



Service Performance Measurement Descriptions (SPMD)

14-State 272 SPMD Version 2.2

[Performance Results - 272 Non-Affiliate Identifier - PIC Change](#)

28 May, 2004

QWEST'S SERVICE PERFORMANCE MEASUREMENT DESCRIPTIONS (SPMD)

14-State 272 SPMD Version 2.20

Introduction

Qwest will report performance results for the service performance measurements defined herein. In its Section 271 applications, Qwest Corporation made commitments regarding compliance with Section 272(e)(1) of the Act. This included the commitment to provide the performance monitoring that will assist in confirmation of nondiscriminatory performance in Qwest Corporation's dealings with its 272 affiliates.

Qwest's Service Performance Indicator Definitions

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PIC Changes

PC-1-272 – Timely IXC Initiated PIC Change Requests

Purpose: Evaluates the timeliness of IXC initiated PIC Change Requests ^{NOTE 1} processed by time intervals.	
Description: Measures the percentage of IXC initiated PIC change requests completed within the specified interval; e.g. one or three days. <ul style="list-style-type: none"> • Includes all IXC initiated PIC change requests received for processing Monday – Friday by 10:00 p.m. MT and Saturday by 5:30 p.m. MT, during the reporting period. • Timely PIC change requests include all IXC initiated PIC change requests processed within the specified interval. 	
Reporting Period: One month	Unit of Measure: Percent
Reporting Comparisons: QLDC and QCC aggregate and IXC Non-Affiliates results .	Disaggregation Reporting: Statewide and Region level. PC-1A PIC changes within one business days. PC-1B PIC changes within three business days.
Formula: Formula: ((Total IXC initiated PIC change requests, received by the specified cutoff time and completed within the specified interval in the reporting period), ÷ (Total number of IXC initiated PIC change requests completed in the reporting period)) x 100.	
Exclusions: <ul style="list-style-type: none"> • Records with invalid file creation dates and network updates. • Records from IXCs that have subscribed to “Default CARE” package. • Records with missing data essential to the calculation of the measurement per the SPMD. 	
Product Reporting: None	Standard: Parity
Availability: Available	Notes: <ol style="list-style-type: none"> 1. PIC Changes included in this measurement consist of IXC initiated requests to change InterLATA and/or intraLATA primary interexchange carriers.

Pre-Order/Order

PO-5-272 – Firm Order Confirmations (FOCs) On Time

Purpose: Monitors the timeliness with which Qwest returns Firm Order Confirmations (FOCs) to IXCs in response to ASRs received from IXC, focusing on the degree to which FOCs are provided within specified intervals.					
Description: Measures the percentage of Firm Order Confirmations (FOCs) that are provided to IXCs within the intervals specified under “Standards” below for FOC notifications. <ul style="list-style-type: none"> Includes all Switched and Special Access ASRs that are submitted through the specified interface or in the specified manner (i.e., facsimile) that receive an FOC during the reporting period, subject to exclusions specified below. The interval measured is the period between the application date and time, as defined herein, and Qwest’s response with a FOC notification (notification date and time). ASRs are measured only in business days. ASRs will be evaluated according to the FOC interval categories shown in the “standards” section below, based on the number of lines/services requested on the ASR. 					
Reporting Period: One month	Unit of Measure: Percent				
Reporting Comparisons: QCC aggregate, Other Qwest Affiliates and IXC Non-Affiliates results.	Disaggregation Reporting: Statewide level and Region level.				
Formula: $\left\{ \left[\text{Count of ASRs for which the original FOC's " (FOC Notification Date \& Time) - (Application Date \& Time)" is within the intervals specified for the service category involved} \right] \div \left(\text{Total Number of original FOC Notifications transmitted for the service category in the reporting period} \right) \right\} \times 100$					
Exclusions: <ul style="list-style-type: none"> ASRs involving individual case basis (ICB) handling based on quantities of lines, as specified in the Service Interval Guide for Access Services or for service/request types deemed to be projects. Hours on Weekends and holidays. ASRs with IXC-requested FOC arrangements different from standard FOC arrangements. Records with invalid product codes. Records missing data essential to the calculation of the measurement per the SPMD. Invalid start/stop dates/times. Records with invalid application or confirmation dates.. 					
Product Reporting:	Standard:				
<ul style="list-style-type: none"> DS0 DS1 DS3 OCN FG-D 	<ul style="list-style-type: none"> Parity with IXC Non-Affiliates DS0 Parity with IXC Non-Affiliates DS1 Parity with IXC Non-Affiliates DS3 Parity with IXC Non-Affiliates OCN Parity with IXC Non-Affiliates FG-D 				
	<p>– Product Group FOC Interval NOTE 1</p> <table border="1" style="width: 100%;"> <tr> <td>DS0, DS1, DS3 & Higher</td> <td>3 Business Days</td> </tr> <tr> <td>Feature Group D</td> <td>5 Business Days</td> </tr> </table>	DS0, DS1, DS3 & Higher	3 Business Days	Feature Group D	5 Business Days
DS0, DS1, DS3 & Higher	3 Business Days				
Feature Group D	5 Business Days				
Availability: Available	Notes: 1. For ASRs where the due date interval in the Service Interval Guide for Access Services is ICB, the FOC interval is ICB.				

Ordering and Provisioning

OP-3-272 – Installation Commitments Met

Purpose: Evaluates the extent to which Qwest installs services for Customers by the scheduled due date.	
Description: Measures the percentage of orders for which the scheduled due date is met. <ul style="list-style-type: none"> All inward Switched and Special Access orders (Change, New, and Transfer order types) assigned a due date by Qwest and which are completed/closed during the reporting period are measured, subject to exclusions specified below. Change order types included in this measurement consist of all C orders representing inward activity (with “I” and “T” action coded line USOCs). Also included are orders with customer-requested due dates longer than the standard interval. Completion date on or before the Applicable Due Date recorded by Qwest is counted as a met due date. The Applicable Due Date is the original due date or, if changed or delayed by the customer, the most recently revised due date, subject to the following: If Qwest changes a due date for Qwest reasons, the Applicable Due Date is the customer-initiated due date, if any, that is (a) subsequent to the original due date and (b) prior to a Qwest-initiated, changed due date, if any. 	
Reporting Period: One month	Unit of Measure: Percent
Reporting Comparisons: QCC aggregate, Other Qwest Affiliates and IXC Non-Affiliates results .	Disaggregation Reporting: Statewide level and Region level.
Formula: $\left[\frac{\text{Total Orders completed in the reporting period on or before the Applicable Due Date}}{\text{Total Orders Completed in the Reporting Period}} \right] \times 100$ <p><u>Explanation:</u> The percent commitments met is obtained by dividing the total number of service orders completed on or before the Applicable Due Date (as defined in the description above) by the total number of service orders completed during the measurement period.</p>	
Exclusions: <ul style="list-style-type: none"> Disconnect, From (another form of disconnect) and Record order types. Due dates missed for standard categories of customer and non-Qwest reasons. Standard categories of customer reasons are: previous service at the location did not have a customer-requested disconnect order issued, no access to customer premises, and customer hold for payment. Standard categories of non-Qwest reasons are: Weather, Disaster, and Work Stoppage. Records involving official company services. Records with invalid due dates or application dates. Records with invalid completion dates. Records with invalid product codes. Records missing data essential to the calculation of the measurement per the SPMD. 	
Product Reporting: <ul style="list-style-type: none"> DS0 DS1 DS3 OCN FG-D Frame Relay 	Standards: <ul style="list-style-type: none"> Parity with IXC Non-Affiliates DS0 Parity with IXC Non-Affiliates DS1 Parity with IXC Non-Affiliates DS3 Parity with IXC Non-Affiliates OCN Parity with IXC Non-Affiliates FG-D Parity with IXC Non-Affiliates Frame Relay
Availability: Available	Notes:

OP-4-272 – Average Installation Interval

Purpose: Evaluates the timeliness of Qwest's installation of services for customers, focusing on the average time to install service.	
Description: Measures the average interval (in business days) ^{NOTE 1} between the application date and the completion date for Switched and Special Access service orders accepted and implemented. <ul style="list-style-type: none"> Includes all inward orders (Change, New, and Transfer order types) assigned a due date by Qwest and which are completed/closed during the reporting period, subject to exclusions specified below. Change order types for additional lines consist of all C orders representing inward activity (with "I" and "T" action coded line USOCs). Intervals for each measured event are counted in whole days: the application date is day zero (0); the day following the application date is day one (1). The Applicable Due Date is the original due date or, if changed or delayed by the customer, the most recently revised due date, subject to the following: If Qwest changes a due date for Qwest reasons, the Applicable Due Date is the customer-initiated due date, if any, that is (a) subsequent to the original due date and (b) prior to a Qwest-initiated, changed due date, if any. Time intervals associated with customer-initiated due date changes or delays occurring after the Applicable Due Date, as applied in the formula below, are calculated by subtracting the latest Qwest-initiated due date, if any, following the Applicable Due Date, from the subsequent customer-initiated due date, if any. 	
Reporting Period: One month	Unit of Measure: Average Business Days
Reporting Comparisons: QCC aggregate, Other Qwest Affiliates and IXC Non-Affiliates results.	Disaggregation Reporting: Statewide level and Region level.
Formula: $\frac{\Sigma[(\text{Order Completion Date}) - (\text{Order Application Date}) - (\text{Time interval between the Original Due Date and the Applicable Date}) - (\text{Time intervals associated with customer-initiated due date changes or delays occurring after the Applicable Due Date})]}{\text{Total Number of Orders Completed in the reporting period}}$	
Explanation: The average installation interval is derived by dividing the sum of installation intervals for all orders (in business days) ^{NOTE 1} by total number of service orders completed in the reporting period.	
Exclusions: <ul style="list-style-type: none"> Orders with customer requested original due dates greater than the current standard interval. Disconnect, From (another form of disconnect) and Record order types. Records involving official company services. Records with invalid due dates or application dates. Records with invalid completion dates. Records with invalid product codes. Records missing data essential to the calculation of the measurement per the SPMD. 	
Product Reporting: <ul style="list-style-type: none"> DS0 DS1 DS3 OCN FG-D Frame Relay 	Standards: <ul style="list-style-type: none"> Parity with IXC Non-Affiliates DS0 Parity with IXC Non-Affiliates DS1 Parity with IXC Non-Affiliates DS3 Parity with IXC Non-Affiliates OCN Parity with IXC Non-Affiliates FG-D Parity with IXC Non-Affiliates Frame Relay
Availability: Available	Notes: <ol style="list-style-type: none"> Saturday is counted as a business day when the service order is due or completed on Saturday.

Maintenance and Repair

MR-5-272 – All Troubles Cleared within 4 hours

Purpose: Evaluates timeliness of repair for specified services, focusing on all trouble reports of all types (including out of service and service affecting troubles) and on the number of such trouble reports cleared within the standard estimate for specified services (i.e., 4 hours).	
Description: Measures the percentage of Switched and Special Access trouble reports for specified services that are cleared within 4 hours of receipt of trouble reports from IXCs or from retail customers. <ul style="list-style-type: none"> • Includes all trouble reports, closed during the reporting period, which involve a specified service, subject to exclusions specified below. • Time measured is from date and time of receipt to date and time trouble is cleared. 	
Reporting Period: One month	Unit of Measure: Percent
Reporting Comparisons: QCC aggregate, Other Qwest Affiliates and IXC Non-Affiliates results .	Disaggregation Reporting: Statewide level and Region level.
Formula: [(Number of Trouble Reports closed in the reporting period that are cleared within 4 hours) ÷ (Total Trouble Reports closed in the reporting period)] x 100	
Exclusions: <ul style="list-style-type: none"> • Trouble reports coded to trouble codes for Carrier Action (IXC) and Customer Provided Equipment (CPE). • Subsequent trouble reports of any trouble before the original trouble report is closed. • Information tickets generated for internal Qwest system/network monitoring purposes. • Time delays due to “no access” are excluded from repair time. • Trouble reports on the day of installation before the installation work is reported by the technician/installer as complete. • Records involving official company services. • Records with invalid trouble receipt dates. • Records with invalid cleared or closed dates. • Records with invalid product codes. • Records missing data essential to the calculation of the measurement per the SPMD. 	
Product Reporting: <ul style="list-style-type: none"> • DS0 • DS1 • DS3 • OCN • FG-D • Frame Relay 	Standards: <ul style="list-style-type: none"> • Parity with IXC Non-Affiliates DS0 • Parity with IXC Non-Affiliates DS1 • Parity with IXC Non-Affiliates DS3 • Parity with IXC Non-Affiliates DS3 • Parity with IXC Non-Affiliates FG-D • Parity with IXC Non-Affiliates Frame Relay
Availability: Available	Notes: .

MR-6-272 – Mean Time to Restore

Purpose: Evaluates timeliness of repair, focusing how long it takes to restore services to proper operation.	
Description: Measures the time actually taken to clear trouble reports. <ul style="list-style-type: none"> • Includes all Switched and Special Access trouble reports closed during the reporting period, subject to exclusions specified below. • Includes customer direct reports, customer-relayed reports, and test assist reports that result in a trouble report. • Time measured is from date and time of receipt to date and time trouble is cleared. 	
Reporting Period: One month	Unit of Measure: Hours and Minutes
Reporting Comparisons: QCC aggregate, Other Qwest Affiliates and IXC Non-Affiliates results .	Disaggregation Reporting: Statewide level and Region level.
Formula: $\frac{\sum[(\text{Date \& Time Trouble Report Cleared}) - (\text{Date \& Time Trouble Report Opened})]}{\text{(Total number of Trouble Reports closed in the reporting period)}}$	
Exclusions: <ul style="list-style-type: none"> • Trouble reports coded to trouble codes for Carrier Action (IXC) and Customer Provided Equipment (CPE). • Subsequent trouble reports of any trouble before the original trouble report is closed. • Information tickets generated for internal Qwest system/network monitoring purposes. • Time delays due to “no access” are excluded. • Trouble reports on the day of installation before the installation work is reported by the technician/installer as complete. • Records involving official company services. • Records with invalid trouble receipt dates. • Records with invalid cleared or closed dates. • Records with invalid product codes. • Records missing data essential to the calculation of the measurement per the SPMD. 	
Product Reporting: <ul style="list-style-type: none"> • DS0 • DS1 • DS3 • OCN • FG-D • Frame Relay 	Standards: <ul style="list-style-type: none"> • Parity with IXC Non-Affiliates DS0 • Parity with IXC Non-Affiliates DS1 • Parity with IXC Non-Affiliates DS3 • Parity with IXC Non-Affiliates OCN • Parity with IXC Non-Affiliates FG-D • Parity with IXC Non-Affiliates Frame Relay
Availability: Available	Notes: <ol style="list-style-type: none"> 1. Saturday is counted as a business day when the repair is completed on Saturday.

MR-8-272 – Trouble Rate

Purpose: Evaluates the overall rate of Special Access trouble reports as a percentage of the total installed base of the service or element.	
Description: Measures Switched and Special Access trouble reports by product and compares them to the number of lines in service. <ul style="list-style-type: none"> • Includes all trouble reports closed during the reporting period, subject to exclusions specified below. • Includes all applicable trouble reports, including those that are out of service and those that are only service-affecting. 	
Reporting Period: One month	Unit of Measure: Percent
Reporting Comparisons: QCC aggregate, Other Qwest Affiliates and IXC Non-Affiliates results .	Disaggregation Reporting: Statewide level and Region level.
Formula: $\left[\frac{\text{Total number of trouble reports closed in the reporting period involving the specified service grouping}}{\text{Total number of the specified services that are in service in the reporting period}} \right] \times 100$	
Exclusions: <ul style="list-style-type: none"> • Trouble reports coded to trouble codes for Carrier Action (IXC) and Customer Provided Equipment (CPE). • Subsequent trouble reports of any trouble before the original trouble report is closed. • Information tickets generated for internal Qwest system/network monitoring purposes. • Trouble reports on the day of installation before the installation work is reported by the technician/installer as complete. • Records involving official company services. • Records with invalid trouble receipt dates. • Records with invalid cleared or closed dates. • Records with invalid product codes. • Records missing data essential to the calculation of the measurement per the SPMD. 	
Product Reporting: <ul style="list-style-type: none"> • DS0 • DS1 • DS3 • OCN • FG-D • Frame Relay 	Standards: <ul style="list-style-type: none"> • Parity with IXC Non-Affiliates DS0 • Parity with IXC Non-Affiliates DS1 • Parity with IXC Non-Affiliates DS3 • Parity with IXC Non-Affiliates DS3 • Parity with IXC Non-Affiliates FG-D • Parity with IXC Non-Affiliates Frame Relay
Availability: Available	Notes:

272 Reporting Statistical Methodology

Parity measurements reflect Qwest Corporation's ability to perform for non-affiliate IECs as it does for Qwest affiliates. Qwest Regulatory Reporting uses statistical methods to assess that performance.

The purpose of statistical testing is to account for random variation in the performance results, so that true differences in service can be distinguished from random differences, with specified levels of confidence. It is vitally important that "false positives" – finding a difference in service where no difference truly exists – be controlled. If Qwest is continually confronted with false positives, then it will be unable to implement the process improvements necessary to ensure parity of service.

Mod Z Scores

Qwest Regulatory Reporting follows the standard hypothesis testing procedure:

1. Specify a null hypothesis, H_0 , that the performance is equivalent,
2. Specify an alternative hypothesis, H_a , that there is a difference in performance between non-affiliate IEC and Qwest affiliate,
3. Select a test statistic, e.g., modified z,
4. Select a critical value for the test statistic, z^* .

The testing procedure involves comparing the test statistic, z, with the critical value, z^* . If z is greater than or equal to z^* , then there is a significant difference in service.

For parity measurements, Regulatory Reporting uses the modified z-test. In contrast to some states, including New York, Qwest structures the z-tests so that a positive z-score indicates inferior performance provided to the non-affiliate IECs.

The modified z-test is:

$$z = \frac{\bar{x}_{CLEC} - \bar{x}_{Qwest}}{\sigma_D}$$

where:

$$\sigma_D = \sigma_{Qwest} \sqrt{\frac{1}{n_{ILEC}} + \frac{1}{n_{CLEC}}}$$

σ_{Qwest} = Qwest affiliate standard deviation

n_{Qwest} = Qwest affiliate sample size

n_{CLEC} = CLEC affiliate sample size

\bar{x}_{CLEC} = CLEC affiliate mean (or proportion)

\bar{x}_{Qwest} = Qwest affiliate mean (or proportion)

The PAPs in each Qwest state (approved by each state Commission and incorporated into the SGATs as Exhibit K) specify different values of z^* depending on the competitor sample size. For higher sample sizes, higher values of z^* are used, reflecting the increased statistical confidence in larger samples.

At the 1.645 critical value, the confidence level is 95%. At this level, one test has a 5% probability of finding a difference due to chance alone, even when no true difference exists (a Type I error). At higher critical values this probability is reduced. The variable critical value depending on sample size also provides a fair compromise between Type I and Type II errors (the probability of failing to detect a true difference).¹ Sample size is the best way to reduce Type II error. However, since the results do not come from a controlled study, sample size can not be controlled.

¹ See Appendix B of the FCC's order in BANY-NY, FCC99-404, p.9.

STATISTICAL METHODOLOGY (continued)

The modified z-test gives a z-score that is then compared to the critical z-value, z^* . If z is greater than or equal to z^* , the difference is statistically significant at the level indicated by z^* , e.g., 95%.

Qwest compares the calculated z with z^* in the parity score.

Parity Scores

The parity score indicates whether there is numerical parity or disparity between IEC non-affiliate and Qwest affiliate results. For large sample sizes, the parity score is calculated directly from z and z^* . For small sample sizes, an additional step is performed to calculate the parity score.

The z-test assumes large sample sizes. When sample sizes are small, or the data are skewed, the z-test may give a result that is more likely to be in error.

To overcome these problems, Qwest Regulatory Reporting uses a permutation testing procedure. The permutation test is a non-parametric test, which means that it does not make any assumptions about the distribution of the data, e.g., normality, or number of observations. It constructs its own distribution based on the data available. It does this by randomly generating 1000 samples, each dividing the data between IEC and retail. If 50 samples out of the 1000 have a mean difference larger than the actual mean difference, then we have a non-significant result (at $\alpha=0.05$). If not, we have a significant result.²

Regulatory Reporting calculates the actual probability of obtaining a result at least as extreme as the actual result. This is called the p-value, and takes a value from zero to 100. If the p-value is .05 or less, the result is statistically significant.

Regulatory Reporting then converts the p-value to a z-score using a standard normal distribution function, and calculates the parity score from this z-score.

Regulatory Reporting performs permutation tests on all samples where the z-score is greater than zero and where the IEC or Qwest sample size is 100 or less.

For proportion type measures, Regulatory Reporting uses an exact probability test, which is also a form of a permutation test.³ The results of the exact test are reflected in the parity score. Regulatory Reporting performs the exact probability test for all proportion type measures where there is a positive difference between the IEC and retail proportions and where the non-affiliate IEC or Qwest affiliate sample size is less than or equal to 500.

The parity scores indicate whether there is parity between a non-affiliate measurement and its affiliate comparative, taking into account the permutation testing results. The following table indicates how to interpret parity scores:

Parity Score	Meaning
< -1.0	Non-affiliate is "better" than affiliate comparative
= -1.0	Non-affiliate and affiliate appear to be exactly equal
> - 1.0 and < 0.0	Qwest affiliate appears to be "better" than non-affiliate, but the difference is not statistically significant
>= 0.0	Qwest affiliate is better than non-affiliate and the difference is statistically significant.

² Joint Proposed Rule Language for Statistical Analysis Process by Drs. Michael Carnall and Colin Mallows, Colorado Public Utilities Commission 97R-153T, December 9, 1998.

³ This test is based on Fisher's exact probability test, based on a hypergeometric distribution, but does not restrict the marginals. Sidney Siegel, Nonparametric Statistics, New York: McGraw-Hill, 1956, p. 96.

STATISTICAL METHODOLOGY (continued)

The parity score is calculated from the z-score and z^* , the z critical value.⁴

$$Score = \frac{z - z^*}{z^*}$$

where:

z = the calculated z-score, and

z^* = the critical z-value (1.645).

The parity score represents the relationship of the calculated z-score to the critical z-value. If it is zero or greater, there is a statistically significant difference at the nominal significance level of 5%.

⁴ The critical z^* value is from a standard table of critical z^* values. Qwest uses a z^* that sets $\alpha=.05$ for one test, or $z^* = 1.645$. This corresponds to a 95% level of confidence.

DEFINITION OF TERMS

Affiliate– The Qwest Long Distance Corporation (QLDC) or Qwest Communications Corporation (QCC) IXC companies. For measurement purposes, Qwest Affiliates are identified by the presence of an ACNA equal to ATS, BEY, CGP, CRV, DGL, HOG, JJJ, LGT, LTL, LWC, NTH, PAC, PHX, QWD, SEP, SMF, SNN, SPA, TED, TOA, TPZ, and VWF..

Application Date (and Time) – The date (and time) on which Qwest receives from the IXC a complete and accurate access service request (ASR) or retail order, subject to the following:

- For the following types of requests/orders, the application date (and time) is the start of the next business day:
 - (1) ASRs received after 3:00PM MT.
 - (2) Orders received after 3:00 PM local time.
- For all types of orders that are received from Friday at 7:00 PM MT through Sunday, or on holidays, and do not flow through, the application date (and time) is the next, non-weekend business day.

Access Service Record (ASR) – transaction sent from the IXC to the ILEC to order services or to request a change(s) be made to existing services.

Business Day – Workdays that Qwest is normally open for business. Business Day = Monday through Friday, excluding weekends and Qwest published Holidays including New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving and Christmas. Individual measurement definitions may modify (typically expanding) this definition as described in the Notes section of the measurement definition.

Customer Account Record Exchange - CARE facilitates the exchange of end user account information between Qwest and Interexchange Carriers. Qwest offers CARE-formatted, industry standard Win, Loss, and Account Maintenance TCSIs in two packages: Premium and Default. Each IXC is required to have an output package set up before they can begin doing business as a 1+ FGD carrier with Qwest. To understand PC-1, Premium CARE has a network response date and time stamp and Default CARE does not. Transactions where the CLEC has subscribed to "Default" lacks the information necessary to measure it.

Cleared Trouble Report – a trouble report for which the trouble has been cleared, meaning the customer is "back in service".

Closed Trouble Report – a trouble report that has been closed out from a maintenance center perspective, meaning the ticket is closed in the trouble reporting system following repair of the trouble.

Common Transport – Trunk groups between tandem and end office switches that are shared by more than one carrier, often including the traffic of both the ILEC and several IXCs.

Completion – The time in the order process when the service has been provisioned and service is available.

Completion Notice – A notification the ILEC provides to the IXC to inform the IXC that the requested service order activity is complete.

Coordinated Access - These services are a dedicated link, governed by the FCC Tariff 1, Section 7.

The process for ordering Coordinated Access is through Interexchange Carriers channels. The customer chooses an IXC as a vendor to issue an ASR stating their requirements for service. However, beyond that, QC (a regional BOC) will deal directly with the end customer for provisioning, repair and billing. Such services are considered to be "retail" services.

For measurement purposes, Coordinated Access is identified by the presence of an ACNA equal to "ZZZ", and a "C" in the 5th character position of the MCN.

Customer Requested Due Date – A specific due date requested by the customer which is either shorter or longer than the standard interval or the interval offered by the ILEC.

Customer Trouble Reports – A report that the carrier providing the underlying service opens when notified that a customer has a problem with their service. Once resolved, the disposition of the trouble is changed to closed.

Dedicated Transport – A network facility reserved to the exclusive use of a single customer, carrier or pair of carriers used to exchange switched or special, local exchange, or exchange access traffic.

Delayed Order – An order which has been completed after the scheduled due date and/or time.

DS-0 – Digital Service Level 0. Service provided at a digital signal speed commonly at 64 kbps, but occasionally at 56 kbps. The DS-0 product for ordering and provisioning is identified by the class of service USOC and line level USOCs. For preorder, maintenance and repair, the circuit identification NC and NCI codes identify the DS-0 product.

DEFINITION OF TERMS (continued)

DS-1 – Digital Service Level 1. Service provided at a digital signal speed of 1.544 Mbps. The DS-1 product for ordering and provisioning is identified by the class of service USOC and line level USOCs. For preorder, maintenance and repair, the circuit identification NC and NCI codes identify the DS-1 product.

DS-3 – Digital Service Level 3. Service provided at a digital signal speed of 44.736 Mbps or higher. The DS-3 product for ordering and provisioning is identified by the class of service USOC and line level USOCs. For preorder, maintenance and repair, the circuit identification NC and NCI codes identify the DS-3 product.

Due Date – The date provided on the Firm Order Confirmation (FOC) the ILEC sends the IXC identifying the planned completion date for the order.

Feature Group-D – Feature Group-D is equal access service. It allows the AC (Access Carrier) to offer their subscribers the convenience of 1 plus dialing. It automatically routes the call over the AC's network. The Feat Grp D product for ordering and provisioning is identified by the class of service USOC and line level USOCs. For preorder, maintenance and repair, the circuit identification NC and NCI codes identify the Feat Grp D product.

Installation – The activity performed to activate a service.

Installation Troubles – A trouble, which is identified after service order activity and installation, has completed on a customer's line. It is likely attributable to the service activity (within a defined time period).

Interconnection Trunks – A network facility that is used to interconnect two switches generally of different local exchange carriers

Inward Activity – refers to an order for new or additional lines. Change order types for additional lines consist of all C orders with "I" and "T" action coded line USOCs that represent new or additional lines, including conversions from retail to IXC and IXC to IXC.

Lack of Facilities – A shortage of cable facilities identified after a due date has been committed to a customer, including the IXC. The facilities shortage may be identified during the inventory assignment process or during the service installation process, and typically triggers a jeopardy.

Non-Affiliate– An IXC other than Qwest Wireless, QLDC or QCC companies.

OCN - High Capacity Channel service provisioned on Sonet based optical equipment.

Other Qwest Affiliates– The Qwest Wireless, (QW) or Qwest Corporation (QC) companies.

For measurement purposes, Other Qwest Affiliates are identified by the presence of an ACNA equal to UWW, TJB, UIA, UWC and ZZZ

Projects – Service requests that exceed the line size and/or level of complexity which would allow for the use of standard ordering and provisioning processes. Generally, due dates for projects are negotiated, coordination of service installations/changes is required and automated provisioning may not be practical.

Service Order – The work order created and distributed in ILECs systems and to ILEC work groups in response to a complete, valid access service request.

Service Order Type – The designation used to identify the major types of provisioning activities associated with a access service request.

Special Access – Special Access Services are a dedicated link. Special Access Services are governed by the FCC Tariff 1, Section 7.

The process for ordering Switched and Special Access is through Interexchange Carriers channels. The customer must issue an ASR stating their requirements for service.

Switched and Special Access transactions, for measurement purposes, are identified by the presence of a valid ACNA or CCNA and a "C" in the 5th character position of the MCN.

Standard Interval – The interval that the ILEC publishes as a guideline for establishing due dates for provisioning a service request. Typically, due dates will not be assigned with intervals shorter than the standard. These intervals are specified by service type and type of service modification requested. ILECs publish these standard intervals in documents used by their own service representatives as well as ordering instructions provided to IXCs in the Qwest Standard Interval Guidelines.

Switched Access – Switched Access Service is a dial tone service which requires a dial connection. Switched Access Services are governed by the FCC Tariff 1, Section 6.

Time to Restore – The time interval from the receipt, by the ILEC, of a trouble report on a customer's service to the time service is fully restored to the customer.

Wireless Service – These services are a dedicated link. Special Access Services are governed by the FCC Tariff 1, Section 7.

The process for ordering Wireless Access is through Wireless Carriers channels who must issue an ASR stating their requirements for service.

Wireless Access transactions, for measurement purposes, are identified by the presence of a valid ACNA or CCNA, a "C" in the 5th character position of the MCN and a "W" in the 6th character position of the MCN.

DEFINITION OF TERMS (continued)

GLOSSARY OF ACRONYMS

<u>ACRONYM</u>	<u>DESCRIPTION</u>
ACNA	Access Carrier Name Abbreviation
ASR	Access Service Record (processed via EXACT system)
CARE	Customer Account Record Exchange
CKT	Circuit
CO	Central Office
CPE	Customer Premises Equipment
DB	Database
DS0	Digital Service 0
DS1	Digital Service 1
DS3	Digital Service 3
EAS	Extended Area Service
EB-TA	Electronic Bonding – Trouble Administration
EDI	Electronic Data Interchange
EXACT	Exchange Access Control and Tracking, an operational support system.
FG-D	Feature Group D
FOC	Firm Order Confirmation
ICB	Individual Case Basis
IXC	Interexchange Carrier
ILEC	Incumbent Local Exchange Carrier
IOF	Interoffice Facilities (refers to trunk facilities located between Qwest central offices)
LATA	Local Access Transport Area
LD	Long Distance
LPIC	Local Primary Interexchange Carrier
MCN	Master Customer Number
N, T, C	Service Order Types - - N (new), T (to or transfer), C (change)
NC	Network Channel code
NCI	Network Channel Interface
OOS	Out of service (type of trouble condition)
OSS	Operations-al Support Systems
PIC	Customer Primary Interexchange Carrier
PON	Purchase Order Number
QCC	Qwest Communications Corporation
QLDC	Qwest Long Distance Corporation
RFS	Ready for Service (refers to collocation projects)
SOP	Service Order Processor
SOT	Service Order Type
TN	Telephone Number
USOC	Universal Service Order Code
WFA	Work Force Administration