_CODE‖a11.NMP_CLEC_ID‖to_char(a11.B ILL_DATE,'MMDDYYYY')) BI302UNEDENO, count(distinct a11.ACC_KEY‖a11.STATE_CODE‖a11.NMP_CLEC_ID‖to_char(a11.B ILL_DATE,'MMDDYYYY')) BI302_C_D2 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.STATE_CODE = 'PA' and a11.REC_TYPE in (11, 12, 13, 15, 16, 17) and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'M', 'N', 'S', 'V', 'W')) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

DCI then summed the numerators and denominators and divided using excel spreadsheet commands. DCI was able to exactly replicate Verizon PA reported CLEC results.

BI-3-03

Table F-13 – DCI Derived Metric Statement

Not Applicable	

BI-3-04

Table F-14 – DCI Derived Metric Statement

BI-3-04-2030 CLEC Numerator 1	BI-3-04-2030 CLEC Numerator 2
select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(1) BI304RESALEN, count(1) BI304_C_N1 from TB_DM_BIL_CLAIM_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.STATE_CODE = 'PN' and a11.BUSINESS_DAYS_2_IND = 'Y' and to_char(a11.CREATE_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R') group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(1) BI304UNENUME, count(1) BI304_C_N2 from TB_DM_BIL_CLAIM_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.STATE_CODE = 'PN' and a11.BUSINESS_DAYS_2_IND = 'Y' and to_char(a11.CREATE_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U') group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

Table F-15 – DCI Derived Metric Statement

BI-3-04-2030 CLEC Denominator1	BI-3-04-2030 CLEC Denominator 2
select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(1) BI304RESALED, count(1) BI304_C_D1 from TB_DM_BIL_CLAIM_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.STATE_CODE = 'PN' and to_char(a11.CREATE_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R') group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(1) BI304UNEDENO, count(1) BI304_C_D2 from TB_DM_BIL_CLAIM_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.STATE_CODE = 'PN' and to_char(a11.CREATE_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U') group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

DCI then summed the two numerators and the two denominators using excel spreadsheet formulas. DCI was able to exactly replicate Verizon PA reported CLEC results. Verizon PA does not report results for this metric.

BI-3-05

Table F-16 – DCI Derived Metric Statement

BI-3-05-2030 CLEC Numerator 1	BI-3-05-2030 CLEC Numerator 2
select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(1) BI305RESALEN, count(1) BI305_C_N1 from TB_DM_BIL_CLAIM_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.STATE_CODE = 'PN' and a11.BUSINESS_DAYS_28_IND = 'Y' and to_char(a11.RESOLUTION_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R') group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(1) BI305UNENUME, count(1) BI305_C_N2 from TB_DM_BIL_CLAIM_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.STATE_CODE = 'PN' and a11.BUSINESS_DAYS_28_IND = 'Y' and to_char(a11.RESOLUTION_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U') group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

Table F-17 – DCI Derived Metric Statement

BI-3-05-2030 CLEC Denominator 1	BI-3-05-2030 CLEC Denominator 2
select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(1) BI305RESALED, count(1) BI305_C_D1 from TB_DM_BIL_CLAIM_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.STATE_CODE = 'PN' and a11.PRODUCT_IND = 'R' and to_char(a11.RESOLUTION_DATE,'YYYYMM') = a11.REPORT_PERIOD) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, count(1) BI305UNEDENO, count(1) BI305_C_D2 from TB_DM_BIL_CLAIM_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.STATE_CODE = 'PN' and to_char(a11.RESOLUTION_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U') group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

DCI then summed the two numerators and the two denominators using excel spreadsheet formulas. DCI was able to exactly replicate Verizon PA reported CLEC results. Verizon PA does not report results for this metric.

Report Dimension

All sub-metrics are reported at the CLEC Aggregate level. BI-301, BI-3-02 and BI-3-03 are reported at the CLEC specific level. All sub-metrics are reported at the Pennsylvania level.

Exclusions

For Sub-Metrics BI-3-01 Through BI-3-03: Adjustments that are not billing errors such as: charges for directories, incentive regulation credits, PA PAP Payments, out of service credits, special promotional credits.

For Sub-Metrics BI-3-04 And BI-3-05: CLEC claims for adjustments such as: charges for directories, incentive regulation credits, credits for performance remedies, out-of-service credits, and special promotional credits

Performance Standard

Table F-18

Metric	Standard
BI-3-01	Parity with Verizon PA Retail*
BI-3-02	No standard
BI-3-03	Parity with Verizon PA Retail*
BI-3-04	95% within two (2) business days
BI-3-05	95% within 28 days(after acknowledgement)

* excluding charges adjusted due to billing errors resulting from order activity post completion discrepancies.

DCI Analysis

BI-3-01: DCI Summed the numerator and denominator for the CLEC aggregate with the following result:

Table F-19 – DCI Calculated CLEC Results BI-3-01

	DCI Numerator Sum	DCI Denominator Sum	Results
April	$1,674,654.41	$63,748,071.25	2.63%
May	$1,236,914.03	$66,113,464.47	1.87%
June	$734,417.69	$64,284,167.52	1.14%

Table F-20 – DCI Results[7]

April	0.43
May	1.76
June	1.11

This replicates exactly the Verizon PA reported C2C results for both Verizon PA and CLECs.

BI-3-02: DCI Summed the numerator and denominator for the CLEC aggregate with the following result:

Table F-20 – DCI Calculated CLEC Results BI-3-02

	DCI Numerator Sum	DCI Denominator Sum	Results
April	339	502,113.00	**0.07%**
May	497	509,712.00	**0.10%**
June	175	521,593.00	**0.03%**

This replicates exactly the Verizon PA reported C2C results for CLECs. Verizon PA results are not reported on the C2C report for this metric.

BI-3-04: DCI Summed the numerator and denominator for the CLEC aggregate with the following result:

Table F-21 – DCI Calculated CLEC Results BI-3-04

	DCI Numerator Sum	DCI Denominator Sum	Results
April	148	148	100%
May	134	134	100%
June	158	158	100%

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[7] Verizon calculations taken directly from DCI file, BI-3-01-2030.xls. No extra calculations made or shown.

This replicates exactly the Verizon PA reported C2C results for CLEC metrics and number of observations in each month. Verizon PA does not report Verizon PA results for this metric in the C2C.

BI-3-05: DCI Summed the numerator and denominator for the CLEC aggregate with the following result:

Table F-22 – DCI Calculated CLEC Results BI-3-04

	DCI Numerator Sum	DCI Denominator Sum	Results
April	46	46	100%
May	162	162	100%
June	124	124	100%

This replicates exactly the Verizon PA reported C2C results for CLEC metrics and number of observations in each month. Verizon PA does not report results for this metric.

Metric Creation

The BI-3 Metrics use data from CABS South, FBS, CAFS, CATS/WCIT and CATS. The files are:

- CABS Adjustment Detail
- CABS Bill Detail
- Legacy CRIS Bill Detail (from FBS)
- Legacy CRIS Adjustment Detail
- Acknowledged Claims, Acknowledged Claims(WCIT Interim) and Resolved Claims (WCIT Interim)

The files from these systems are all generated daily with the exception of the CATS files which are transmitted weekly.

BI-6: BILLING ACCURACY & CLAIMS PROCESSING

Definition

This measure captures the completeness of Verizon PA usage charges and Verizon PA usage billing errors that are itemized by date on the paper bill. It is derived by dividing the count of date itemized usage charges on the bill that were recorded during the last two billing cycles by the total count of date itemized usage charges that appear on the bill.

For Retail, Verizon PA may elect to perform this measurement by using a statistically valid sampling methodology.

Sub-Metrics

- **BI-6-01** % Completeness of Usage Charges – Including Order Activity Post Completion Discrepancy Delayed Charges
- **BI-6-02** % Completeness of Usage Charges – Excluding Order Activity Post Completion Discrepancy Delayed Charges

Formulas

Table F-23

	Numerator	**Denominator**
BI-6-01	Usage charges shown on the bill that were recorded during the last two billing cycles	Total usage charges shown on the bill
BI-6-02	Usage charges shown on the bill that were recorded during the last two billing cycles	Total usage charges shown on the bill

Plan Changes

The following changes were made to the BI 6 metrics in the June Plan .

Table F-24 – June Plan Changes

Metric	Old Plan	June Plan
BI-6-01-2030	Metric: BI-6-01-2030: % CLEC Billing Claims Resolved within 28 Calendar Days After Acknowledgment Standard: 95% within 28 Calendar Days	Metric: BI-6-01-2030: Completeness of Usage Charges - Including Order Activity Post Completion Discrepancy Delayed Charges Standard: No Standard
BI-6-01-2030	Verizon PA Formula….	Verizon PA algorithm removed
BI-6-02-2030	Metric: BI-6-02-2030: % CLEC Billing Claims Resolved within 28 Calendar Days After Acknowledgment Standard: 95% within 28 Calendar Days	Metric: BI-6-02-2030: Completeness of Usage Charges - Including Order Activity Post Completion Discrepancy Delayed Charges Standard: Parity with Verizon PA Retail

DCI Derived Metric Statement

DCI validated through algorithms and data extraction that Verizon PA sums the absolute value of the number of usage charges, including order activity post completion delayed charges (PCDs), that accrued during the last two bill periods and compares it to the total charges on the bill.

BI 6-01: For BI 6-01 DCI calculated separate numerators and denominators for CLEC resale and UNE and added the numerators and denominators for a combined result. As with all of the DCI metric replication efforts, this SQL code differed from Verizon PA CMA code and as such DCI

made certain assumptions. In this case the assumption was that the numerators and denominators are added together as per BI 2-01. (where separate numerators and denominators are defined and the calculation specified.)

DCI also calculated Verizon PA results but these are not reported in the C2C reports and are not shown here.

The DCI metric calculation for the numerators was as follows:

Table F-25 – BI-6-01-2030 DCI Derived Metric Statement (SQL)

CLEC Numerator 1 (resale	BI-6-01-2030 CLEC Numerator 2 (UNE
VW_BI_6_01_PA0503_C_N1 select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, sum(ABS(a11.BILL_USAGE_2_MTH)) BI601RESALEN, sum(ABS(a11.BILL_USAGE_2_MTH)) BI601_C_N1 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REC_TYPE in (11, 12, 13, 15, 16, 17) and a11.STATE_CODE ='PA' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W')) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	VW_BI_6_01_PA0503_C_N2 select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, sum(ABS(a11.BILL_USAGE_2_MTH)) BI601UNENUME, sum(ABS(a11.BILL_USAGE_2_MTH)) BI601_C_N2 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REC_TYPE in (11, 12, 13, 15, 16, 17) and a11.STATE_CODE ='PA' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W')) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

For the denominators, DCI used the following metrics:

Table F-26 – BI-6-01-2030 DCI Derived Metric Statement (SQL)

CLEC Denominator 1(resale)	BI-6-01-2030 CLEC Denominator 2 (UNE)
VW_BI_6_01_PA0503_C_D1 select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, sum(ABS(a11.BILL_USAGE_ITEMS)) BI601RESALED, sum(ABS(a11.BILL_USAGE_ITEMS)) BI601_C_D1 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REC_TYPE in (11, 12, 13, 15, 16, 17) and a11.STATE_CODE ='PA' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W')) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	VW_BI_6_01_PA0503_C_D2 select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, sum(ABS(a11.BILL_USAGE_ITEMS)) BI601UNEDENO, sum(ABS(a11.BILL_USAGE_ITEMS)) BI601_C_D2 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REC_TYPE in (11, 12, 13, 15, 16, 17) and a11.STATE_CODE ='PA' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W')) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

DCI combined the CLEC numerators and denominators and summed each with the following results.

Table F-27 – BI 6-01 DCI CLEC Calculated Results

	Numerator	Denominator	Results
April	$422,035,565.00	$422,144,947.00	99.97%
May	$414,551,608.00	$414,657,301.00	99.97%
June	$404,661,507.00	$404,765,040.00	99.97%

BI-6-02: For BI 6-01 DCI calculated separate numerators and denominators for CLEC resale and UNE and added the numerators and denominators for a combined result. As with all of the DCI metric replication efforts, this SQL code differed from Verizon PA CMA code and as such DCI made certain assumptions.

Table F-28 - BI-6-02 DCI Denominators

BI-6-02-2030 CLEC Numerator 1	BI-6-02-2030 CLEC Numerator 2
DCI Derived Metric Statement (SQL) VW_BI_6_02_PA0603_C_N1 select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, sum(ABS(a11.BILL_USAGE_2_MTH)) BI602RESALEN, sum(ABS(a11.BILL_USAGE_2_MTH)) BI602_C_N1 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	DCI Derived Metric Statement (SQL) VW_BI_6_02_PA0603_C_N2 select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, sum(ABS(a11.BILL_USAGE_2_MTH)) BI602UNENUME, sum(ABS(a11.BILL_USAGE_2_MTH)) BI602_C_N2 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

Table F-29 - BI-6-02 DCI Denominators

BI-6-02-2030 CLEC Denominator 1	BI-6-02-2030 CLEC Denominator 2
DCI Derived Metric Statement (SQL) VW_BI_6_02_PA0603_C_D1 select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, sum(ABS(a11.BILL_USAGE_ITEMS)) BI602RESALED, sum(ABS(a11.BILL_USAGE_ITEMS)) BI602_C_D1 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	DCI Derived Metric Statement (SQL) VW_BI_6_02_PA0603_C_D2 select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, sum(ABS(a11.BILL_USAGE_ITEMS)) BI602UNEDENO, sum(ABS(a11.BILL_USAGE_ITEMS)) BI602_C_D2 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

The results for BI 6-02 are as follows.

Table F-30 – BI 6-02 DCI CLEC Calculated Results

	Numerator	Denominator	Results
April	422,034,053	422,143,433	99.97%
May	414,549,584	414,655,272	99.97%
June	404,659,294	404,762,827	99.97%

Report Dimension

Exclusions

CLEC claims for adjustments for charges for directories, incentive regulation credits, credits for performance remedies, out-of-service credits, and special promotional credits are excluded. Also usage charges that accrued prior to the last two billing cycles and whose billing was delayed because of an order activity post completion discrepancy are also excluded.

Performance Standard

- Metric BI-6-01: No standard.
- Metric BI-6-02: Parity with Verizon PA Retail.

For the review period, the following were the results:

Table F-31 – BI-6 Completeness of Usage Charges

	April	**May**	**June**
BI-6-01			
Standard	No Standard	No Standard	No Standard
Verizon PA Reported CLEC Results	99.97%	99.97%	99.97%
DCI Calculated CLEC Results	99.97%	99.97%	99.97%
BI-6-02			
Standard	Parity with Verizon PA Retail	Parity with Verizon PA Retail	Parity with Verizon PA Retail
Verizon PA calculated Verizon PA results	99.99%	99.96%	99.62%
Verizon PA calculated CLEC Results	99.97%	99.97%	99.97%
DCI calculated Verizon PA results	99.99%	99.96%	99.62%
DCI calculated CLEC Results	99.97%	99.97%	97.97%

CLEC Specific Results

DCI also compared a sampling of specific CLEC results reported by Verizon PA against NMP data. In all cases, DCI calculations resulted in the same results as reported.

Report Dimension

BI-6 is reported at both the CLEC Aggregate and CLEC Specific levels.

Metric Creation Filename

BI-6, uses CABS SOUTH for CABS Bill Detail and FBS to obtain CRIS bill detail from legacy systems. The NMP files used are:

    PA.CABS01.BILDTL.DLY.TXT
    PA.CABS02.BILDTL.DLY.TXT
    PA.FBS01.BILDTL.DLY.TXT
    PA.FBS02.BILDTL.DLY.TXT

All metric calculations are performed within NMP.

BI-7: FRACTIONAL RECURRING CHARGES

Definition

This measure captures the completeness of Verizon PA fractional recurring charges shown on the carrier bill. Fractional recurring charges are those recurring charges that applied for only a portion of the particular carriers billing cycle. The CMA defines a "fractional recurring charge" as a recurring charge for a service that was subscribed to by a CLEC for only a portion of a billing cycle

(e.g., the monthly recurring charge for a service that was installed or terminated on 15th day of a 30 day bill cycle).

The measure is derived by dividing the fractional recurring charges shown on the bill that accrued in the last two billing cycles by the total fractional recurring charges shown on the bill. The two sub measures included in BI-7 differ only in that one of the measures, BI 7-01, includes "order activity completion discrepancy charges" or adjustments. The other, BI-7-02 excludes them.

For Retail, Verizon PA may elect to perform this measurement by using a statistically valid sampling methodology.

Sub-Metrics

Billing Domain –7 contains two sub-metrics.

- **BI-7-01:** Percent Completeness of Fractional Recurring Charges – Including Order Activity Post Completion Discrepancy Delayed Charges
- **BI-7-02:** Percent Completeness of Fractional Recurring Charges – Excluding Order Activity Post Completion Discrepancy Delayed Charges

Formula

Table F-32

Metric	Numerator	Denominator
BI-7-01- 2030	Fractional recurring charges shown on the bill that accrued in the last two billing cycles	Total fractional recurring charges shown on the bill
BI-7-02-2030	Fractional recurring charges shown on the bill that accrued in the last two billing cycles	Total fractional recurring charges shown on the bill

The C2C guidelines define the formula as:

[(Fractional recurring charges shown on the bill that accrued in the last two billing cycles) / (Total fractional recurring charges shown on the bill)] x 100

DCI Derived Metric Statements

BI-7-01: Since 7-01 has no standard, and Verizon PA did not report any results for the period, DCI did not perform any verifications on 7-01.

BI-7-02: DCI first calculated CLEC results using the following algorithms:

Table F-33 – DCI Derived Metric Statement (SQL)

BI-7-02-2030 CLEC Numerator 1	BI-7-02-2030 CLEC Numerator 2
select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.FRACT_REC_CREDIT_2_MTH)) + sum(ABS(a11.FRACT_REC_DEBIT_2_MTH))) WJXBFS1, (sum(ABS(a11.FRACT_REC_CREDIT_2_MTH)) + sum(ABS(a11.FRACT_REC_DEBIT_2_MTH))) BI702_C_N1 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.FRACT_REC_CREDIT_2_MTH)) + sum(ABS(a11.FRACT_REC_DEBIT_2_MTH))) WJXBFS1, (sum(ABS(a11.FRACT_REC_CREDIT_2_MTH)) + sum(ABS(a11.FRACT_REC_DEBIT_2_MTH))) BI702_C_N2 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

Table F-34 – DCI Derived Metric Statement (SQL)

BI-7-02-2030 CLEC Denominator 1	BI-7-02-2030 CLEC Denominator 2
select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.FRACT_REC_CREDIT)) + sum(ABS(a11.FRACT_REC_DEBIT))) WJXBFS1, (sum(ABS(a11.FRACT_REC_CREDIT)) + sum(ABS(a11.FRACT_REC_DEBIT))) BI702_C_D1 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.FRACT_REC_CREDIT)) + sum(ABS(a11.FRACT_REC_DEBIT))) WJXBFS1, (sum(ABS(a11.FRACT_REC_CREDIT)) + sum(ABS(a11.FRACT_REC_DEBIT))) BI702_C_D2 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

Results for the CLEC Numerators and Denominators were then summed and divided as follows:

Table F-35

	Numerator	Denominator	Percent
April	$624,579.35	$759,549.19	82.23%
May	$609,909.66	$794,387.18	76.78%
June	$626,595.52	$635,768.86	98.56%

These results match those reported by Verizon PA. A slight variance was allowed for rounding.

Table F-36 – DCI Derived Metric Statement (SQL)

BI-7-02-2030 Verizon Numerator 1	BI-7-02-2030 Verizon Denominator 1
select a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.FRACT_REC_CREDIT_2_MTH)) + sum(ABS(a11.FRACT_REC_DEBIT_2_MTH))) WJXBFS1, (sum(ABS(a11.FRACT_REC_CREDIT_2_MTH)) + sum(ABS(a11.FRACT_REC_DEBIT_2_MTH))) BI702_V_N1 from TB_DM_BIL_DETAIL_FMT a11 where (a11.NMP_CLEC_ID = 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'E' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.FRACT_REC_CREDIT)) + sum(ABS(a11.FRACT_REC_DEBIT))) WJXBFS1, (sum(ABS(a11.FRACT_REC_CREDIT)) + sum(ABS(a11.FRACT_REC_DEBIT))) BI702_V_D1 from TB_DM_BIL_DETAIL_FMT a11 where (a11.NMP_CLEC_ID = 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'E' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

The calculated Verizon PA results are as follows:

Table F-37

	DCI Calculated Result
April	72.10%
May	63.42%
June	33.65%

These results match exactly the Verizon PA reported C2C results.

DCI also compared individual sample CLEC results as reported in C2C Guideline reports with data retrieved form the NMP. The sample results matched.

Report Dimension

Both 7-01 and 7-02 are reported at the aggregate and CLEC specific level in the C2C Guidelines. Neither are reported in the PA PAP.

Exclusions

CLEC claims for adjustments such as: charges for directories, incentive regulation credits, credits for performance remedies, out-of-service credits, and special promotional credits.

Performance Standard

The performance standards for BI-7 are:

- Metric BI-7-01: No standard.
- Metric BI-7-02: Parity with Verizon PA Retail.

As noted, no results were compared for 7-01. For 7-02 DCI results matched Verizon PA reported results at both the aggregate and CLEC specific levels.

Metric Creation

Data for BI-7 is collected in the Verizon PA CABS and FBS subsystem of CRIS. These files are sent to NMP daily. The primary source file used by DCI is TB_DM_BIL_DETAIL_FMT a11. All metric calculations for Verizon PA are performed within NMP and there are no manual calculations for BI-7.

BI-8: NON-RECURRING CHARGE COMPLETENESS

Definition

This measure captures the completeness of Verizon PA non-recurring charges shown on the carrier bill. The measure is derived by dividing the non-recurring charges shown on the bill that accrued in the last two billing cycles by the total non-recurring charges shown on the bill. Similar to BI-7, the two sub-metrics within BI-8 differ only in whether they include or exclude post completion activity. In this case, Post Completion Discrepancy Delayed Charges.

The C2C guidelines state that for Retail calculations, Verizon PA may elect to perform this measurement by using a statistically valid sampling methodology.

Sub-Metrics

There are two sub-metrics within BI-8.

- **BI-8-01:** % Completeness of Non-Recurring Charges – Including Order Activity Post Completion Discrepancy Delayed Charges
- **BI-8-02:** % Completeness of Non-Recurring Charges – Excluding Order Activity Post Completion Discrepancy Delayed Charges

Formulas

The formulas for BI-8-01 and BI-8-02 are identical. As discussed above the differences between the sub-metrics are whether there is an inclusion of the post completion discrepancies.

Table F-38

Metric	Numerator	Denominator
BI 8-01	Non-recurring charges shown on the bill that accrued in the last two billing cycles	Total non-recurring charges shown on the bill
BI 8-02	Non-recurring charges shown on the bill that accrued in the last two billing cycles	Total non-recurring charges shown on the bill

DCI Derived Metric Statement

DCI validated the algorithms used to in both BI-8-01 and BI 8-02. These DCI algorithms are shown below.

BI 8-01 has no standards and Verizon PA did not report results for the test period. Therefore, DCI validated the algorithms used for reporting CLEC results.

Table F-39 – DCI Derived Metric Statement (SQL) BI-8-01

BI-8-01-2030 CLEC Numerator 1	BI-8-01-2030 CLEC Numerator 2
select a11.TEST_ACC_IND TEST_ACC_IND,a11.STATE_CODE STATE_CODE,a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.NON_REC_CREDIT_2_MTH)) + sum(ABS(a11.NON_REC_DEBIT_2_MTH))) WJXBFS1, (sum(ABS(a11.NON_REC_CREDIT_2_MTH)) + sum(ABS(a11.NON_REC_DEBIT_2_MTH))) BI801_C_N1 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and a11.REC_TYPE in (11, 12, 13, 15, 16, 17) and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W')) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.NON_REC_CREDIT_2_MTH)) + sum(ABS(a11.NON_REC_DEBIT_2_MTH))) WJXBFS1, (sum(ABS(a11.NON_REC_CREDIT_2_MTH)) + sum(ABS(a11.NON_REC_DEBIT_2_MTH))) BI801_C_N2 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and a11.REC_TYPE in (11, 12, 13, 15, 16, 17) and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W')) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

Table F-40 – DCI Derived Metric Statement (SQL) BI-8-01

BI-8-01-2030 CLEC Denominator 1	BI-8-01-2030 CLEC Denominator 2
select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.NON_REC_CREDIT)) + sum(ABS(a11.NON_REC_DEBIT))) WJXBFS1, (sum(ABS(a11.NON_REC_CREDIT)) + sum(ABS(a11.NON_REC_DEBIT))) BI801_C_D1 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and a11.REC_TYPE in (11, 12, 13, 15, 16, 17) and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W')) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.NON_REC_CREDIT)) + sum(ABS(a11.NON_REC_DEBIT))) WJXBFS1, (sum(ABS(a11.NON_REC_CREDIT)) + sum(ABS(a11.NON_REC_DEBIT))) BI802_C_D2 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

The results produced by the DCI algorithms were then summed with the following results.

Table F-41

	Numerator	Denominator	Result
April	$846,791.30	$1,588,387.48	53.31%
May	$2,352,026.35	$2,362,532.70	99.56%
June	$999,735.35	$1,006,997.40	99.28%

The numbers match Verizon PA reported C2C Guideline numbers exactly in April and May. In June, Verizon PA results are reported as 95.50% while DCI calculated 99.28%. Given that the standard is not included in the PA PAP and that there is no standard for this metric, DCI did not pursue this minor and non-affecting difference.

Table F-42 – DCI Derived Metric Statement (SQL) BI-8-02

BI-8-02-2030 CLEC Numerator 1	BI-8-02-2030 CLEC Numerator 2
select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.NON_REC_CREDIT_2_MTH)) + sum(ABS(a11.NON_REC_DEBIT_2_MTH))) WJXBFS1, (sum(ABS(a11.NON_REC_CREDIT_2_MTH)) + sum(ABS(a11.NON_REC_DEBIT_2_MTH))) BI802_C_N1 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.NON_REC_CREDIT_2_MTH)) + sum(ABS(a11.NON_REC_DEBIT_2_MTH))) WJXBFS1, (sum(ABS(a11.NON_REC_CREDIT_2_MTH)) + sum(ABS(a11.NON_REC_DEBIT_2_MTH))) BI802_C_N2 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

Table F-43 – DCI Derived Metric Statement (SQL) BI-8-02

BI-8-02-2030 CLEC Denominator 1	BI-8-02-2030 CLEC Denominator 2
select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.NON_REC_CREDIT)) + sum(ABS(a11.NON_REC_DEBIT))) WJXBFS1, (sum(ABS(a11.NON_REC_CREDIT)) + sum(ABS(a11.NON_REC_DEBIT))) BI802_C_D1 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'R' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.TEST_ACC_IND TEST_ACC_IND, a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.NON_REC_CREDIT)) + sum(ABS(a11.NON_REC_DEBIT))) WJXBFS1, (sum(ABS(a11.NON_REC_CREDIT)) + sum(ABS(a11.NON_REC_DEBIT))) BI802_C_D2 from TB_DM_BIL_DETAIL_FMT a11 where ((a11.TEST_ACC_IND = 'N' or a11.TEST_ACC_IND = 'V') and a11.NMP_CLEC_ID <> 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'U' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.TEST_ACC_IND, a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

DCI calculated results from these metrics are as follows.

Table F-44

	Numerator	Denominator	DCI Result	Verizon PA Reported
April	681,633.59	1,417,468.10	48.09%	48.09%
May	2,287,087.76	2,294,566.06	99.67%	99.67%
June	965,545.14	969,628.46	99.58%	99.81%

As shown although DCI was able to duplicate April and May results exactly, June results could not be exactly duplicated.   This does not affect PA PAP payments and Verizon PA remains out of parity as reported in the June C2C report.

Table F-45 – DCI Derived Metric Statement (SQL) BI-8-02

BI-8-02-2030 Verizon Numerator	BI-8-02-2030 Verizon Denominator
select a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.NON_REC_CREDIT_2_MTH)) + sum(ABS(a11.NON_REC_DEBIT_2_MTH))) WJXBFS1, (sum(ABS(a11.NON_REC_CREDIT_2_MTH)) + sum(ABS(a11.NON_REC_DEBIT_2_MTH))) BI802_V_N1 from TB_DM_BIL_DETAIL_FMT a11 where (a11.NMP_CLEC_ID = 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'E' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID	select a11.STATE_CODE STATE_CODE, a11.REPORT_PERIOD REPORT_PERIOD, a11.NMP_CLEC_ID NMP_CLEC_ID, (sum(ABS(a11.NON_REC_CREDIT)) + sum(ABS(a11.NON_REC_DEBIT))) WJXBFS1, (sum(ABS(a11.NON_REC_CREDIT)) + sum(ABS(a11.NON_REC_DEBIT))) BI802_V_D1 from TB_DM_BIL_DETAIL_FMT a11 where (a11.NMP_CLEC_ID = 'RTL9' and a11.REPORT_PERIOD_TYPE='M' and to_char(a11.BILL_DATE,'YYYYMM') = a11.REPORT_PERIOD and a11.PRODUCT_IND = 'E' and a11.SYSTEM_ID in ('B', 'C', 'E', 'F', 'N', 'S', 'V', 'W') and a11.REC_TYPE in (11, 12, 13, 17)) group by a11.STATE_CODE, a11.REPORT_PERIOD, a11.NMP_CLEC_ID

The results of the DCI analysis matched Verizon PA reported results exactly.

Table F-46 – Verizon PA Results

	Verizon PA Reported	DCI Calculated
April	99.98%	98.98%
May	98.01%	98.01%
June	99.01%	99.01%

Report Dimension

- CLEC Aggregate
- CLEC Specific

Exclusions

CLEC claims for adjustments such as: charges for directories, incentive regulation credits, credits for performance remedies, out-of-service credits, and special promotional credits.

Performance Standard

- **BI-8-01:** No Standard
- **BI-8-02:** Parity with Verizon PA retail

For the review period, the following are the summarized results:

Table F-47 – BI 8-01-2030

	April	May	June
Standard	NA	NA	NA
Verizon PA Reported CLEC Results	53.31%	99.56%	99.5%
DCI Calculated Results	53.31%	99.56%	99.28%

Table F-48 – BI 8-02-2030

	April	May	June
Standard	Parity w/Verizon PA Retail	Parity w/Verizon PA Retail	Parity w/Verizon PA Retail
Verizon PA Reported CLEC Results	48.09%	99.67%	99.81%
DCI Calculated CLEC Results	48.09%	99.67%	99.58%
Verizon PA Reported Verizon PA Results	99.98%	98.01%	99.01%
DCI Calculated Results	99.98%	98.01%	99.01%

Metric Creation

Primary source systems for 8-01 and 8-02 are FBS and CABS-South. Like the other billing metrics, the actual data collection and metric calculation is a totally automated process. The primary record fields are as follows.

Record fields for 8-01 are:

    Non-PCD, Total Bill Charges,
    Non-PCD, Usage
    Non-PCD, Bill total + total current charges
    PCD, Usage
    PCD, Fractional and Non-Recurring charges
    PCD, Total Bill Charges

Record filed for 8-02 are:

    Non-PCD, Total Bill Charges,
    Non-PCD, Usage
    Non-PCD, Bill total + total current charges
    PCD, Total Bill Charges

Filename

All actual metric calculations are performed within NMP.

C – FINDINGS

BI-1 FINDINGS

1. DCI Was Able To Replicate The Verizon PA Reported Results

Using the SQL statements shown above and the process described, DCI was able to exactly replicate the Verizon PA reported results for both Verizon PA and CLECs. A sampling of individual CLEC results was also verified by DCI.

BI-2 FINDINGS

1. DCI Was Able To Replicate Verizon PA Aggregate And CLEC Specific Results For April, May And June.

Using the SQL statements shown above and the process described, DCI was able to exactly replicate the Verizon PA reported results for both Verizon PA and CLECs. A sampling of individual CLEC results was also verified by DCI.

BI-3 FINDINGS

1. April/May CMA Documentation Is Inadequate For Certain Of The Billing Metrics.

The April/May CMA did not provide documentation on how to handle multiple numerators and denominators on the CLEC calculations (UNE and Resale) for BI-3-01-2030, BI-2-04-2030, BI-3-05-2030 and BI-6-01-2030. DCI "borrowed" a formula from BI 2-01-2030 and was able to replicate Verizon PA results.

BI-6 FINDINGS

1. DCI Was Able To Replicate Verizon PA C2C Reported Aggregate Results For The Test Period For Metrics BI-6-01 And BI-6-02.

DCI was able to replicate Verizon PA reported results for BI-6-01 and BI-6-02 to the second decimal point. Although DCI SQL code appears somewhat different from the original Verizon PA code, DCI code produced exactly the same mathematical result as the Verizon PA code.

BI-7 FINDINGS

1. DCI Calculated Results Match Verizon PA Reported Results Exactly For The Review Period For CLEC And Verizon PA Results.

No results were compared for BI-7-01. For BI-7-02, DCI results matched Verizon PA reported results at both the aggregate and CLEC specific levels.

BI-8 FINDINGS

1. **DCI Could Verify All Metric Calculations Except For Two June Metrics Where The Difference Was Deemed Insignificant.**

DCI was unable to verify precisely the June reported results for Verizon PA data for metric BI-8-01. DCI was also unable to exactly replicate metric BI-8-02 data reported for June CLEC results. The precise reason for the slight difference could not be determined but parsing problems with the date field were observed and could have caused the very minor difference. Neither difference was deemed significant and neither altered PA PAP payments.

D – RECOMMENDATIONS

BI-3 RECOMMENDATIONS

1. The CMA Should Be Updated For All Billing Metrics (Refer to 1, BI-3).

CMA documentation should be updated to show the correct mechanics for all BI metric calculations, as described herein.

Note: This Appendix has presented detailed findings which support and amplify on findings in Chapter IV – Measurement Calculations and Chapter V – Measurement Calculation Results. Potential recommendations, other than the one listed above, are included with recommendations located in either or both of those chapters.   Some may be subsumed within broader recommendations.

APPENDIX G – EVALUATION OF CMA ALGORITHM CHANGES

APPENDIX G – EVALUATION OF CMA ALGORITHM CHANGES

A. - INTRODUCTION

The initial (April/May) PA CMA©[1] was issued and filed with the PA PUC on August 1, 2003. This was the CMA that DCI was planning to use for this review. However, Verizon PA issued the June CMA on September 29, 2003. Verizon PA stated that it had corrected many of DCI's algorithm findings pointed out in the April/May CMA. As added scope to DCI's Review of Verizon PA Performance Metrics and Related Remedies, Verizon PA requested DCI to review and determine if the new CMA had corrected the algorithm deficiencies DCI had found.[2]

The results of this review are summarized in Table G-1.

Table G-1
Incorrect April/May 2003 Algorithms Corrected in the June CMA

Domain	Algorithms With Problems April-May CMA	Number Modified June CMA	Number Resolved[3]	Outstanding Issues June CMA
PreOrdering	87	71	71	16
Ordering	14	11	12	2
Provisioning	104	93	62	42
M&R	185	131	67	118
Total	390	306	212	178

B – FINDINGS

Details of the algorithm issues and their resolutions are provided on the following spreadsheet pages. These spreadsheets list the relevant domains, provide cross references to Finding and Exception Report numbers and describe the issues in general terms. Next, they specify relevant metrics, provide product numbers, and indicate whether the algorithm applies to retail, CLEC or both, and describe the issues in detail. Finally, the spreadsheets indicate whether or not Verizon addressed the issues in the June CMA, and whether or not they were resolved and/or remain open. DCI offers no recommendations in this Appendix relative to outstanding issues, since they are embedded in recommendations for issues relative to Pre-Ordering, Ordering, Provisioning and Maintenance & Repair, discussed in Chapters IV, V and VI of the report.

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[1] Verizon PA claims copyright protection for the Pennsylvania Carrier-to-Carrier Metric Algorithms© (PA CMA) and for all references to the Verizon PA CMA, whether specifically designated and marked or not. While Verizon PA and DCI have endeavored to designate and mark the PA CMA code for which Verizon PA claims copyright protection throughout the report and the other appendices, the PA CMA code have not been so designated and marked in this Appendix G. "Copyright 2003. All rights reserved. No compilation, modification, translation, storage in a retrieval system or reproduction (by photocopying or other means) of the data in the PA CMA or of other parts of the PA CMA is permitted without the separate, express written permission of Verizon PA. Title to the data in the PA CMA and all intellectual property rights therein shall remain with Verizon PA."

[2] Originally DCI was directed to work with the New York CMA, which was made available in June 2003. Subsequently, DCI was directed to work with the April/May 2003 (provided on September 29, 2003) Pennsylvania CMA, which it did. The comparison referenced herein is between the April/May 2003 PA CMA and the June PA CMA.

[3] Fully or significantly resolved.

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
OR-1	2	ER D-019	Several CMA algorithms incorrect		2100		Denom should exclude TEST_ACC_IND='B" like Num does Denom incorrectly restricts to PROCESS_FLOW_CATEGORY='1'. Should be '3'	Y	Y	
					3143		Both Num and Denom have PROCESS_FLOW_CATEGORY='5'. Dhould be '3'.	Y	Y	
				OR-1-04	3331		Two sets of numerator and denominator algorithms provided. First set is for order_type='2' (UNE Loop) which is correct. Second set is for order_type in('2','3') (UNE Loop or UNE Platform) which does not apply to this metric. Algorithm instructions are to add the two numerators Both numerator and denominator algorithms incorrectly restrict process_flow_category='5' (facility check) whereas this metric is for no facility check (process_flow_category='3').	Y	Y	
				OR-1-06	2213		Facility Check DS3: Incorrectly restricting to non-facility check (process_flow_category='3'). Should be facility check (process_flow_category='5').	Y	Y	

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					2320		POTS/Prequalified Complex: Facility check. Incorrectly restricting to manual facility check (process_flow_category='4'). Should be electronic facility check (process_flow_category='5').	Y	Y	
					3143		UNE Platform: Facility check. Incorrectly restricting to manual facility check (process_flow_category='4'). Should be electronic facility check (process_flow_category='5').	Y	Y	
					3331		Two sets of numerator and denominator algorithms provided. First set is for order_type='2' (UNE Loop) which is correct. Second set is for order_type in('2','3') (UNE Loop or UNE Platform) which does not apply to this metric. Algorithm instructions are to add the two numerators Both numerator and denominator algorithms incorrectly restrict process_flow_category='4' (manual facility check) whereas this metric is for electronic facility check (process_flow_category='5').	Y	Y	
OR-2	1	ER D-019	Several CMA algorithms incorrect	OR-2-04	2320		POTS / Pre-qualified Complex: No Facility Check – Both numerator and denominator algorithms incorrectly restrict process_flow_category='5' (facility check) whereas this metric is for no facility check (process_flow_category='3').	Y	Y	

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
				OR-2-06	3331		UNE Loop / Pre-qualified Complex / LNP: No Facility Check: Both numerator and denominator algorithms incorrectly restrict process_flow_category='5' (facility check) whereas this metric is for no facility check (process_flow_category='3').	Y	Y	
					2320		POTS / Pre-qualified Complex: Facility Check – Both numerator and denominator algorithms incorrectly restrict process_flow_category='4' (Manual with facility check) whereas this metric is for electronic with facility check (process_flow_category='5')	Y	Y	
					3331		UNE Loop / Pre-qualified Complex / LNP: Facility Check: Both numerator and denominator algorithms incorrectly restrict process_flow_category='4' (Manual with facility check) whereas this metric is for electronic with facility check (process_flow_category='5')	Y	Y	
OR-3	4	ER D-020	Algorithms provided for OR-3-02 incorrect	OR-3-02	2000		• They contained no clause restricting to EDI PONs.• They contained no clause restricting to resubmissions.• They contained no clause restricting the resubmissions to those at Verizon's request.• They incorrectly restricted SVC_ORDER_CLASS_ID to a value of '0', which would allow only POTS, Prequalified Complex, and LNP orders (including UNE-P)• The numerator algorithms contained no clause excluding those orders rejected by Verizon's systems as	N	N	The June CMAs (provided at the end of September) still exhibit this problem. On October 10, Verizon provided an updated CMA algorithm for OR-3-02 and the TB_DM_OR_RESEND Fact Table Layout. While the updated CMA algorithm for OR-3-02 provided October 10 now correctly references the new TB_DM_OR_RESEND_FILING_MART table, it is still incorrect, in that the numerator box contains the algorithm for the

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					3000		being duplicative of EDI PONs already in Verizon systems	N	N	denominator and the denominator box contains the algorithm for the numerator
OR-7	2	ER D-026	undocumented exclusions for the OR-7 numerator and denominator. Numerator and Denominator algorithms are inconsistent with each other	OR-7			The denominator considers orders as eligible with the additional (undocumented) conditions that the order must have been submitted via EDI and that at least one of the Confirmation, Rejection, Receipt, BCN, or PCN must have come via EDI.

The numerator also incorrectly requires that the order have been submitted via EDI, but additionally requires that either the confirmation or the rejection have been provided via EDI. (also undocumented). This excludes many more orders which were not excluded in the denominator, invalidating any metric result produced from such an algorithm. | N | Y | DCI is satisfied with Verizon's explanation insofar as the correctness of the results and the algorithms for the revised NY based PA Guidelines. Verizon's response however shifts DCI's finding to both the calculation and algorithms of the metrics under the old PA Guidelines |
| PR-1 | 14 | ER D-021 | No retail algorithm | PR-1-07 | -3211 | Retail | | Y | N | Add exclusion of PRI ISDN feature change orders. |
| PR-3 | 5 | ER D-014 | Numerator and Denominator algorithms are inconsistent with each other | PR-3-09 | -2100 | CLEC | denominator algorithm does not contain the restrictions on the fields UNN1_IN_DATA, C2C_PROJECT_IND, SUB_DELAY_IND, ORG_APPT_CODE, and LINES_NUMBER. In addition, it allows record orders based on the field RESALE_MIGR_NO_APPINTV instead of the field RESALE_MIGR_APPINTV_LTE2 | Y | Y | CLEC Numerator and Denominator formulas are now consistent except for "Product Indicator <> 1" in denominators only, which is superfluous code anyway. |

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					-3113		Denom has incorrect conditions appropriate only in a numerator: NVL(a11.CISR_MAC, 1) LIKE 'S%' and a11.COMPL_DATE>a11.ORG_DUE_DATE	Y	Y	
					-3140		Also, denominator algorithm does not contain the restrictions on the fields UNN1_IN_DATA, C2C_PROJECT_IND, SUB_DELAY_IND, ORG_APPT_CODE, and LINES_NUMBER. In addition, it allows record orders based on the field RESALE_MIGR_NO_APPINTV instead of the field RESALE_MIGR_APPINTV_LTE2	Y	Y	
PR-3	6		No Denominator Algorithms in May CMA	PR-3-09	-2100	Retail		Y	Y	Retail Numerator and Denominator formulas are present, and consistent except for "Product Indicator <> 1" in denominators only, which is superfluous code anyway.
					-3113			Y	Y	
					-3140			Y	Y	
PR-5	2	ER-D-014	Numerator and Denominator algorithms are inconsistent with each other	PR-5-02	-2100	Retail	Denominator for VZ formula have incorrect conditions which would be appropriate only in a numerator formula:NVL(CISR_MAC, 0) LIKE 'C%'and NVL(COMP_MAC_LAST,1) <> 'EO'and COMP_MAC_DY_CNT > 0and COMPL_DATE>ORG_DUE_DATE	N	N	Denominator for VZ formula have incorrect conditions which would be appropriate only in a numerator formula. These are: and NVL(CISR_MAC, 0) LIKE 'C%'and NVL(COMP_MAC_LAST,1) <> 'EO'and COMP_MAC_DY_CNT > 0and COMPL_DATE>ORG_DUE_DATE

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					-3112	CLEC	Denom included Cancels. Denom requires DISPATCH_IND = 'Y', Num doesn't. Both should.	Y	N	ASRs should be removed from Formula Header
						Retail	Denominator for VZ formula have incorrect conditions which would be appropriate only in a numerator formula:	Y	Y	
					-3140	Retail	NVL(CISR_MAC, 0) LIKE 'C%' and NVL(COMP_MAC_LAST,1) <> 'EO' and COMP_MAC_DY_CNT > 0 and COMPL_DATE>ORG_DUE_DATE	Y	Y	nvl(PRODUCT_IND, 0) <> '1' in denom but not in Num
					-3200	CLEC	No LSR Numerator Algorithm	Y	Y	
					-3341	Both	Not originally an issue	Y	N	nvl(PRODUCT_IND, 0) <> '1' in denom but not in Num
					-3342	CLEC	Denom is LineShare+LineSplit. Should be xDSL loop, like numerator.Also, denom has incorrect conditions appropriate only in a numerator:(COMPL_DATE-ORG_DUE_DATE) > 15and CAL_COMP_MAC_DAYS > 15	Y	Y	
					-3342	Retail	Denom requires DISPATCH_IND = 'Y', Num doesn't. Both should	N	N	Denom requires DISPATCH_IND = 'Y', Num doesn't. Both should

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					-3343	CLEC	Num incorrectly includes LineSplit - should be LineShare only Denom is UNE 2wire Digital Loops. Should be LineShare. Also, denom has incorrect conditions appropriate only in a numerator: FACILITY_MISS_IND = 'Y' and (COMPL_DATE-ORG_DUE_DATE) > 15 and CAL_COMP_MAC_DAYS > 15	Y	N	Both Num and Denom incorrectly includes LineSplit - should be LineShare only
					-3343	Retail	Denom requires DISPATCH_IND = 'Y', Num doesn't. Both should	N	N	Denom requires DISPATCH_IND = 'Y', Num doesn't. Both should
					-3345	CLEC	Denom is UNE Platform. Should be LineSplit. Also, denom has incorrect conditions appropriate only in a numerator: FACILITY_MISS_IND = 'Y' and (COMPL_DATE-ORG_DUE_DATE) > 15 and CAL_COMP_MAC_DAYS > 15	Y	Y	
					-3345	Retail	Denom requires DISPATCH_IND = 'Y', Num doesn't. Both should	N	N	Denom requires DISPATCH_IND = 'Y', Num doesn't. Both should
				PR-5-04	-3200	CLEC	Numerator does not include Cancels with SOCD in report month, null Report Period (200000) and next month FILING_DATE	N	N	Numerator does not include Cancels with SOCD in report month, null Report Period (200000) and next month FILING_DATE

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
PR-5	3	ER-D-015	The PA May CMA contains no denominator algorithms for several PR-5 submetrics	PR-5-02	-2100	CLEC		Y	Y	None
					-2200	CLEC		Y	Y	None
					-2200	Retail		Y	N	Newly provided Retail denom formula is incorrect (the following segment belongs in a numeratorformula not a denominator): and NVL(CISR_MAC, 0) LIKE 'C%' and NVL(COMP_MAC_LAST,1) <> 'EO' and COMP_MAC_DY_CNT > 0 and COMPL_DATE>ORG_DUE_DATE Also, denom incorrectly requires DISPATCH_IND='N'. Should be DISPATCH_IND='Y'. Also, denom is for UNE xDSL Loops; Should be Resale Specials

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					-2341	CLEC		Y	N	Newly provided CLEC denom formula is incorrect:Formula is for Resale Specials; Should be Resale 2-wire DigitalRefers to Pending and Cancelled orders: "and REPORT_PERIOD = 200000"Denom has Numerator conditions:and CISR_MAC like 'C%'and (TO_DATE('06/30/2003','MM/DD/YYYY')-ORG_DUE_DATE) > 90
					-2341	Retail		Y	Y	Denom now has nvl(a11.PRODUCT_IND, 0) <> '1' (not in numerator). Condition is superfluous as PRODUCT_IND already restricted to '3'.
					-3140	CLEC		Y	Y	
					-3200	CLEC	No LSR Numerator Algorithm	Y	Y	
					-3200	Retail		Y	Y	
				PR-5-04	-3112	CLEC	No Numerator Algorithm (in addition to there being no Denominator Algorithm)	Y	N	Both Num and Denom are for LineSplit - should be UNE POTS Loop.Both Num and Denom don't contain Cancels - algorithms inappropriate for this metricBoth Num and Denom require DISPATCH_IND='Y'; Inappropriate for PR-5-04
PR-6	3	ER-D-015	The PA May CMA contains	PR-6-01	-2100	CLEC		Y	Y	

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
			no denominator algorithms for several PR-6 submetrics		-2200	CLEC		Y	Y	
					-2341	CLEC		Y	Y	
					-3341	Retail		Y	Y	
					-3342	Retail		Y	Y	
				PR-6-02	-3520	CLEC	No numerator	Y	Y	
					-2100	CLEC		Y	Y	
				PR-6-03	-2200	CLEC		Y	Y	
					-2341	CLEC		Y	Y	
					-3200	CLEC	LSR Denominator	Y	Y	
PR-8	2	ER-D-015	The PA May CMA contains no denominator algorithms for several PR-8 submetrics	PR-8-01	-2200	Retail		Y	Y	

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					-2341	Retail		Y	Y	
					-3200	CLEC	No ASR denominator	Y	N	ASR formulae restrict to PROD_TYP in('DS1','DS3'). DS0 and OTH should also be allowed Both ASR num and denom have superfluous condition: not(SO_TYP = 'C' and ACTV_TYP in('D')). This is superfluous since ACTV_TYP already restricted to ('N','C')
					-3200	Retail		Y	Y	
					-3341	Retail		Y	Y	
					-3345	CLEC		Y	Y	
					-3345	Retail		Y	Y	
					-3510	CLEC	No ASR denominator	Y	N	Now there is no LSR Denom
					-3530	CLEC	No ASR denominator	Y	N	Now there is no LSR Denom
				PR-8-02	-3100	CLEC		Y	Y	

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					-3200	CLEC	Neither LSR nor ASR denominator	Y	Y	ASR formulae restrict to PROD_TYP in('DS1','DS3'). DS0 and OTH should also be allowed Both ASR num and denom have superfluous condition: not(SO_TYP = 'C' and ACTV_TYP in('D')). This is superfluous since ACTV_TYP already restricted to ('N','C')
					-3341	CLEC		Y	Y	Denominator has incorrect conditions which would be appropriate only in a numerator: and NVL(CISR_MAC, 0) LIKE 'C%' and NVL(COMP_MAC_LAST,1) <> 'EO' and COMP_MAC_DY_CNT > 0 and COMPL_DATE>ORG_DUE_DATE
					-3342	CLEC		Y	Y	
					-3343	CLEC		Y	N	Both Num and Denom incorrectly contain LineSplitting
					-3345	CLEC		Y	Y	
					-3510	CLEC	No ASR denominator	Y	N	Now there is no LSR Denom
					-3530	CLEC	No ASR denominator	Y	N	Now there is no LSR Denom
PR-8	3	ER-D-016	The PA May CMA contains	PR-8-01	-2100	CLEC		Y	Y	

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
			no numerator algorithms for several PR-8 submetrics		-2100	Retail		Y	Y	
					-2200	CLEC		Y	N	Numerator allows RESALE_MIGR_NO_APPINTV = 'Y' whenever NVL(ORG_APPT_CODE, '*') <> 'Y'), while denominator allows RESALE_MIGR_NO_APPINTV = 'Y' only when ORG_APPT_CODE in ('M', 'R', 'W', 'X', 'C', 'S')
					-2200	Retail		Y	Y	
					-2341	CLEC		Y	N	Numerator allows RESALE_MIGR_NO_APPINTV = 'Y' whenever NVL(ORG_APPT_CODE, '*') <> 'Y'), while denominator allows RESALE_MIGR_NO_APPINTV = 'Y' only when ORG_APPT_CODE in ('M', 'R', 'W', 'X', 'C', 'S')
					-2341	Retail		Y	Y	
					-3100	CLEC		Y	N	Denom has PURCHASE_ORDER_NUMBER is not null. Numerator doesn't
					-3100	Retail		Y	Y	

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					-3200	CLEC	Neither LSR nor ASR numerator	Y	N	ASR formulae restrict to PROD_TYP in('DS1','DS3'). DS0 and OTH should also be allowedBoth ASR num and denom have superfluous condition: not(SO_TYP = 'C' and ACTV_TYP in('D')).This is superfluous since ACTV_TYP already restricted to ('N','C')
					-3200	Retail		Y	Y	
					-3341	CLEC		Y	Y	
					-3341	Retail		Y	Y	
					-3342	CLEC	See Finding 36	Y	N	See Finding 36
					-3343	CLEC		Y	N	Both Num and Denom incorrectly contain LineSplitting
					-3343	Retail		Y	Y	
					-3345	CLEC		Y	Y	
					-3510	CLEC	Neither LSR nor ASR numerator	Y	N	No LSR numerator
					-3530	CLEC	Neither LSR nor ASR numerator	Y	N	No LSR numerator
				PR-8-02	-2100	CLEC		Y	Y	
					-2100	Retail		Y	Y	

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					-2200	CLEC		Y	N	Numerator has no restrictions on ORG_APPT_CODE, while denominator requires: ORG_APPT_CODE in ('M', 'R', 'W', 'X', 'C', 'S')
					-2200	Retail		Y	Y	
					-2341	CLEC		Y	N	CLEC Num and Denom have no restrictions on ORG_APPT_CODE, while Retail Num and Denom require: ORG_APPT_CODE in ('M', 'R', 'W', 'X', 'C', 'S')
					-2341	Retail		Y	N	CLEC Num and Denom have no restrictions on ORG_APPT_CODE, while Retail Num and Denom require: ORG_APPT_CODE in ('M', 'R', 'W', 'X', 'C', 'S')
					-3100	CLEC		Y	Y	
					-3100	Retail		Y	Y	
					-3200	CLEC	Neither LSR nor ASR numerator	Y	N	ASR formulae restrict to PROD_TYP in('DS1','DS3'). DS0 and OTH should also be allowedBoth ASR num and denom have superfluous condition: not(SO_TYP = 'C' and ACTV_TYP in('D')).This is superfluous since ACTV_TYP already restricted to ('N','C')

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					-3200	Retail		Y	Y	
					-3341	CLEC		Y	Y	
					-3341	Retail		Y	Y	
					-3342	CLEC		Y	Y	
					-3343	CLEC		Y	N	Both Num and Denom incorrectly contain LineSplitting
					-3343	Retail		Y	Y	
					-3345	CLEC		Y	Y	
					-3345	Retail		Y	Y	
					-3510	CLEC	Neither LSR nor ASR numerator	Y	N	No LSR numerator
					-3510	Retail		Y	N	missing restriction to Pending: STATUS not in('55B','CAN')
					-3530	CLEC	Neither LSR nor ASR numerator	Y	N	No LSR numerator
					-3530	Retail		Y	Y	

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
PR-8	4	ER-D-017	Incorrect May CMA retail numerator algorithm for PR-8-01	PR-8-01	-3342	Retail	Algorithm should be for xDSL loops, yet identifies them via DS_LEVEL_IND = '0' which is appropriate for DS0.Counts Completed and Cancelled orders instead of Pending Orders	Y	N	Algorithm should be for xDSL loops, yet identifies them via DS_LEVEL_IND = '0' which is appropriate for DS0.Missing code to restrict to pending orders: STATUS not in('55B','CAN)
					-3530	Retail	Counts Completed and Cancelled orders instead of Pending Orders	Y	Y	
PR-8	5	ER-D-018	Incorrect May CMA retail denominator algorithm for PR-8-01	PR-8-02	-3342	Retail	Algorithm should be for xDSL loops, yet identifies them via DS_LEVEL_IND = '0' which is appropriate for DS0.	N	N	Algorithm should be for xDSL loops, yet identifies them via DS_LEVEL_IND = '0' which is appropriate for DS0.
					-3530	Retail	Counts Pending Orders - Should count Completed Orders	Y	N	Missing STATUS='55B'
PR-5	6		June CMA algorithms for PR-5-04-3112 (UNE POTS Loop) are incorrect	PR-5-04	3112	CLEC	See Finding 27			Both Num and Denom are for LineSplit - should be UNE POTS Loop. Both Num and Denom don't contain Cancels - algorithms inappropriate for this metric Both Num and Denom require DISPATCH_IND='Y'; Inappropriate for PR-5-04
PR-4	4		Incorrect Trunk types specified in CMA for PR-4	PR-4-02	5000	CLEC	CLEC algorithms incorreclty restrict to Interexchange and Wireless Trunks: TRNK_SERV_TYP in('I','W') Should be CLEC and Reciprocal Trunks ('T','R')	N	N	CLEC algorithms incorreclty restrict to Interexchange and Wireless Trunks: TRNK_SERV_TYP in('I','W') Should be CLEC and Reciprocal Trunks ('T','R')

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
				PR-4-03	5000	CLEC	CLEC algorithms incorreclty restrict to Interexchange and Wireless Trunks: TRNK_SERV_TYP in('I','W') Should be CLEC and Reciprocal Trunks ('T','R')	N	N	CLEC algorithms incorreclty restrict to Interexchange and Wireless Trunks: TRNK_SERV_TYP in('I','W') Should be CLEC and Reciprocal Trunks ('T','R')
PR-4	5		CMA excludes DS0 and OTH from PR-4	PR-4-02	3200	CLEC	ASR formulae restrict to PROD_TYP in('DS1','DS3'). DS0 and OTH should also be allowed Both ASR num and denom have superfluous condition: not(SO_TYP = 'C' and ACTV_TYP in('D')). This is superfluous since ACTV_TYP already restricted to ('N','C')	N	N	ASR formulae restrict to PROD_TYP in('DS1','DS3'). DS0 and OTH should also be allowed Both ASR num and denom have superfluous condition: not(SO_TYP = 'C' and ACTV_TYP in('D')). This is superfluous since ACTV_TYP already restricted to ('N','C')
				PR-4-03	3200	CLEC	ASR formulae restrict to PROD_TYP in('DS1','DS3'). DS0 and OTH should also be allowed Both ASR num and denom have superfluous condition: not(SO_TYP = 'C' and ACTV_TYP in('D')). This is superfluous since ACTV_TYP already restricted to ('N','C')	N	N	ASR formulae restrict to PROD_TYP in('DS1','DS3'). DS0 and OTH should also be allowed Both ASR num and denom have superfluous condition: not(SO_TYP = 'C' and ACTV_TYP in('D')). This is superfluous since ACTV_TYP already restricted to ('N','C')
MR-3	2		CMA lacks code to	MR-3-01	3550	CLEC	No algorithms	Y	N	Verizon elsewhere uses the code segment:and (not

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
			implement exclusion of redirected troubles			Retail	No algorithms	Y	N	(a11.DISPATCH_IN_CNT <= 1and a11.DISPATCH_OUT_CNT = 1))to implement the exclusion of redirected troubles. However this code does not appear in the MR-3-xx-3550 CMA algorithms
				MR-3-02	3550	CLEC	Verizon elsewhere uses the code segment: and (not (a11.DISPATCH_IN_CNT <= 1 and a11.DISPATCH_OUT_CNT = 1)) to implement the exclusion of redirected troubles. However this code does not appear in the MR-3-xx-3550 CMA algorithms	N	N	
						Retail		N	N	
				MR-3-03	3550	CLEC		N	N	
MR-2			No algorithms provided	MR-2-01	2200	CLEC		Y	Y	
					2200	Retail		Y	Y	
MR-3				MR-2-02	2341	Retail	No numerator algorithm	Y	Y	
				MR-2-05	3345	CLEC	No numerator algorithm	Y	Y	
				MR-3-01	3343	Retail	No numerator or denominator algorithm	Y	Y	
					3345	CLEC		Y	Y	
					3345	Retail		Y	Y	
					3550	CLEC		Y	Y	
					3550	Retail		Y	Y	
				MR-3-02	2341	CLEC		Y	Y	
					2341	Retail		Y	Y	

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					3341	CLEC		Y	Y	
					3341	Retail		Y	Y	
					3342	CLEC		Y	Y	
					3342	Retail		Y	Y	
					3343	CLEC		Y	Y	
					3343	Retail		Y	Y	
					3345	CLEC		Y	Y	
					3345	Retail		Y	Y	
MR-4	includes part of Finding 4	includes ER D-031	Miscellaneous issues	MR-3-02	3144	CLEC	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'B'.	N	N	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'B'.
					3144	Retail	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'B'.	N	N	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'B'.
					3145	CLEC	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'R'.	N	N	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'R'.
					3145	Retail	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'R'.	N	N	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'R'.

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
				MR-4-01	2216	CLEC	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)	N	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					2216	Retail	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)	N	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					2217	CLEC	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)	N	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					2217	Retail	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)	N	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					3216	CLEC	Specials other than DS0, DS1, and DS3 should also be included. Use DS_LEVEL_IND not in('DS1','DS3'). Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)	Y	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					3216	Retail	Specials other than DS0, DS1, and DS3 should also be included. Use DS_LEVEL_IND not in('DS1','DS3'). Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)	Y	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					3217	CLEC	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)	N	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					3217	Retail	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)	N	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					3341	CLEC	Numerator ignores Dispatched Out tickets	Y	Y	
					3341	Retail	Numerator ignores Dispatched Out tickets	Y	N	Retail algorithm should handle Dispatched Out tickets similarly to CLEC
					3550	CLEC	Numerator ignores Dispatched Out tickets	Y	Y	
					3550	Retail	Numerator ignores Dispatched Out tickets	Y	N	Retail algorithm should handle Dispatched Out tickets similarly to CLEC
					5000	CLEC	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='S' (Specials)	N	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='S' (Specials)
					5000	Retail	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='S' (Specials)	N	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='S' (Specials)
				MR-4-02	2110	CLEC	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'B'.	N	N	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'B'.
					2110	Retail	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'B'.	N	N	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'B'.
					2120	CLEC	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'R'.	N	N	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'R'.

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					2120	Retail	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'R'.	N	N	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'R'.
					3144	CLEC	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'B'.	N	N	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'B'.
					3144	Retail	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'B'.	N	N	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'B'.
					3145	CLEC	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'R'.	N	N	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'R'.
					3145	Retail	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'R'.	N	N	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'R'.
					3341	CLEC	Numerator ignores Dispatched Out tickets	Y	Y	
					3341	Retail	Numerator ignores Dispatched Out tickets	Y	N	Retail algorithm should handle Dispatched Out tickets similarly to CLEC
					3342	CLEC	Numerator ignores Dispatched Out tickets	Y	Y	
					3342	Retail	Numerator ignores Dispatched Out tickets	Y	N	Retail algorithm should handle Dispatched Out tickets similarly to CLEC
					3343	CLEC	Numerator ignores Dispatched Out tickets	Y	Y	
					3343	Retail	Numerator ignores Dispatched Out tickets	Y	N	Retail algorithm should handle Dispatched Out tickets similarly to CLEC
					3345	CLEC	Numerator ignores Dispatched Out tickets	Y	Y	

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					3345	Retail	Numerator ignores Dispatched Out tickets	Y	N	Retail algorithm should handle Dispatched Out tickets similarly to CLEC
					3550	CLEC	Numerator ignores Dispatched Out tickets	Y	Y	
					3550	Retail	Numerator ignores Dispatched Out tickets	Y	N	Retail algorithm should handle Dispatched Out tickets similarly to CLEC
				MR-4-03	2110	CLEC	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'B'.	N	N	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'B'.
					2110	Retail	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'B'.	N	N	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'B'.
					2120	CLEC	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'R'.	N	N	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'R'.
					2120	Retail	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'R'.	N	N	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'R'.
					3144	CLEC	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'B'.	N	N	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'B'.
					3144	Retail	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'B'.	N	N	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'B'.
					3145	CLEC	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'R'.	N	N	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'R'.

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					3145	Retail	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'R'.	N	N	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'R'.
					3341	CLEC	If correct to restrict DISPATCH_OUT_CNT = 0 for Central Office tickets in Numerator, then should do so in Denominator as well. Otherwise, also need to count ACTUAL_DURATION_STOP for DISPATCH_OUT_CNT > 0 tickets in Numerator.	N	N	If correct to restrict DISPATCH_OUT_CNT = 0 for Central Office tickets in Numerator, then should do so in Denominator as well. Otherwise, also need to count ACTUAL_DURATION_STOP for DISPATCH_OUT_CNT > 0 tickets in Numerator.
					3341	Retail	If correct to restrict DISPATCH_OUT_CNT = 0 for Central Office tickets in CLEC Numerator, then should do so in Retail Numerator and Denominator as well. Otherwise, also need to count ACTUAL_DURATION_STOP for DISPATCH_OUT_CNT > 0 tickets in Numerator.	N	N	If correct to restrict DISPATCH_OUT_CNT = 0 for Central Office tickets in CLEC Numerator, then should do so in Retail Numerator and Denominator as well. Otherwise, also need to count ACTUAL_DURATION_STOP for DISPATCH_OUT_CNT > 0 tickets in Numerator.
					3342	CLEC	If correct to restrict DISPATCH_OUT_CNT = 0 for Central Office tickets in Numerator, then should do so in Denominator as well. Otherwise, also need to count ACTUAL_DURATION_STOP for DISPATCH_OUT_CNT > 0 tickets in Numerator.	N	N	If correct to restrict DISPATCH_OUT_CNT = 0 for Central Office tickets in Numerator, then should do so in Denominator as well. Otherwise, also need to count ACTUAL_DURATION_STOP for DISPATCH_OUT_CNT > 0 tickets in Numerator.

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					3342	Retail	If correct to restrict DISPATCH_OUT_CNT = 0 for Central Office tickets in CLEC Numerator, then should do so in Retail Numerator and Denominator as well. Otherwise, also need to count ACTUAL_DURATION_STOP for DISPATCH_OUT_CNT > 0 tickets in Numerator.	N	N	If correct to restrict DISPATCH_OUT_CNT = 0 for Central Office tickets in CLEC Numerator, then should do so in Retail Numerator and Denominator as well. Otherwise, also need to count ACTUAL_DURATION_STOP for DISPATCH_OUT_CNT > 0 tickets in Numerator.
					3343	CLEC	If correct to restrict DISPATCH_OUT_CNT = 0 for Central Office tickets in Numerator, then should do so in Denominator as well. Otherwise, also need to count ACTUAL_DURATION_STOP for DISPATCH_OUT_CNT > 0 tickets in Numerator.	N	N	If correct to restrict DISPATCH_OUT_CNT = 0 for Central Office tickets in Numerator, then should do so in Denominator as well. Otherwise, also need to count ACTUAL_DURATION_STOP for DISPATCH_OUT_CNT > 0 tickets in Numerator.
					3343	Retail	If correct to restrict DISPATCH_OUT_CNT = 0 for Central Office tickets in CLEC Numerator, then should do so in Retail Numerator and Denominator as well. Otherwise, also need to count ACTUAL_DURATION_STOP for DISPATCH_OUT_CNT > 0 tickets in Numerator.	N	N	If correct to restrict DISPATCH_OUT_CNT = 0 for Central Office tickets in CLEC Numerator, then should do so in Retail Numerator and Denominator as well. Otherwise, also need to count ACTUAL_DURATION_STOP for DISPATCH_OUT_CNT > 0 tickets in Numerator.
					3345	CLEC	If correct to restrict DISPATCH_OUT_CNT = 0 for Central Office tickets in Numerator, then should do so in Denominator as well. Otherwise, also need to count ACTUAL_DURATION_STOP for DISPATCH_OUT_CNT > 0 tickets in Numerator.	N	N	If correct to restrict DISPATCH_OUT_CNT = 0 for Central Office tickets in Numerator, then should do so in Denominator as well. Otherwise, also need to count ACTUAL_DURATION_STOP for DISPATCH_OUT_CNT > 0 tickets in Numerator.

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					3345	Retail	If correct to restrict DISPATCH_OUT_CNT = 0 for Central Office tickets in CLEC Numerator, then should do so in Retail Numerator and Denominator as well. Otherwise, also need to count ACTUAL_DURATION_STOP for DISPATCH_OUT_CNT > 0 tickets in Numerator.	N	N	If correct to restrict DISPATCH_OUT_CNT = 0 for Central Office tickets in CLEC Numerator, then should do so in Retail Numerator and Denominator as well. Otherwise, also need to count ACTUAL_DURATION_STOP for DISPATCH_OUT_CNT > 0 tickets in Numerator.
					3350	CLEC	Limited Stop Clock not used for DISPATCH_OUT_CNT > 0 troubles	N	N	Limited Stop Clock not used for DISPATCH_OUT_CNT > 0 troubles
					3350	Retail	Limited Stop Clock not used for DISPATCH_OUT_CNT > 0 troubles	N	N	Limited Stop Clock not used for DISPATCH_OUT_CNT > 0 troubles
				MR-4-04	2216	CLEC	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)	N	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					2216	Retail	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)	N	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					2217	CLEC	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)	N	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					2217	Retail	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)	N	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					3216	CLEC	Specials other than DS0, DS1, and DS3 should also be included. Use DS_LEVEL_IND not in('DS1','DS3').Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)	Y	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					3216	Retail	Specials other than DS0, DS1, and DS3 should also be included. Use DS_LEVEL_IND not in('DS1','DS3'). Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)	Y	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					3217	CLEC	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)	N	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					3217	Retail	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)	N	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					3341	Retail	Retail algorithm should handle Dispatched Out tickets similarly to CLEC	N	N	Retail algorithm should handle Dispatched Out tickets similarly to CLEC
					3342	Retail	Retail algorithm should handle Dispatched Out tickets similarly to CLEC	N	N	Retail algorithm should handle Dispatched Out tickets similarly to CLEC
					3343	Retail	Numerator ignores Dispatched Out tickets	Y	Y	
					3345	Retail	Numerator ignores Dispatched Out tickets	Y	Y	

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					3550	Retail	Retail algorithm should handle Dispatched Out tickets similarly to CLEC	N	N	Retail algorithm should handle Dispatched Out tickets similarly to CLEC
					5000	CLEC	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='S' (Specials)	N	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='S' (Specials)
					5000	Retail	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='S' (Specials)	N	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='S' (Specials)
				MR-4-05	5000	CLEC	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='S' (Specials)	N	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='S' (Specials)
					5000	Retail	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='S' (Specials)	N	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='S' (Specials)
MR-4	2	ER D-030	No algorithms provided	MR-4-06	2100	CLEC		Y	N	Further disaggregated to 2210 (Bus) and 2220 (Res) as of June. However, algorithms don't restrict RES_BUS_PUB_IND appropriately.
	4 5	ER D-031	Should use Limited Stop Clock for Dispatched		2100	Retail		Y	N	Further disaggregated to 2210 (Bus) and 2220 (Res) as of June. However, algorithms don't restrict RES_BUS_PUB_IND appropriately.

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
			Out troubles in all Retail comparatives for UNE 2-Wire Digital Loops, UNE 2-wire xDSL Loops, Linesharing, Linesplitting, and UNE POTS Loops		2216	CLEC		Y	N	Specials other than DS0, DS1, and DS3 should also be included. Use DS_LEVEL_IND not in('DS1','DS3'). Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					2216	Retail		Y	N	Specials other than DS0, DS1, and DS3 should also be included. Use DS_LEVEL_IND not in('DS1','DS3').Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					2217	CLEC		Y	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					2217	Retail		Y	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					3140	CLEC		Y	N	Further disaggregated to 3144 (Bus) and 3145 (Res) as of June. However, algorithms don't restrict RES_BUS_PUB_IND appropriately.
					3140	Retail		Y	N	Further disaggregated to 3144 (Bus) and 3145 (Res) as of June. However, algorithms don't restrict RES_BUS_PUB_IND appropriately.

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					3216	CLEC		Y	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					3216	Retail		Y	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					3217	CLEC		Y	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					3217	Retail		Y	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					5000	CLEC		Y	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='S' (Specials)
					5000	Retail		Y	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='S' (Specials)
				MR-4-07	2100	CLEC		Y	N	Further disaggregated to 2210 (Bus) and 2220 (Res) as of June. However, algorithms don't restrict RES_BUS_PUB_IND appropriately.
					2100	Retail		Y	N	Further disaggregated to 2210 (Bus) and 2220 (Res) as of June. However, algorithms don't restrict RES_BUS_PUB_IND appropriately.
					2341	CLEC		Y	Y	

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					2341	Retail		Y	Y	
					3140	CLEC		Y	N	Further disaggregated to 3144 (Bus) and 3145 (Res) as of June. However, algorithms don't restrict RES_BUS_PUB_IND appropriately.
					3140	Retail		Y	N	Further disaggregated to 3144 (Bus) and 3145 (Res) as of June. However, algorithms don't restrict RES_BUS_PUB_IND appropriately.
					3341	CLEC		Y	Y	
					3341	Retail		Y	N	Retail algorithm should handle Dispatched Out tickets similarly to CLEC
					3342	CLEC		Y	Y	
					3342	Retail		Y	N	Retail algorithm should handle Dispatched Out tickets similarly to CLEC
					3343	CLEC		Y	Y	
					3343	Retail		Y	Y	
					3345	CLEC		Y	Y	
					3345	Retail		Y	Y	

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					3550	CLEC		Y	Y	
					3550	Retail		Y	N	Retail algorithm should handle Dispatched Out tickets similarly to CLEC
					5000	CLEC		Y	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='S' (Specials)
					5000	Retail		Y	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='S' (Specials)
				MR-4-08	2110	CLEC		Y	N	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'B'.
					2110	Retail		Y	N	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'B'.
					2120	CLEC		Y	N	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'R'.
					2120	Retail		Y	N	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'R'.

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					2216	CLEC		Y	N	Specials other than DS0, DS1, and DS3 should also be included. Use DS_LEVEL_IND not in('DS1','DS3'). Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					2216	Retail		Y	N	Specials other than DS0, DS1, and DS3 should also be included. Use DS_LEVEL_IND not in('DS1','DS3'). Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					2217	CLEC		Y	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					2217	Retail		Y	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					2341	CLEC		Y	Y	
					2341	Retail		Y	Y	
					3144	CLEC		Y	N	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'B'.

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					3144	Retail		Y	N	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'B'.
					3145	CLEC		Y	N	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'R'.
					3145	Retail		Y	N	Num and Denom both allow RES_BUS_PUB_IND in('R','B','P'). Should restrict to 'R'.
					3216	CLEC		Y	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					3216	Retail		Y	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					3217	CLEC		Y	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					3217	Retail		Y	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='M' (Trunks)
					3341	CLEC		Y	Y	
					3341	Retail		Y	N	Retail algorithm should handle Dispatched Out tickets similarly to CLEC
					3342	CLEC		Y	Y	

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					3342	Retail		Y	N	Retail algorithm should handle Dispatched Out tickets similarly to CLEC
					3343	CLEC		Y	Y	
					3343	Retail		Y	Y	
					3345	CLEC		Y	Y	
					3345	Retail		Y	Y	
					3550	CLEC		Y	Y	
					3550	Retail		Y	N	Retail algorithm should handle Dispatched Out tickets similarly to CLEC
					5000	CLEC		Y	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='S' (Specials)
					5000	Retail		Y	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='S' (Specials)
MR-5	2	ER D-030	No algorithms provided	MR-5-01	2100	CLEC		Y	Y	
					2100	Retail		Y	Y	
					2200	CLEC		Y	Y	

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					2200	Retail		Y	Y	
					2341	CLEC		Y	Y	
					2341	Retail		Y	Y	
					3140	CLEC		Y	Y	
					3140	Retail		Y	Y	
					3200	CLEC		Y	Y	
					3200	Retail		Y	Y	
					3341	CLEC		Y	Y	
					3341	Retail		Y	Y	
					3342	CLEC		Y	Y	
					3342	Retail		Y	Y	
					3343	CLEC		Y	Y	
					3343	Retail		Y	Y	
					3345	CLEC		Y	Y	

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					3345	Retail		Y	Y	
					3550	CLEC		Y	Y	
					3550	Retail		Y	Y	
					5000	CLEC		Y	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='S' (Specials)
					5000	Retail		Y	N	Superfluous, inoperative but confusing code regarding SERVICE_LEVEL_CD='S' (Specials)
PO			Incorrect algorithms	PO-1-02	6020	Retail	Verizon's results could not be replicated using the algorithms provided; in addition, non-existent field cited in algorithms	Y	N	Corrections made, but nonexistent field still cited in algorithms
					6030	Retail		Y	N	Corrections made, but nonexistent field still cited in algorithms
				PO-1-03	6020	Retail		Y	N	Corrections made, but nonexistent field still cited in algorithms
					6030	Retail		Y	N	Corrections made, but nonexistent field still cited in algorithms
				PO-1-04	6020	Retail		Y	N	Corrections made, but nonexistent field still cited in algorithms
					6030	Retail		Y	N	Corrections made, but nonexistent field still cited in algorithms
				PO-1-05	6020	Retail		Y	N	Corrections made, but nonexistent field still cited in algorithms; Verizon's results still could not be replicated

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					6030	Retail		Y	N	Corrections made, but nonexistent field still cited in algorithms; Verizon's results still could not be replicated
				PO-1-06	6020	Retail		Y	N	Corrections made, but nonexistent field still cited in algorithms
					6030	Retail		Y	N	Nonexistent field still cited in algorithms
					6020	CLEC		Y	N	Nonexistent field still cited in algorithms; Virginia data apparently included
				PO-1-07	6020	Retail		Y	N	Nonexistent field still cited in algorithms; Virginia data apparently included
					6030	CLEC		Y	N	Nonexistent field still cited in algorithms; Virginia data apparently included
					6030	Retail		Y	N	Nonexistent field still cited in algorithms; Virginia data apparently included
				PO-1-09	6020	CLEC		Y	N	Nonexistent field still cited in algorithms
					6030	CLEC		Y	N	Nonexistent field still cited in algorithms
				PO-2-02	6020	CLEC		Y	N	Corrections made, but new algorithm apparently measuring data from wrong state, and improperly includes unmeasured 6-minute periods in the calculation of the denominator, a violation of the guidelines

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					6030	CLEC		Y	N	Corrections made, but new algorithm apparently measuring data from wrong state, and improperly includes unmeasured 6-minute periods in the calculation of the denominator, a violation of the guidelines
					6060	CLEC		Y	N	Corrections made, but new algorithm apparently measuring data from wrong state, and improperly includes unmeasured 6-minute periods in the calculation of the denominator, a violation of the guidelines
					6080	CLEC		Y	N	Corrections made, but new algorithm apparently measuring data from wrong state, and improperly includes unmeasured 6-minute periods in the calculation of the denominator, a violation of the guidelines
				PO-2-03	6020	CLEC		Y	N	Corrections made, but new algorithm apparently measuring data from wrong state, and improperly includes unmeasured 6-minute periods in the calculation of the denominator, a violation of the guidelines
					6030	CLEC		Y	N	Corrections made, but new algorithm apparently measuring data from wrong state, and improperly includes unmeasured 6-minute periods in the calculation of the denominator, a violation of the guidelines

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					6060	CLEC		Y	N	Corrections made, but new algorithm apparently measuring data from wrong state, and improperly includes unmeasured 6-minute periods in the calculation of the denominator, a violation of the guidelines
					6080	CLEC		Y	N	Corrections made, but new algorithm apparently measuring data from wrong state, and improperly includes unmeasured 6-minute periods in the calculation of the denominator, a violation of the guidelines
			No algorithms provided	PO-1-02	6050	CLEC		Y	N	Algorithms given, but nonexistent field stil cited in algorithms
					6050	Retail		Y	N	Algorithms given, but nonexistent field stil cited in algorithms
				PO-1-03	6050	CLEC		Y	N	Algorithms given, but nonexistent field stil cited in algorithms
					6050	Retail		Y	N	Algorithms given, but nonexistent field stil cited in algorithms
				PO-1-04	6050	CLEC		Y	N	Algorithms given, but nonexistent field stil cited in algorithms
					6050	Retail		Y	N	Algorithms given, but nonexistent field stil cited in algorithms
				PO-1-05	6050	CLEC		Y	N	Algorithms given, but nonexistent field stil cited in algorithms
					6050	Retail		Y	N	Algorithms given but nonexistent field stil cited in algorithms, and Verizon's results still could not be replicated

| Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
				PO-1-06	6050	CLEC		Y	N	Algorithms given, but nonexistent field stil cited in algorithms
					6050	Retail		Y	N	Algorithms given, but nonexistent field stil cited in algorithms
				PO-1-07	6050	CLEC		Y	N	Algorithms given, but nonexistent field stil cited in algorithms
					6050	Retail		Y	N	Algorithms given, but nonexistent field stil cited in algorithms
				PO-1-08	6050	CLEC		Y	N	Algorithms given, but nonexistent field stil cited in algorithms
			Questionable SQL used in queries	PO-1-01	6020	CLEC	Selecting data by using a "NOT IN" clause rather than an "IN" clause; no coding to handle possible null values	Y	N	NOT IN clauses removed, but no coding added for possible null values
					6020	Retail		Y	N	NOT IN clauses removed, but no coding added for possible null values
					6030	CLEC		Y	N	NOT IN clauses removed, but no coding added for possible null values
					6030	Retail		Y	N	NOT IN clauses removed, but no coding added for possible null values
				PO-1-02	6020	CLEC		Y	N	NOT IN clauses removed, but no coding added for possible null values
					6020	Retail		Y	N	NOT IN clauses removed, but no coding added for possible null values
					6030	CLEC		Y	N	NOT IN clauses removed, but no coding added for possible null values
					6030	Retail		Y	N	NOT IN clauses removed, but no coding added for possible null values
				PO-1-03	6020	CLEC		Y	N	NOT IN clauses removed, but no coding added for possible null values

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					6020	Retail		Y	N	NOT IN clauses removed, but no coding added for possible null values
					6030	CLEC		Y	N	NOT IN clauses removed, but no coding added for possible null values
					6030	Retail		Y	N	NOT IN clauses removed, but no coding added for possible null values
					6020	CLEC		Y	N	NOT IN clauses removed, but no coding added for possible null values
					6020	Retail		Y	N	NOT IN clauses removed, but no coding added for possible null values
				PO-1-04	6030	CLEC		Y	N	NOT IN clauses removed, but no coding added for possible null values
					6030	Retail		Y	N	NOT IN clauses removed, but no coding added for possible null values
					6020	CLEC		Y	N	NOT IN clauses removed, but no coding added for possible null values
					6020	Retail		Y	N	NOT IN clauses removed, but no coding added for possible null values
				PO-1-05	6030	CLEC		Y	N	NOT IN clauses removed, but no coding added for possible null values
					6030	Retail		Y	N	NOT IN clauses removed, but no coding added for possible null values
				PO-1-06	6020	CLEC		Y	N	NOT IN clauses removed, but no coding added for possible null values
					6020	Retail		Y	N	NOT IN clauses removed, but no coding added for possible null values
					6030	CLEC		Y	N	NOT IN clauses removed, but no coding added for possible null values

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					6030	Retail		Y	N	NOT IN clauses removed, but no coding added for possible null values
					6020	CLEC		Y	N	NOT IN clauses removed, but no coding added for possible null values
				PO-1-07	6020	Retail		Y	N	NOT IN clauses removed, but no coding added for possible null values
					6030	CLEC		Y	N	NOT IN clauses removed, but no coding added for possible null values
					6030	Retail		Y	N	NOT IN clauses removed, but no coding added for possible null values
				PO-1-08	6020	CLEC		Y	N	NOT IN clauses removed, but no coding added for possible null values
					6030	CLEC		Y	N	NOT IN clauses removed, but no coding added for possible null values
				PO-1-09	6020	CLEC		Y	N	NOT IN clauses removed, but no coding added for possible null values
					6030	CLEC		Y	N	NOT IN clauses removed, but no coding added for possible null values
			Inconsistent methodology used in queries	PO-1-07	6020	CLEC		Y	N	The CLEC code for this query now joins three tables, which is inconsistent with other CLEC queries' methodology.
					6030	CLEC		Y	N	The CLEC code for this query now joins three tables, which is inconsistent with other CLEC queries' methodology.
			Overly complex	PO-1-01	6020	Retail	Joining tables unnecessarily for retail queries; inconsistent with the way CLEC queries are	N	N	

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
			methodology used in queries		6030	Retail	formed	N	N	
				PO-1-02	6020	Retail		N	N	
					6030	Retail		N	N	
				PO-1-03	6020	Retail		N	N	
					6030	Retail		N	N	
				PO-1-04	6020	Retail		N	N	
					6030	Retail		N	N	
				PO-1-05	6020	Retail		N	N	
					6030	Retail		N	N	
				PO-1-06	6020	Retail		N	N	
					6030	Retail		N	N	
				PO-1-07	6020	Retail		N	N	
					6030	Retail		N	N	
				PO-1-09	6020	Retail		N	N	

Metric	Finding #	ER #	General Issue	Sub-Metric	Product	Algorithm	Issue Details	VZ address issue in June CMA?	Problem completely resolved?	Remaining Issues
					6030	Retail		N	N	
			Entitlement calculation time not clear from C2C guidelines	MR-1			Verizon makes an adjustment to certain transactions that involve a security login; DCI's interpretation is that this adjustment should not be made because it already is allowed for in the "parity plus 4 seconds" standard	N	N	
			Incorrect algorithms	MR-1						
MR			Discrepancies between CLEC and Retail algorithms	MR-1			Values ENTITLE_TIME4 and ENTITLE_TIME5 are summed in the numerator for CLECs; they are not summed in retail algorithms			
				MR-1-01			Verizon results could not be replicated for May and June	Y		
				MR-1-02			Verizon results could not be replicated for May and June	Y		
				MR-1-03			Verizon results could not be replicated for May and June	Y		
				MR-1-04			Verizon results could not be replicated for May and June	Y		
				MR-1-05			Verizon results could not be replicated for May and June	Y		
				MR-1-06			Verizon results could not be replicated for May and June	Y		

APPENDIX H – ACRONYM LIST

APPENDIX H – ACRONYM LIST

A

ACD	Automated Call Distributor
ACE	Automated Cable Enterprise or Austin Computers
ACK	Order Acknowledgement
AD	Auto Detect
ADSL	Asymmetric Digital Subscriber Line
ADV	Address Validation
ALJ	Administrative Law Judge
APPINTV	Offered Interval
ASA	Average Speed of Answer
ASC II	A Type of Computer Software (no longer an acronym)
ASR	Automated Service Request (processed via Exact system)
AT	Assist Test
ATIS	Alliance for the Telecommunications Industry Solutions

B

BA/GTE	Bell Atlantic-GTE
BAN	Billing Authorization Number
BAUI	Bell Atlantic Usage Interface
BCN	Billing Completion Notification
BI	Billing Metrics
BOS/BDT	Billing Output Specification/Billing Data Tape
BRI	Basic Rate Interface
BTN	Billing Telephone Number
BTR	Business Transformation Rules

C

C	Change
C2C	Carrier-To-Carrier
CABS	Carrier Access Billing System
CAD	Common Agent Desktop
CAFE	CABS Automated Fron End
CAFS	Carrier Access File - South
CATC	Carrier Access Test Center
CATS	Claims and Adjustments Tracking System
CBITS	CLEC Billing Inquiry Tracking System
CBS/CNE	Customer Business Services/Customer Network Engineering
CC	Came Clear
CCAP	Change Control Assurance Plan
CCI	Customer Care Index or Change Control Identification
CCM	Change Control Manager
CCOE	Cageless Collocation Open Environment

CCR	Change Control Request or Change Control Record
CCS	Hundred Call Seconds
CD	Customer Direct
CID	Change Identification
CLASS	Custom Local Area Signaling Services
CLEC	Competitive Local Exchange Carrier
CLLI	Common Language Location Identifier
CLPC	CLEC Loop Provisioning Center
CM	Critical Measures
CMA	Carrier Metric Algorithms©[1]
CMN	Change Management Notices
CMPINTV	Completion Interval
CMPS	Competitive Management Performance Standards
CNR	Customer Not Ready
CO	Central Office
CORBA	Common Object Request Broker Architecture
CPE	Customer Premises Equipment
CR	Change Request or Customer Reports
CRAS	Cable Records Analysis System
CREMS	Change Request & Edit Management System
CRIS	Customer Record Information System
CSG	Carrier Services Gateway
CSR	Customer Service Record
CWG	Carrier Working Group

D

DA	Directory Assistance or Don't Answer or Dedicated Access
DALIDX	Daily Index
DD	Due Date
DDA	Due Date Availability
DLEC	Data Local Exchange Carrier
DLVR	Directory Listing Verification Report
DNS	Domain Name Server
DOJ	Department of Justice
DP	Data Provider
DR	Data Request or Data Report
DRC	Dispatch Resource Center
DS0	Digital Service 0
DS1	Digital Service 1

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DS3	Digital Service 3
DSL	Digital Service Line
DSNO	Data Services Network Operations
DSR	Directory Service Request
DUF	Daily Usage File
DW	Data Warehouse

E

ECIC	Electronic Commerce Interexchange Committee
EDI	Electronic Data Interchange
EEL	Enhanced Extended Loop
ER	Exception Report
ERR	Rejected Query
ETL	Extraction, Translation, and Loading
EXACT	Exchange Access and Control Tracking

F

FAC	Facility
FBS	Flexible Billing System
FCC	Federal Communications Commission
FDT	Frame Due Time
FG	Feature Group
FMC	Facilities Management Center
FMS	Force Management System
FOC	Firm Order Confirmation
FOK	Found Okay
FOMS	Frame Order Management System
FTG	Final Trunk Group
FTM	File Transfer Mode
FTP	File Transfer Protocol

G

| GE | General Standards Metrics |
| GUI | Graphical User Interface |

H

| HDSL | High-bit-rate Digital Subscriber Line |

I

I&M	Installation and Maintenance
IDLC	Integrated Digital Loop Carrier
IDX	Index

IFAS	Intelligent Field Access System
ILEC	Incumbent Local Exchange Carrier
INF	Information
IOF	Inter Office Facilities
IPM	Impulse Per Minute
ISDN	Integrated Services Digital Network
ISO	Information System Organization or Information Service Organization
IT	Information Technology
IXC	InterExchange Carrier

J

JAD	Joint Application Development

K

KPMG	At one time this was an acronym; however, it is now the self-standing name of an accounting firm.

L

LATA	Local Access Transport Area
LCC	Local Collocation Co-coordinator
LFAC	Loop Facility Assignment Control
LFACS	Loop Facility Assignment Control System
LIDB	Line Identification Database Information
LMOS	Loop Maintenance Operations System
LNP	Long-term Number Portability
LNUM	Listed Number
LQC	Loop Qualification Center
LSC	Order Confirmation
LSI	Local Service Interface
LSOG	Local Service Order Guide
LSR	Local Service Request
LSRC	Local Service Request Confirmation

M

M	Mechanically
M&R	Maintenance & Repair
MA	Maintenance Administrator
MCO	Maintenance Control Office
MLT	Mechanized Loop Testing
MLT	Mechanized Loop Testing
MOE	Mode of Entry
MPOE	Minimum Point of Entry
MR	Maintenance & Repair Metrics
MTACT	Metric Tracking and Change Tool

MTAS	Mechanized Trouble Analysis System
MTTR	Mean Time to Repair

N

NC	New Contact or Network Channel or No Circuit or No Change or No Charge
NCI	Network Channel Interface
NID	Network Interface Device
NMC	National Marketing Center
NMP	Network Metric Platform
NP	Network Performance Metrics
NP	Not Polled
NTF	No Trouble Found
NY PAP	New York Performance Assurance Plan
NY PSC	New York Public Service Commission

O

OBF	Ordering and Billing Forum
OCO	Order Control Office
OD	Operator Services Metrics
OLAP	Online Analytical Processing
OOS	Out of Service
OR	Ordering Metrics
OS	Operator Services
OSS	Operations Support System
OTH	Other, (data value signifying Specials Product Code or DS-Level), meaning "Speacials, Other than DSO, DS1, and DS3"

P

PA	Pennsylvania
PA PAP	Pennsylvania Performance Assurance Plan
PA PUC	Pennsylvania Public Utility Commission
PAD	Rejected Query
PAP	Performance Assurance Plan
PCD	Post Completion Discrepancies or Post Completion Delayed
PCN	Provisioning Completion Notification
PCSR	Parsed CSR
PM	Preventive Maintenance
PMO I	Performance Measure Order I (Opinion and Order entered 12-31-99), Docket No. P-00991643.
PMO II	Performance Measure Order II (Final Opinion & Order on Performance Measures & Remedies for Wholesale Performance for Verizon Pennsylvania Inc. entered 12-12-02) Docket No. M-00011468.
PO	Pre-Ordering Metric
PON	Purchase Order Number
POTS	Plain Old Telephone Service

PR	Provisioning Metrics
PRI	ISDN Primary Rate
PSR	Produce & Service Availability
PUC	Public Utility Commission

Q

QA	Quality Assurance
QMIS	Queue Management Information System

R

RCCC	Regional CLEC Control Center
RCMAC	Recent Change Memory Administration Center
RCMC	Regional CLEC Maintenance Center
REJ	Rejected Query
ReTAS	Repair Trouble Administration System
RI	Routine Installation
RL	Release
RM	Request Manager
RRSC	Regional Resold Services Center
RS	Referred from Self
RT	Repair Tracking
RTR	Response Type Requested

S

SAI	System Analysis & Integration
SAS	Statistical Analysis System
SCCB	Software Change Control Board
SCOPE	Secured open Collocation Environment
SECNCI	Secondary Network Channel Interface Code
SERVICE	System Expediting the Remote Verification and Input of Customer Enhancements
SES	Software Engineering Solutions
SGAT	Statement Of Generally Available Terms And Conditions
SOP	Service Order Processor
SP	Special Provisions
SQL	Structured Query Language
STD RMK	Standard Remarks
STP	Signaling Transfer Point

T

TA-96	Telecommunications Act of 1996
TC	Telecommunications Company
TCBH	Time Consistent Busy Hour
TCIF	Telecommunications Industry Forum

TCM	Trunk Capacity Management
TDMS	Traffic Data Measurement System
TE	Trouble Entry
TEO	Telephone Equipment Order
TISOC	Telecom Industry Services Operations Center
TNDS-TK	Traffic Network Data System TK
TNS	Telephone Number Availability & Reservation
TOK	Test Okay
TOPS	Traffic Operator Position System
TR	Trouble Report
TRA	Due Date Availability (no longer used)
TSS	Trunk Servicing System
TT	Trouble Ticket

U

UNE	Unbundled Network Element
UNE-L	Unbundled Network Element Loop
UNE-P	Unbundled Network Element Platform
USOC	Universal Service Order Code
USS	Unix System Services

V

VADI	Verizon Advanced Data Incorporated
VB	Visual Basic
VMS	Voice Message Service
VZ	Verizon

W

WBCC	Wholesale Billing Collection Center
WCCC	Wholesale Customer Care Center
WCIT	Wholesale Claims and Inquiry Tracking
WDRC	Wholesale Dispatch Resource Center
WFA	Work Force Administration
WFA-DI	Work Force Administration – Dispatch In
WFA-DO	Work Force Administration – Dispatch Out
WPA	Wholesale Performance Assurance
WPTS	Wholesale Provisioning Tracking System

X

XML	Extensible Markup Language