# V.    PID Report of P-CLEC and Commercial Observation Results

## 1.0    Description

KPMG Consulting evaluated Qwest's Service Performance Indicator Definitions (PIDs) in accordance with Appendix G of the *Master Test Plan* (MTP). The purpose of this report section is two-fold. First, to serve as reference to the statistical methods that were utilized for evaluating the PIDs. And second, to provide detailed results of the PID evaluation.

Below is a description of each analysis type, and the conditions under which that analysis was performed. The Results section is divided into three subsections:

- The first gives the results for PIDs that were evaluated according to a benchmark standard;

- The second gives the results for PIDs that were evaluated according to a parity standard; and

- The third gives the results for PIDs where no 'pass/fail' evaluation was performed, i.e. diagnostic.

## 2.0    Method

### 2.1    Benchmark Test Analysis

Appendix G specifies that benchmark standards be analyzed according to the method of 'stare and compare.' This means that if the test result meets or exceeds the benchmark, Qwest passes; and, if the test result falls short of the benchmark, Qwest fails. No statistical testing is performed. The first table gives test results for these types of comparisons.

### 2.2    Parity Test Analysis

For parity PIDs, MTP Appendix G specifies that a Dual Test be performed. The Dual test is the combination of two statistical tests. In the first test, the Null Hypothesis is parity between the test results and retail results. In the second test, the Null Hypothesis is that a difference exists between test results and retail results.

Each test conducted during the Dual Test carries a Type I error rate of 5%. The meaning of Type I error and the implications of this standard are described in Appendix G. Also in Appendix G is a chart that describes the four possible outcomes of the Dual Test. Three of these outcomes lead to a 'pass' or a 'fail' determination. The fourth leads to a "No Decision." No Decision results were referred to the TAG for resolution. There were a handful of instances during the test in which this occurred, and they are noted in the results section below.

In the second test, the Null Hypothesis difference is defined as 0.28 standard deviations for measures derived from averages, and 'twice as bad' for measures that are derived from proportions. The 'twice as bad' standard means that if, for example, retail is missing X% of orders, the second test Null Hypothesis is that the P-CLEC is missing 2X% of orders. As another example, if Qwest is performing at a 90% on-time rate for retail orders, the second Null

Hypothesis is that the data for the P-CLEC is performing no better than 80% on-time for test orders.

The 'twice as bad' difference is calibrated to a sample size of 134. This calibration is done by finding the percentage result that would allow the Type II error to be 5%, when the Null Hypothesis is parity, and the sample size is 134. This percentage is the Null Hypothesis percentage for the second test. When the retail result is 90%, this second test Null Hypothesis percentage is 80% ('twice as bad'). However, for other retail results, the second test's Null Hypothesis percentage is not exactly twice as bad.

The level at which results were reported, and the sample sizes required for retesting, were determined using Appendix K of the MTP and guidance from the TAG. In general, the PID tests required a sample size of 140 initially. For retesting, the requirement was 35 for benchmark PIDs and 140 for parity PIDs.

The quantities reported in the following tables deviate from the targeted sample sizes due to four general reasons:

The PID definition excluded specific transactions that were executed for the test;

TAG agreements reduced the sample size due to lack of commercial volume (e.g., DS1);

A number of UNE-Loop orders experienced an issue with the WFA script; and

Sample sizes for some PIDs (e.g., Jeopardies, delay days) were beyond KPMG Consulting's control.

The breakdown of the PIDs by product and region was determined using the retest PID document, titled *Retest and PID Matrix*, distributed to the TAG on 9/10/2001. In some cases, the PID was disaggregated by product, but the test results were necessarily aggregated. The results in the table below reflect these disaggregations.

In order to perform the statistical tests for these PIDs, KPMG Consulting did the following for each of the two dual tests:

- Performed the required permutation simulation by product;
- Aggregated these simulations into a single average; and
- Determined a single p-value for the test.

## 2.3 Diagnostic PID Analysis

For several PIDs, no evaluation was performed. KPMG Consulting has calculated the results for these PIDs, and is providing the results in a table below. In many of these cases, the PID standard was not established before the test. In other cases, KPMG Consulting had no method of directly calculating the result, but instead reported Qwest data and, thus, cannot evaluate the results.

## 3.0     Results Summary

The following three tables show results for Benchmark, Parity, and Diagnostic PIDs.   As explained above, only the parity PIDs have statistical tests associated with them. The Benchmark PIDs are based on 'stare and compare', and the Diagnostic PID results are for information only.

### *Table V-1: Benchmark Test Results*

| Metric Name and Description | MTP Test # | Numerator (for percentages) | Denominator or Count | Test Percent or Average | Benchmark | Pass/Fail | Comments |
|---|---|---|---|---|---|---|---|
| GA-1: Gateway Availability – IMA-GUI -All Regions | 12 | | | | | Not Tested | IMA GUI was not part of the PING test. |
| GA-2: Gateway Availability – IMA-EDI-All Regions | 12 | 27,476 | 27,485 | 99.97% | 99.25% | Pass | Jan and Feb 2002 'ping' data used for this test. |
| GA-6: Gateway Availability – CEMR - Repair-All Regions | 16 | | | | | Not Tested | CEMR was not included in the PING test |
| PO-1A: Average Pre-Order/Order Response Time- GUI by pre-order query type-All Regions | 12 | | | | | Pass | See the Test 12 report for details. |
| PO-1B: Average Pre-Order/Order Response Time- EDI by pre-order query type-All Regions | 12 | | | | | Pass | See the Test 12 report for details. |
| PO-1C: Percent Pre-Order/Order Timeouts- GUI - All Regions | 12 | 0 | 4,038 | 0.0% | 0.5% | Pass | |
| PO-1C: Percent Pre-Order/Order Timeouts- EDI-All Regions | 12 | 10 | 17,369 | 0.06% | 0.50% | Pass | |
| PO-3A-2: Average LSR Rejection Notice Interval - GUI (auto-rejected)-All Regions | 12 | | 81 | 4.9 | 18 | Pass | in seconds |
| PO-3A-1: Average LSR Rejection Notice Interval- GUI (rejected manually)-All Regions | 12 | | 38 | 5.9 | 12 | Pass | in hours |
| PO-3B-1: Average LSR Rejection Notice Interval - EDI (rejected manually)-All Regions | 12 | | 285 | 6.1 | 12 | Pass | in hours |
| PO-3B-2: Average LSR Rejection Notice Interval - EDI (auto-rejected)-All Regions | 12 | | 1,478 | 16.8 | 18 | Pass | in seconds |

| Metric Name and Description | MTP Test # | Numerator (for percentages) | Denominator or Count | Test Percent or Average | Benchmark | Pass/Fail | Comments |
|---|---|---|---|---|---|---|---|
| PO-3C: Average LSR Rejection Notice Interval Statewide level - LSRs via facsimile-All Regions | 12 | | 22 | 20 | 24 | Pass | in hours |
| *PO-5 A, B, and C All Regions* | | | | | | | |
| PO-5A-1: Firm Order Confirmations (FOCs) On Time-Electronic-GUI - LNP-All Regions | 12 | | | | | Not tested | LNP could not be tested using the GUI because it required using a participating CLEC's ZCID code. |
| PO-5A-2: Firm Order Confirmations (FOCs) On Time-Electronic-EDI - LNP-All Regions | 12 | 69 | 69 | 100% | 95% | Pass | |
| PO-5B-1: Firm Order Confirmations (FOCs) On Time-Electronic/Manual-GUI-LNP-All Regions | 12 | | | | | Not Tested | LNP could not be tested using the GUI because it required using a participating CLEC's ZCID code. |
| PO-5B-2: Firm Order Confirmations (FOCs) On Time-Electronic/Manual-EDI - LNP-All Regions | 12 | 45 | 46 | 98% | 90% | Pass | |
| PO-5C: Firm Order Confirmations (FOCs) On Time-Facsimile-All Regions | 12 | 21 | 21 | 100% | 90% | Pass | Exception 3117 was issued based on an initial 19 out of 22 result. This Exception was closed, based on the retest result of 21 out of 21 on time. |
| *PO-5 A and B Central Region* | | | | | | | |
| PO-5A-1: Firm Order Confirmations (FOCs) On Time-Electronic-- GUI - resale & UNE-P-Central Region | 12 | 23 | 24 | 96% | 95% | Pass | |
| PO-5A-1: Firm Order Confirmations (FOCs) On Time-Electronic-GUI-Unbundled loops-Central Region | 12 | 18 | 18 | 100% | 95% | Pass | |
| PO-5A-2: Firm Order Confirmations (FOCs) On Time-Electronic-EDI-resale and UNE-P-Central Region | 12 | 758 | 771 | 98% | 95% | Pass | |

| Metric Name and Description | MTP Test # | Numerator (for percentages) | Denominator or Count | Test Percent or Average | Benchmark | Pass/Fail | Comments |
|---|---|---|---|---|---|---|---|
| PO-5A-2: Firm Order Confirmations (FOCs) On Time-Electronic-EDI-Unbundled loops-Central Region | 12 | 231 | 232 | 100% | 95% | Pass | |
| PO-5B-1: Firm Order Confirmations (FOCs) On Time-Electronic/Manual-GUI-resale & UNE-P-Central Region | 12 | 7 | 7 | 100% | 90% | Pass | |
| PO-5B-1: Firm Order Confirmations (FOCs) On Time-Electronic/Manual-GUI -Unbundled loops-Central Region | 12 | 34 | 37 | 92% | 90% | Pass | |
| PO-5B-2: Firm Order Confirmations (FOCs) On Time-Electronic/Manual-EDI-resale & UNE-P-Central Region | 12 | 290 | 294 | 99% | 90% | Pass | |
| PO-5B-2: Firm Order Confirmations (FOCs) On Time-Electronic/Manual-EDI-Unbundled loops-Central Region | 12 | 449 | 456 | 98% | 90% | Pass | |
| *PO-5 A and B Eastern Region* | | | | | | | |
| PO-5A-1: Firm Order Confirmations (FOCs) On Time-Electronic-GUI-resale & UNE-P-Eastern Region | 12 | 30 | 30 | 100% | 95% | Pass | |
| PO-5A-1: Firm Order Confirmations (FOCs) On Time-Electronic-GUI-Unbundled loops-Eastern Region | 12 | 22 | 22 | 100% | 95% | Pass | |
| PO-5A-2: Firm Order Confirmations (FOCs) On Time-Electronic-EDI-resale and UNE-P-Eastern Region | 12 | 896 | 905 | 99% | 95% | Pass | |
| PO-5A-2: Firm Order Confirmations (FOCs) On Time-Electronic-EDI-Unbundled loops-Eastern Region | 12 | 218 | 219 | 100% | 95% | Pass | |

| Metric Name and Description | MTP Test # | Numerator (for percentages) | Denominator or Count | Test Percent or Average | Benchmark | Pass/Fail | Comments |
|---|---|---|---|---|---|---|---|
| PO-5B-1: Firm Order Confirmations (FOCs) On Time-Electronic/Manual-GUI-resale & UNE-P-Eastern Region | 12 | 33 | 33 | 100% | 90% | Pass | |
| PO-5B-1: Firm Order Confirmations (FOCs) On Time-Electronic/Manual-GUI-Unbundled loops-Eastern Region | 12 | 49 | 53 | 92% | 90% | Pass | |
| PO-5B-2: Firm Order Confirmations (FOCs) On Time-Electronic/Manual-EDI -resale & UNE-P-Eastern Region | 12 | 363 | 374 | 97% | 90% | Pass | |
| PO-5B-2: Firm Order Confirmations (FOCs) On Time-Electronic/Manual-EDI -Unbundled loops-Eastern Region | 12 | 477 | 492 | 97% | 90% | Pass | |
| PO-5 A and B Western Region | | | | | | | |
| PO-5A-1: Firm Order Confirmations (FOCs) On Time-Electronic-- GUI - resale & UNE-P-Western Region | 12 | 30 | 30 | 100% | 95% | Pass | |
| PO-5A-1: Firm Order Confirmations (FOCs) On Time-Electronic-GUI-Unbundled loops-Western Region | 12 | 23 | 23 | 100% | 95% | Pass | |
| PO-5A-2: Firm Order Confirmations (FOCs) On Time-Electronic-EDI-resale and UNE-P-Western Region | 12 | 902 | 903 | 100% | 95% | Pass | |
| PO-5A-2: Firm Order Confirmations (FOCs) On Time-Electronic-EDI-Unbundled loops-Western Region | 12 | 175 | 176 | 99% | 95% | Pass | |
| PO-5B-1: Firm Order Confirmations (FOCs) On Time-Electronic/Manual-GUI-resale & UNE-P-Western Region | 12 | 25 | 25 | 100% | 90% | Pass | |

| Metric Name and Description | MTP Test # | Numerator (for percentages) | Denominator or Count | Test Percent or Average | Benchmark | Pass/Fail | Comments |
|---|---|---|---|---|---|---|---|
| PO-5B-1: Firm Order Confirmations (FOCs) On Time-Electronic/Manual-GUI -Unbundled loops-Western Region | 12 | 53 | 54 | 98% | 90% | Pass | |
| PO-5B-2: Firm Order Confirmations (FOCs) On Time-Electronic/Manual-EDI -resale & UNE-P-Western Region | 12 | 355 | 363 | 98% | 90% | Pass | |
| PO-5B-2: Firm Order Confirmations (FOCs) On Time-Electronic/Manual-EDI-Unbundled loops-Western Region | 12 | 466 | 477 | 98% | 90% | Pass | |
| *OP-3* | | | | | | | |
| OP-3C: Installation Commitments Met Analog Loops-Eastern Region | 14 | 168 | 170 | 99% | 90% | Pass | |
| OP-3C: Installation Commitments Met Analog Loops-Central Region | 14 | 167 | 180 | 93% | 90% | Pass | |
| OP-3C: Installation Commitments Met Analog Loops-Western Region | 14 | 157 | 166 | 95% | 90% | Pass | |
| OP-3C: Installation Commitments Met Non-Loaded Loops-Eastern Region | 14 | 56 | 57 | 98% | 90% | Pass | |
| OP-3C: Installation Commitments Met Non-Loaded Loops-Central Region | 14 | 52 | 52 | 100% | 90% | Pass | |
| OP-3C: Installation Commitments Met Non-Loaded Loops-Western Region | 14 | 63 | 64 | 98% | 90% | Pass | |
| OP-3A, B, D & E: Installation Commitments Met-Eastern Region | 14 | 358 | 376 | 95% | 90% | Pass | Tested using commercial observations. |
| OP-3A, B, D & E: Installation Commitments Met-Central Region | 14 | 271 | 273 | 99% | 90% | Pass | Tested using commercial observations. |
| OP-3A, B, D & E: Installation Commitments Met-Western Region | 14 | 232 | 238 | 97% | 90% | Pass | Tested using commercial observations. |

| Metric Name and Description | MTP Test # | Numerator (for percentages) | Denominator or Count | Test Percent or Average | Benchmark | Pass/Fail | Comments |
|---|---|---|---|---|---|---|---|
| *OP-4* | | | | | | | |
| OP-4C: Installation Interval - Analog Loops-Eastern Region | 14 | | 142 | 5.5 | 6 | Pass | |
| OP-4C: Installation Interval-Analog Loops-Central Region | 14 | | 103 | 5.7 | 6 | Pass | |
| OP-4C: Installation Interval-Analog Loops-Western Region | 14 | | 128 | 5.9 | 6 | Pass | |
| OP-4C: Installation Interval-Non-Loaded Loops-Eastern Region | 14 | | 52 | 5.13 | 6 | Pass | |
| OP-4C: Installation Interval-Non-Loaded Loops-Central Region | 14 | | 44 | 5.05 | 6 | Pass | |
| OP-4C: Installation Interval-Non-Loaded Loops-Western Region | 14 | | 48 | 5.19 | 6 | Pass | |
| OP-4A, B, D & E: Installation Interval-Eastern Region | 14 | | 253 | 5.8 | 6 | Pass | Tested using commercial observations. |
| OP-4A, B, D & E: Installation Interval-Central Region | 14 | | 190 | 4.9 | 6 | Pass | Tested using commercial observations. |
| OP-4A, B, D & E: Installation Interval-Western Region | 14 | | 124 | 6.1 | 6 | Pass | Tested using commercial observations. Exception 3103 was issued. This Exception was closed based on Qwest data documenting exclusions. |
| *OP-8 B and C* | | | | | | | |
| OP-8B: Number Portability Timeliness with coordination-Eastern Region | 14 | 129 | 129 | 100% | 95% | Pass | Tested using commercial and test bed observations. |
| OP-8B: Number Portability Timeliness with coordination-Central Region | 14 | 96 | 96 | 100% | 95% | Pass | Tested using commercial and test bed observations. |
| OP-8B: Number Portability Timeliness with coordination-Western Region | 14 | 76 | 76 | 100% | 95% | Pass | Tested using commercial and test bed observations. |
| OP-8C: Number Portability Timeliness without coordination-All Regions | 14 | 15 | 15 | 100% | 95% | Pass | Tested using commercial observations. |
| *OP-13* | | | | | | | |

| Metric Name and Description | MTP Test # | Numerator (for percentages) | Denominator or Count | Test Percent or Average | Benchmark | Pass/Fail | Comments |
|---|---|---|---|---|---|---|---|
| OP-13 A: Coordinated Cuts On Time – Unbundled Loop-Eastern Region | 14 | 259 | 259 | 100% | 95% | Pass | Tested using commercial observations and test bed orders. |
| OP-13 A: Coordinated Cuts On Time – Unbundled Loop-Central Region | 14 | 244 | 244 | 100% | 95% | Pass | Tested using commercial observations and test bed orders. |
| OP-13 A: Coordinated Cuts On Time – Unbundled Loop-Western Region | 14 | 185 | 186 | 99% | 95% | Pass | Tested using commercial observations and test bed orders. |

## Table V-2: Parity Test Results

| Metric Name | MTP Test # | Test Average | Retail Average | Test Sample Size | p-value test 1 | p-value test 2 | Pass/Fail/No Decision | Comments |
|---|---|---|---|---|---|---|---|---|
| PO-7A-Billing Completion Notification Timeliness -IMA-13 state | N/A | 88% | | 373 | | | Diagnostic | Diagnostic only for the test. The P-CLEC did not receive BCNs. Therefore, Qwest data for the P-CLEC was reported for this PID. |
| PO-7B-Billing Completion Notification Timeliness -EDI-13 state | N/A | 94% | | 4306 | | | Diagnostic | Diagnostic only for the test. The P-CLEC did not receive BCNs. Therefore, Qwest data for the P-CLEC was reported for this PID. |
| PO-8-Jeopardy Notice Interval-Resale-Eastern | 12 | | | | | | No Data | |
| PO-8-Jeopardy Notice Interval-Resale-Central | 12 | | | | | | No Data | |
| PO-8-Jeopardy Notice Interval-Resale-Western | 12 | | | | | | No Data | |
| PO-8-Jeopardy Notice Interval-UNE-L-Eastern | 12 | 4.3 | 3.9 | 25 | 0.3070 | 0.2251 | No Decision | Observation 3104 was issued from the No Decision result. The TAG decided it should be a PASS and the Observation was closed. |
| PO-8-Jeopardy Notice Interval-UNE-L-Central | 12 | 5.4 | 8.6 | 12 | 0.4482 | 0.0944 | No Decision | Observation 3104 issued. The TAG decided it should be a PASS, and the Observation was closed. |

| Metric Name | MTP Test # | Test Average | Retail Average | Test Sample Size | p-value test 1 | p-value test 2 | Pass/Fail/No Decision | Comments |
|---|---|---|---|---|---|---|---|---|
| PO-8-Jeopardy Notice Interval-UNE-L-Western | 12 | 6.3 | 3.6 | 12 | 0.0622 | 0.6861 | No Decision | Observation 3104 was issued from the No Decision result. The TAG decided it should be a PASS, and the Observation was closed. |
| PO-8-Jeopardy Notice Interval-UNE-P-Eastern | 12 | | | | | | No Data | |
| PO-8-Jeopardy Notice Interval-UNE-P-Central | 12 | | | | | | No Data | |
| PO-8-Jeopardy Notice Interval-UNE-P-Western | 12 | | | | | | No Data | |
| PO-9-Timely Jeopardy Notices-Resale-Eastern | 12 | | | | | | No Data | |
| PO-9-Timely Jeopardy Notices-Resale-Central | 12 | | | | | | No Data | |
| PO-9-Timely Jeopardy Notices-Resale-Western | 12 | | | | | | No Data | |
| PO-9-Timely Jeopardy Notices-UNE-L-Eastern | 12 | 14% | 10% | 49 | 0.8640 | 0.0006 | Pass | |
| PO-9-Timely Jeopardy Notices-UNE-L-Central | 12 | 100% | 19% | 2 | 1.0000 | 0.0081 | Pass | |
| PO-9-Timely Jeopardy Notices-UNE-L-Western | 12 | 8% | 8% | 12 | 0.7568 | 0.2153 | No Decision | Observation 3104 was issued from the No Decision result. The TAG decided it should be a PASS, and the Observation was closed. |
| PO-9-Timely Jeopardy Notices-UNE-P-Eastern | 12 | | | | | | No Data | |
| PO-9-Timely Jeopardy Notices-UNE-P-Central | 12 | | | | | | No Data | |
| PO-9-Timely Jeopardy Notices-UNE-P-Western | 12 | | | | | | No Data | |
| OP-3 A, B, D, & E | | | | | | | | |
| OP-3A, B, D & E-Installation Commitments Met-All products-Eastern | 14 | 89% | 91% | 87 | 0.2010 | 0.0281 | Unable to Determine | Tested using commercial observations. Based on Observation 3080 and Exception 3106, the TAG asked for retesting with resale POTS and UNE-P observations. The passing results |

| Metric Name | MTP Test # | Test Average | Retail Average | Test Sample Size | p-value test 1 | p-value test 2 | Pass/Fail/No Decision | Comments |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | shown here reflect that retesting. Qwest has since changed its processes. Liberty Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-3. Consequently, KPMG Consulting is unable to determine a result for this criterion. |
| OP-3A, B, D & E-Installation Commitments Met-All products-Central | 14 | 93% | 89% | 120 | 0.9433 | 0.0001 | Unable to Determine | Tested using commercial observations. Based on Observation 3080 and Exception 3106, the TAG asked for retesting with resale POTS and UNE-P observations. The passing results shown here reflect that retesting. Qwest has since changed its processes. Liberty Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-3. Consequently, KPMG Consulting is unable to determine a result for this criterion. |
| OP-3A, B, D & E-Installation Commitments Met-All products-Western | 14 | 96% | 92% | 28 | 0.9226 | 0.0276 | Unable to Determine | Tested using commercial observations. Based on Observation 3080 and Exception 3106, the TAG asked for retesting with resale POTS and UNE-P observations. The passing results shown here reflect that retesting. KPMG Consulting's initial |

| Metric Name | MTP Test # | Test Average | Retail Average | Test Sample Size | p-value test 1 | p-value test 2 | Pass/Fail/No Decision | Comments |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | results included 31 orders, but Qwest provided information showing that 3 of the orders should be excluded. Qwest has since changed its processes. Liberty Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-3. Consequently, KPMG Consulting is unable to determine a result for this criterion. |
| OP-3A, B, D & E-Installation Commitments Met-DS1-All | 14 | 77% | 79% | 135 | 0.3537 | 0.0008 | Unable to Determine | Initial test results indicated a pass. However, Qwest has since changed its processes. Liberty Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-3. Consequently, KPMG Consulting is unable to determine a result for this criterion. |
| *OP-3 C* | | | | | | | | |
| OP-3C-Installation Commitments Met-Business POTS-Eastern | 14 | 100.0% | 98.5% | 252 | 1.0000 | 0.0000 | Unable to Determine | Initial test results indicated a pass. However, Qwest has since changed its processes. Liberty Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-3C. Consequently, KPMG Consulting is unable to determine a result for this criterion. |

| Metric Name | MTP Test # | Test Average | Retail Average | Test Sample Size | p-value test 1 | p-value test 2 | Pass/Fail/No Decision | Comments |
|---|---|---|---|---|---|---|---|---|
| OP-3C-Installation Commitments Met-Business POTS-Central | 14 | 97.7% | 98.6% | 128 | 0.2537 | 0.0476 | Unable to Determine | Initial test results indicated a pass. However, Qwest has since changed its processes. Liberty Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-3C. Consequently, KPMG Consulting is unable to determine a result for this criterion. |
| OP-3C-Installation Commitments Met-Business POTS-Western | 14 | 100.0% | 97.5% | 228 | 1.0000 | 0.0000 | Unable to Determine | Initial test results indicated a pass. However, Qwest has since changed its processes. Liberty Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-3C. Consequently, KPMG Consulting is unable to determine a result for this criterion. |
| OP-3C-Installation Commitments Met-Residential POTS-Eastern | 14 | 100.0% | 97.8% | 238 | 1.0000 | 0.0000 | Unable to Determine | Exception 3085 was opened based on initial test results. Retest results indicated a pass. Qwest has since changed its processes. Liberty Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-3C. Consequently, KPMG Consulting is unable to determine a result for this criterion. |
| OP-3C-Installation Commitments Met-Residential | 14 | 100.0% | 96.5% | 205 | 1.0000 | 0.0000 | Unable to Determine | Initial test results indicated a pass. |

| Metric Name | MTP Test # | Test Average | Retail Average | Test Sample Size | p-value test 1 | p-value test 2 | Pass/Fail/No Decision | Comments |
|---|---|---|---|---|---|---|---|---|
| POTS-Central | | | | | | | | However, Qwest has since changed its processes. Liberty Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-3C. Consequently, KPMG Consulting is unable to determine a result for this criterion. |
| OP-3C-Installation Commitments Met-Residential POTS-Western | 14 | 100.0% | 98.1% | 274 | 1.0000 | 0.0000 | Unable to Determine | Initial test results indicated a pass. However, Qwest has since changed its processes. Liberty Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-3C. Consequently, KPMG Consulting is unable to determine a result for this criterion. |
| OP-3C-Installation Commitments Met-UNE-P-Eastern | 14 | 100.0% | 98.5% | 246 | 1.0000 | 0.0000 | Unable to Determine | Initial test results indicated a pass. However, Qwest has since changed its processes. Liberty Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-3C. Consequently, KPMG Consulting is unable to determine a result for this criterion. |
| OP-3C-Installation Commitments Met-UNE-P-Central | 14 | 100.0% | 99.3% | 274 | 1.0000 | 0.0000 | Unable to Determine | Exception 3085 was opened based on initial test results. The retest results indicated a pass, but Qwest has since changed its processes. |

| Metric Name | MTP Test # | Test Average | Retail Average | Test Sample Size | p-value test 1 | p-value test 2 | Pass/Fail/No Decision | Comments |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Liberty Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-3C. Consequently, KPMG Consulting is unable to determine a result for this criterion. This Exception was closed based on the retest results presented here. |
| OP-3C-Installation Commitments Met-UNE-P-Western | 14 | 100.0% | 97.6% | 273 | 1.0000 | 0.0000 | Unable to Determine | Exception 3085 was opened based on initial test results. The retest results indicated a pass, but Qwest has since changed its processes. Liberty Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-3C. Consequently, KPMG Consulting is unable to determine a result for this criterion. |
| *OP-4 A, B, D, & E* | | | | | | | | |
| OP-4A, B, D & E-Installation Interval-All products-Eastern | 14 | 5.8 | 6.2 | 87 | 0.2924 | 0.0030 | Unable to Determine | Tested using commercial observations. Based on Observation 3081, the TAG suggested retesting with resale POTS and UNE-P observations, which resulted in a pass result. Qwest has since changed its processes. Liberty Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results |

| Metric Name | MTP Test # | Test Average | Retail Average | Test Sample Size | p-value test 1 | p-value test 2 | Pass/Fail/No Decision | Comments |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | for PID OP-4. Consequently, KPMG Consulting is unable to determine a result for this criterion. |
| OP-4A, B, D & E-Installation Interval-All products-Central | 14 | 5.6 | 6.1 | 120 | 0.6870 | 0.0001 | Unable to Determine | Tested using commercial observations. Based on Observation 3081, the TAG suggested retesting with resale POTS and UNE-P observations, which resulted in a pass result. Qwest has since changed its processes. Liberty Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-4. Consequently, KPMG Consulting is unable to determine a result for this criterion. |
| OP-4A, B, D & E-Installation Interval-All products-Western | 14 | 4.0 | 4.9 | 28 | 0.8648 | 0.0000 | Unable to Determine | Tested using commercial observations. Based on Observation 3081, the TAG suggested retesting with resale POTS and UNE-P observations. The initial results showed a "Fail," but Qwest provided information about 5 of the orders, showing that 3 should have been excluded and 2 of the intervals were incorrect. Upon re-analysis, this result changed to a "Pass." Qwest has since changed its processes. Liberty Consulting, as PMA, has not |

| Metric Name | MTP Test # | Test Average | Retail Average | Test Sample Size | p-value test 1 | p-value test 2 | Pass/Fail/No Decision | Comments |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-4. Consequently, KPMG Consulting is unable to determine a result for this criterion. |
| OP-4A, B, D & E-Installation Commitments Met-DS1-All | 14 | 9.1 | 18.6 | 135 | 1.0000 | 0.0000 | Unable to Determine | The initial test results indicate a pass, but Qwest has since changed its processes. Liberty Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-4. Consequently, KPMG Consulting is unable to determine a result for this criterion. |
| OP-4 C | | | | | | | | |
| OP-4C-Installation Interval-Residential POTS-Eastern | 14 | 2.4 | 2.6 | 150 | 0.9941 | 0.0000 | Unable to Determine | Exception 3086 was opened based on initial test results. The result of the retest was a pass, but Qwest has since made changes to its processes. Liberty Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-4C. Consequently, KPMG Consulting is unable to determine a result for this criterion. |
| OP-4C-Installation Interval-Residential POTS-Central | 14 | 2.3 | 2.9 | 137 | 1.0000 | 0.0000 | Unable to Determine | Exception 3086 was opened based on initial test results. The result of the retest was a pass, but Qwest has since made changes to its processes. Liberty |

| Metric Name | MTP Test # | Test Average | Retail Average | Test Sample Size | p-value test 1 | p-value test 2 | Pass/Fail/No Decision | Comments |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-4C. Consequently, KPMG Consulting is unable to determine a result for this criterion. |
| OP-4C-Installation Interval-Residential POTS-Western | 14 | 2.4 | 2.8 | 143 | 1.0000 | 0.0000 | Unable to Determine | Exception 3086 was opened based on initial test results. The result of the retest was a pass, but Qwest has since made changes to its processes. Liberty Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-4C. Consequently KPMG Consulting is unable to determine a result for this criterion. |
| OP-4C-Installation Interval-Business POTS-Eastern | 14 | 2.2 | 1.5 | 145 | 0.0001 | 0.8183 | Unable to Determine | Exception 3086 was opened based on initial test results. The result of the retest was a fail, but Qwest has since made changes to its processes. Liberty Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-4C. Consequently, KPMG Consulting is unable to determine a result for this criterion. |
| OP-4C-Installation Interval-Business POTS-Central | 14 | 2.3 | 2.0 | 128 | 0.0751 | 0.0009 | Unable to Determine | The original test results shown here indicated a pass. Qwest has since made changes to its processes. Liberty |

| Metric Name | MTP Test # | Test Average | Retail Average | Test Sample Size | p-value test 1 | p-value test 2 | Pass/Fail/No Decision | Comments |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-4C. Consequently, KPMG Consulting is unable to determine a result for this criterion. |
| OP-4C-Installation Interval-Business POTS-Western | 14 | 2.5 | 2.2 | 160 | 0.0727 | 0.0090 | Unable to Determine | Exception 3086 was opened based on initial test results. The result of the retest was a pass, but Qwest has since made changes to its processes. Liberty Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-4C. Consequently, KPMG Consulting is unable to determine a result for this criterion. |
| OP-4C-Installation Interval-UNE-P-Eastern | 14 | 2.8 | 1.5 | 145 | 0.0000 | 1.0000 | Unable to Determine | Exception 3086 was opened based on initial test results. The result of the retest was a fail, but Qwest has since made changes to its processes. Liberty Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-4C. Consequently, KPMG Consulting is unable to determine a result for this criterion. |
| OP-4C-Installation Interval-UNE-P-Central | 14 | 2.6 | 2.1 | 140 | 0.0058 | 0.5471 | Unable to Determine | Exception 3086 was opened based on initial test results. The result of the retest was a fail, but Qwest has since |

| Metric Name | MTP Test # | Test Average | Retail Average | Test Sample Size | p-value test 1 | p-value test 2 | Pass/Fail/No Decision | Comments |
|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  | made changes to its processes. Liberty Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-4C. Consequently, KPMG Consulting is unable to determine a result for this criterion. |
| OP-4C-Installation Interval-UNE-P-Western | 14 | 2.9 | 2.2 | 141 | 0.0021 | 0.6430 | Unable to Determine | Exception 3086 was opened based on initial test results. The result of the retest was a fail, but Qwest has since made changes to its processes. Liberty Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-4C. Consequently, KPMG Consulting is unable to determine a result for this criterion. |
| OP-5 |  |  |  |  |  |  |  |  |
| OP-5 -New Service Installation Quality-All products -Western | 14 | 97% | 76% | 319 | 1.0000 | 0.0000 | Pass | Tested using commercial observations. |
| OP-5 -New Service Installation Quality-All products -Central | 14 | 96% | 74% | 372 | 1.0000 | 0.0000 | Pass | Tested using commercial observations. |
| OP-5 -New Service Installation Quality-All products -Eastern | 14 | 98% | 72% | 450 | 1.0000 | 0.0000 | Pass | Tested using commercial observations. |
| OP-6 |  |  |  |  |  |  |  |  |
| OP 6A-Delayed Days-Business POTS-Western | 14 |  |  | 0 |  |  | No Data | This could not be tested because there were no delays. |
| OP 6A-Delayed Days-Business POTS-Central | 14 | 1.0 | 9.4 | 3 | 1.0000 | 0.0000 | Unable to Determine | The original test result, presented here, was a pass. Qwest has since changed their processes |

| Metric Name | MTP Test # | Test Average | Retail Average | Test Sample Size | p-value test 1 | p-value test 2 | Pass/Fail/No Decision | Comments |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Liberty Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-6. Consequently, KPMG Consulting is unable to determine a result for this criterion. |
| OP 6A-Delayed Days-Business POTS-Eastern | 14 | | | 0 | | | No Data | This could not be tested because there were no delays in the retest. |
| OP 6A-Delayed Days-Residential POTS-Western | 14 | | | 0 | | | No Data | This could not be tested because there were no delays. |
| OP 6A-Delayed Days-Residential POTS-Central | 14 | | | 0 | | | No Data | This could not be tested because there were no delays. |
| OP 6A-Delayed Days-Residential POTS-Eastern | 14 | | | 0 | | | No Data | This could not be tested because there were no delays. |
| OP 6A-Delayed Days-UNE-P-Western | 14 | | | 0 | | | No Data | This could not be tested because there were no delays. |
| OP 6A-Delayed Days-UNE-P-Central | 14 | | | 0 | | | No Data | This could not be tested because there were no delays. |
| OP 6A-Delayed Days-UNE-P-Eastern | 14 | | | 0 | | | No Data | This could not be tested because there were no delays. |
| OP 6A-Delayed Days-UNE-L-All | 14 | 7.4 | 10.5 | 24 | 0.7216 | 0.0161 | Unable to Determine | This PID was not tested regionally due to the small amount of data (see comments on OP6B below). The original test result, presented here, was a pass. Liberty Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-6. Consequently, |

| Metric Name | MTP Test # | Test Average | Retail Average | Test Sample Size | p-value test 1 | p-value test 2 | Pass/Fail/No Decision | Comments |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | KPMG Consulting is unable to determine a result for this criterion. |
| OP 6B-Delayed Days-All Products-Western | 14 | 8.0 | 19.6 | 12 | 0.9970 | 0.0000 | Unable to Determine | The original Dual Test transformed test data mean for some products to a negative number. Observation 3084 was issued as a result. After analysis of all regions, the TAG decided all three regions should be considered as having passed. Qwest has since changed their processes. Liberty Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-6. Consequently, KPMG Consulting is unable to determine a result for this criterion. |
| OP 6B-Delayed Days-All Products-Central | 14 | 11.0 | 23.8 | 1 | 0.5413 | 0.0078 | Unable to Determine | The original Dual Test transformed test data mean for some products to a negative number. Observation 3084 was issued as a result. After analysis of all regions, the TAG decided all three regions should be determined as passing. Qwest has since changed their processes. Liberty Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-6. Consequently, KPMG Consulting is unable to determine a result for this criterion. |

| Metric Name | MTP Test # | Test Average | Retail Average | Test Sample Size | p-value test 1 | p-value test 2 | Pass/Fail/No Decision | Comments |
|---|---|---|---|---|---|---|---|---|
| OP 6B-Delayed Days-All Products-Eastern | 14 | 19.4 | 14.6 | 12 | 0.1449 | 0.5957 | Unable to Determine | The original Dual Test transformed test data mean for some products to a negative number, resulting in a No Decision. Observation 3084 was issued as a result. After analysis of all regions, the TAG decided all three regions should be determined as passing. Qwest has since changed its processes. Liberty Consulting, as PMA, has not completed an audit of Qwest's new process for capturing data and calculating retail results for PID OP-6. Consequently, KPMG Consulting is unable to determine a result for this criterion. |
| *MR Measures* | | | | | | | | |
| MR-2 -Calls Answered within 20 Seconds – Interconnect Repair Center-Region wide level-13 states | 18.7 | | | | | | Not Applicable | There was no functional testing of this PID. Testing for this PID involved a process review only. |
| MR-3-Out of Service Cleared within 24 Hours-Dispatch out - 13 states | 18 | 93% | 90% | 213 | 0.9809 | 0.0191 | Pass | |
| MR-3-Out of Service Cleared within 24 Hours-No dispatch- 13 states | 18 | 94% | 96% | 161 | 0.0425 | 0.0421 | No Decision | Observation 3078 was issued from the No Decision result. The TAG decided this should be a pass. |
| MR-4-All Troubles Cleared within 48 hours-Dispatch out - 13 states | 18 | 98% | 97% | 219 | 0.9651 | 0.0349 | Pass | |
| MR-4-All Troubles Cleared within 48 hours-No dispatch- 13 states | 18 | 99% | 99% | 192 | 1.0000 | 0.0007 | Pass | |
| MR-5-All Troubles Cleared within 4 hours-Dispatch In and | 18 | 85% | 80% | 13 | 0.7548 | 0.1398 | No Decision | Observation 3079 was issued based on |

| Metric Name | MTP Test # | Test Average | Retail Average | Test Sample Size | p-value test 1 | p-value test 2 | Pass/Fail/No Decision | Comments |
|---|---|---|---|---|---|---|---|---|
| out combined-13 states | | | | | | | | conflicting results when calculated separately for Dispatch In and Dispatch Out. The TAG asked KPMG Consulting to combine the analysis for Dispatch In and Dispatch Out, but the statistical test still conflicted. The TAG then decided this should be a PASS. |
| MR-6-Mean Time to Restore-Dispatch out-13 states | 18 | 9.6 | 13 | 182 | 1.0000 | 0.0000 | Pass | |
| MR-6-Mean Time to Restore-No dispatch-13 states | 18 | 5.2 | 6 | 192 | 0.8793 | 0.0000 | Pass | |
| MR-9-Repair Appointments Met-Dispatch out-13 states | 18 | 89% | 88% | 200 | 0.5715 | 0.0001 | Pass | |
| MR-9-Repair Appointments Met- No dispatch-13 states | 18 | 98% | 98% | 149 | 0.8279 | 0.0000 | Pass | |
| *BI Measures* | | | | | | | | |
| BI-1A-Time to Provide Recorded Usage Records - Statewide level - Average business days-13 states | 19 | | | 8888 | 1.0000 | 0.0000 | Pass | |
| BI-3A-Billing Accuracy – Adjustments for Errors - Statewide level - UNEs and Resale-13 states | 20 | 100% | 99% | 5106 | 1.0000 | 0.0000 | Pass | These results are of retest activity. The count is based on the total elements tested, not the total dollar amount. |

## Table V-3: Diagnostic Test Results

| Metric Name | MTP Test # | Numerator | Denominator or Count | Percent or Average | Comments |
|---|---|---|---|---|---|
| *PO-1 D* | | | | | |
| PO-1D-Avg. response time of rejected pre-order queries-GUI-13 state | 12 | | 571 | 2.78 | in seconds |
| PO-1D-Avg. response time of rejected pre-order queries-EDI-13 state | 12 | | 3146 | 74.84 | in seconds |
| *PO-2* | | | | | |
| PO-2A-% actually flowing through of all orders-GUI-Central | 13 | 92 | 176 | 52% | Product breakdowns are provided in the Test 13 report. |
| PO-2A-% actually flowing through of all orders-EDI-Central | 13 | 1508 | 2610 | 58% | Product breakdowns are provided in the Test 13 report. |
| PO-2A-% actually flowing through of all orders-GUI-Eastern | 13 | 124 | 254 | 49% | Product breakdowns are provided in the Test 13 report. |
| PO-2A-% actually flowing through of all orders-EDI-Eastern | 13 | 1226 | 2488 | 49% | Product breakdowns are provided in the Test 13 report. |
| PO-2A-% actually flowing through of all orders-GUI-Western | 13 | 118 | 232 | 51% | Product breakdowns are provided in the Test 13 report. |
| PO-2A-% actually flowing through of all orders-EDI-Western | 13 | 1052 | 2202 | 48% | Product breakdowns are provided in the Test 13 report. |
| PO-2B-% actually flowing through of those eligible-GUI-Central | 13 | 88 | 92 | 96% | Product breakdowns are provided in the Test 13 report. |
| PO-2B-% actually flowing through of those eligible-EDI-Central | 13 | 1462 | 1578 | 93% | Product breakdowns are provided in the Test 13 report. |
| PO-2B-% actually flowing through of those eligible-GUI-Eastern | 13 | 114 | 124 | 92% | Product breakdowns are provided in the Test 13 report. |
| PO-2B-% actually flowing through of those eligible-EDI-Eastern | 13 | 1192 | 1294 | 92% | Product breakdowns are provided in the Test 13 report. |
| PO-2B-% actually flowing through of those eligible-GUI-Western | 13 | 110 | 120 | 92% | Product breakdowns are provided in the Test 13 report. |

| Metric Name | MTP Test # | Numerator | Denominator or Count | Percent or Average | Comments |
|---|---|---|---|---|---|
| PO-2B-% actually flowing through of those eligible-EDI-Western | 13 | 1038 | 1220 | 85% | Product breakdowns are provided in the Test 13 report. |
| *PO-4* | | | | | |
| PO-4A-% LSRs Rejected - LSRs via GUI-Eastern | 12 | 51 | 343 | 14.9% | |
| PO-4A-% LSRs Rejected - LSRs via GUI-Central | 12 | 31 | 290 | 10.7% | |
| PO-4A-% LSRs Rejected - LSRs via GUI-Western | 12 | 37 | 321 | 11.5% | |
| PO-4B-% LSRs Rejected - LSRs via EDI-Eastern | 12 | 711 | 3395 | 20.9% | |
| PO-4B-% LSRs Rejected - LSRs via EDI-Central | 12 | 850 | 3364 | 25.3% | |
| PO-4B-% LSRs Rejected - LSRs via EDI-Western | 12 | 576 | 3135 | 18.4% | |
| PO-4C-% LSRs Rejected - Statewide level - LSRs via facsimile-13 state | 12 | 2256 | 10848 | 21% | |
| PO-6A-Work Completion Notification Timeliness-GUI-13 state | 12 | | 188 | 102 | in minutes<br><br>The reported number of Work Completion Notifications received via the interface is smaller than the total number of WCNs actually received due to two factors: 1) exclusions, as defined by PID PO-6; and 2) a possible unintentional omission by KPMG Consulting. The additional WCNs will be analyzed by KPMG Consulting, and the diagnostic information will be revised in the Final Report. |

| Metric Name | MTP Test # | Numerator | Denominator or Count | Percent or Average | Comments |
|---|---|---|---|---|---|
| PO-6B-Work Completion Notification Timeliness-EDI-13 state | 12 | | 3053 | 143 | in minutes<br><br>The reported number of Work Completion Notifications received via the interface is smaller than the total number of WCNs actually received due to two factors: 1) exclusions, as defined by PID PO-6; and 2) a possible unintentional omission by KPMG Consulting. The additional WCNs will be analyzed by KPMG Consulting, and the diagnostic information will be revised in the Final Report. |
| PO-10-LSR Accountability-Region wide level-13 state | 12 | 7107 | 7525 | 94.4% | |
| PO-15- Number of Due Date Changes per Order-Statewide level-13 state | 12 | 307 | 6204 | 5% | Measured as number of orders with due date changes. Measured for EDI only. |
| OP-7-Coordinated "Hot Cut" Interval – Unbundled Loop - Statewide level-Eastern | 14 | | 50 | 6.2 | in minutes |
| OP-7-Coordinated "Hot Cut" Interval – Unbundled Loop - Statewide level-Central | 14 | | 76 | 6.6 | in minutes |
| OP-7-Coordinated "Hot Cut" Interval – Unbundled Loop - Statewide level-Western | 14 | | 42 | 8.2 | in minutes |
| OP-13 B-Coordinated Cuts On Time - Unbundled loop-Statewide level-Eastern | 14 | 259 | 259 | 100% | |
| OP-13 B-Coordinated Cuts On Time - Unbundled loop-Statewide level-Central | 14 | 241 | 244 | 99% | |
| OP-13 B-Coordinated Cuts On Time - Unbundled loop-Statewide level-Western | 14 | 186 | 186 | 100% | |
| OP-15-Interval for Pending Orders Delayed Past Due Date-by Product-13 state | 14 | | | | Not able to test. |