

Docket No. 01-00193, Docket to Establish Generic Performance Measures, Benchmarks, and Enforcement Mechanisms for BellSouth Telecommunications, Inc.

In addition to the following set of performance measures, business rules, benchmarks and enforcement mechanisms, Director Greer proposes that the Authority find that:

- (1) Performance measurements but neither benchmarks nor enforcement mechanisms, as proposed by Director Greer, should be adopted for retail special access services;
- (2) The truncated Z methodology will be utilized in assessing parity for measures with comparable retail BellSouth analogs. The parameter δ , delta, is established at 0.25;
- (3) A comprehensive review process of all performance measurements, business rules, delta values, disaggregation levels, benchmarks and enforcement mechanisms will be conducted six months from the date of the final order issued by the Authority. Thereafter, the review process will be conducted annually. The review process will be an open forum before the Authority for both CLECs and BellSouth to present recommended additions, deletions and/or modifications to the plan adopted in this proceeding;
- (4) An independent third-party, chosen by the Authority with input from BellSouth and the CLECs, will conduct an annual audit relating to the accuracy of performance data and reporting procedures. The costs of the audit should be borne 50% by BellSouth and 50% by the CLECs;
- (5) Parties should submit business rules for the adopted measurement, *Percent of Timely Loop Modification/De-Conditioning on xDSL Loops* within ten (10) days of deliberation on this issue.
- (6) Parties should submit language within the business rules clarifying the "statistically valid" sampling techniques that are acceptable for the adopted measurement, *Service Order Accuracy*, within ten (10) days of deliberation on this issue; and
- (7) BellSouth should submit to the Authority a detailed plan outlining how it proposes to expand the number of products eligible for flow-through as listed in its LSR Flow-Through Matrix. The percent of products eligible should be increased from 57% to 95%. This plan should outline how BellSouth will improve its systems to allow for more product types to be eligible for flow-through and when improvement can be expected. The plan should be submitted within ninety (90) days of the final order.
- (8)** Furthermore, Director Greer proposes that BellSouth be required to file monthly reports detailing the amount of Tier 1 payments made and/or due for failed performance. This report should include detailed calculations for each Tier 1 mechanism triggered and paid to each CLEC and the associated benchmark missed. The report should also include detailed calculations for Tier 2 payments triggered due to failed performance. These reports will be due by the fifteenth of each month.

ENFORCEMENT MECHANISM PLAN

- A two-tier enforcement mechanism program comprised of Tier-1 payments paid directly to the CLEC and Tier-2 payments paid directly to the Authority. Tier-1 enforcement mechanism payments are triggered if a standard or benchmark is not achieved and Tier-2 payments are triggered if performance falls below the standard or benchmark for three (3) consecutive months. (Months do not have to be within the same quarter). These mechanisms are to become effective ten (10) days after the Authority issues its final order, unless specified otherwise, in which case, they are to become effective within ninety (90) days of the final order.
- Tier-1 penalties will apply to any and all measures in which the CLEC and State can be identified and apply to the following measure:
 - TN-PO-1&2 Loop Make Up Response Time (manual and electronic)
 - TN-O-1 Acknowledgement Message Timeliness
 - TN-O-2 Acknowledgement Message Completeness
 - TN-O-4 Percent Flow-through Detail
 - TN-O-8 Reject Interval
 - TN-O-9 Firm Order Confirmation Timeliness
 - TN-O-10 Service Inquiry with LSR FOC Response Time Manual
 - TN-O-11 Firm Order Confirmation and Reject Response Completeness
 - TN-D-1 Average Database Update Interval
 - TN-P-1 Mean Held Order Interval & Distribution Intervals
 - TN-P-2 Average Jeopardy Notice Interval
 - TN-P-4 Percent Missed Installation Appointment
 - TN-P-5 Percent Completions/Attempt without notice or with less than 24 hours notice
 - TN-P-6 Average Completion Interval
 - TN-P-7 Order Completion Interval Distribution
 - TN-P-8 Average Completion Notice Interval
 - TN-P-9 Coordinated Customer Conversion Interval
 - TN-P-10 Coordinated Customer Conversions- Hot Cut Timeliness
 - TN-P-11 Coordinated Customer Conversion Average Recovery Time
 - TN-P-12 Hot Cut Conversions Percentage of Provisioning Troubles Received within 7 days
 - TN-P-13 Cooperative Acceptance Testing- DSL
 - TN-P-14 Percent of Timely Loop Modification/Conditioning on DSL Loops Tested
 - TN-P-15 Percentage of Provisioning Troubles within 30 days of Service Order Activity
 - TN-P-16 Service Order Accuracy
 - TN-P-19 Percent of Time BellSouth Applies the 10-digit Trigger Prior to LNP Order Due Date
 - TN-P-18 LNP Average Time Out of Service for LNP Conversion
 - TN-P-20 Percentage of Time the Old Service Provider Releases the Subscription Prior to the Expiration of the Second 9 Hour Timer
 - TN-P-21 LNP Percent Missed Installation Appointments

Enforcement Mechanism Plan

- TN-B-1 Invoice Accuracy
- TN-B-2 Mean Time to Deliver Invoice
- TN-B-3 Percent Billing Errors Corrected in x Days
- TN-B-4 Usage Data Delivery Accuracy
- TN-B-5 Usage Data Delivery Completeness
- TN-B-6 Usage Data Deliver Timeliness
- TN-B-7 Mean Time to Deliver Usage
- TN-B-8 Recurring Charge Completeness
- TN-B-9 Non-Recurring Charge Completeness
- TN-M&R-1 Missed Repair Appointments
- TN-M&R-2 Customer Trouble Report Rate
- TN-M&R-3 Maintenance Average Duration
- TN-M&R-4 Percent Repeat Troubles w/in 30 days
- TN-M&R-5 Out of Service>24 Hours –
- TN-M&R-5 Average Answer Time-Repair Center
- TN-M&R-7 Mean Time to Notify CLEC of Network Outages
- TN-C-1 Average Response Time
- TN-C-2 Average Arrangement Time
- TN-C-3 Percent of Due Dates Missed
- TN-TGP-2 Trunk Group Performance CLEC Specific
- Tier-2 enforcement mechanisms will apply to all measures that carrier Tier-1 enforcement mechanisms as well as:
 - TN-OSS-1 Average Response Time and Response Interval
 - TN-OSS-2 Interface Availability Regional Level
 - TN-OSS-3 Interface Availability Maintenance and Repair
 - TN-OSS-4 Response Interval Maintenance and Repair
 - TN-O-3 Percent Flow-through Summary
 - TN-O-12 Speed of Answer in Order Center
 - TN-D-2 Percent Database Update Accuracy
 - TN-D-3 Percent NXXs and LRNs Loaded by LERG Effective Date
 - TN-TGP-1 Trunk Group Performance Aggregate
- The categories and dollar amounts for Tier-1 and Tier-2 enforcement mechanisms are adopted from BellSouth's proposed SEEM with the addition of "Database Update" as a category.

Enforcement Mechanism Plan

Liquidated Damages Table For Tier-I Measures						
(Paid directly to CLEC)						
			Per Transaction			
Tier-1						
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
Pre-Ordering	\$20	\$30	\$40	\$50	\$60	\$70
Ordering	\$40	\$50	\$60	\$70	\$80	\$90
Provisioning	\$100	\$125	\$175	\$250	\$325	\$500
Provisioning UNE (coordinated customer conversion)	\$400	\$450	\$500	\$550	\$650	\$800
Maintenance and Repair	\$100	\$125	\$175	\$250	\$325	\$500
Maintenance and Repair UNE	\$400	\$450	\$500	\$550	\$650	\$800
LNP	\$150	\$250	\$500	\$600	\$700	\$800
Billing	\$1	\$1	\$1	\$1	\$1	\$1
Database Updates	\$40	\$50	\$60	\$70	\$80	\$90
IC Trunks	\$100	\$125	\$175	\$250	\$325	\$500
Collocation	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Tier-2 Measures						
(Paid directly to the TRA)						
	Per Transaction					
OSS Pre-Ordering	\$20					
Ordering	\$60					
Provisioning	\$300					
Provisioning UNE (coordinated customer conversion)	\$875					
Maintenance and Repair	\$300					
Maintenance and Repair UNE	\$875					
Billing	\$1					
LNP	\$500					
Database Updates	\$60					
IC Trunks	\$500					
Collocation	\$15,000					

Enforcement Mechanism Plan

- Penalties will be assessed when the benchmark or standard is not met for the lowest level of disaggregation and apply to all affected transactions in the category of disaggregation that failed to meet the benchmark or standard. In the event that the transaction amount can not be determined BellSouth is to use the average transaction level.
- BellSouth is to provide to individually affected CLECs and the TRA an itemized list of all enforcement mechanisms paid and their corresponding metric, in conjunction with any and all payments.
- An overall cap of twenty (20%) of "Net Return" using ARMIS data verification of the Tennessee-specific, monetary amount.
- An overall cap of thirty-six (36%) of "Net Return" after § 271 approval, using ARMIS data for verification of the Tennessee-specific, monetary amount.
- BellSouth will be allowed to pursue a waiver request within fifteen (15) calendar days, in the event of a force majeure; the Telecommunications Act of 1996; or State law; an act that is in bad faith; and non-BellSouth problems associated with third-party systems of equipment.

Tennessee (TN)-OSS-1: Average Response Time and Response Interval (Pre-Ordering/Ordering)¹

Definition

Average response time and response intervals are the average times and number of requests responded to within certain intervals for accessing legacy data associated with appointment scheduling, service & feature availability, address verification, request for Telephone numbers (TNs), and Customer Service Records (CSRs).

Exclusions

None

Business Rules

The average response time for retrieving pre-order/order information from a given legacy system is determined by summing the response times for all requests submitted to the legacy systems during the reporting period and dividing by the total number of legacy system requests for that month.

The response interval starts when the client application (LENS or TAG for CLECs and RNS or ROS for BellSouth) submits a request to the legacy system and ends when the appropriate response is returned to the client application. The number of accesses to the legacy systems during the reporting period which take less than 2.3 seconds, the number of accesses which take more than 6 seconds, and the number of accesses which are less than or equal to 6.3 seconds are also captured.

Calculation

Response Time = (a - b)

- a = Date & Time of Legacy Response
- b = Date & Time of Legacy Request

Average Response Time = c ÷ d

- c = Sum of Response Times
- d = Number of Legacy Requests During the Reporting Period

Report Structure

- Not CLEC Specific
- Not Product/Service Specific
- Regional Level

¹ Derived from BellSouth SQM OSS-1: Average Response Time and Response Interval (Pre-Ordering/Ordering). See David Coon Direct Testimony, submitted July 16, 2001, Exhibit DAC-1 pp. 1-1 through 1-5.

Tennessee (TN)-OSS-1: Average Response Time and Response Interval (Pre-Ordering/Ordering)

Disaggregation

- RSAG – Address (Regional Street Address Guide-Address) – stores street address information used to validate customer addresses. CLECs and BellSouth query this legacy system.
- RSAG – TN (Regional Street Address Guide-Telephone number) – contains information about facilities available and telephone numbers working at a given address. CLECs and BellSouth query this legacy system.
- ATLAS (Application for Telephone Number Load Administration and Selection) – acts as a warehouse for storing telephone numbers that are available for assignment by the system. It enables CLECs and BellSouth service reps to select and reserve telephone numbers. CLECs and BellSouth query this legacy system.
- COFFI (Central Office Feature File Interface) – stores information about product and service offerings and availability. CLECs query this legacy system.
- DSAP (DOE Support Application) – provides due date information. CLECs and BellSouth query this legacy system.
- HAL/CRIS (Hands-Off Assignment Logic/Customer Record Information System) – a system used to access the Business Office Customer Record Information System (BOCRIS). It allows BellSouth servers, including LENS, access to legacy systems. CLECs query this legacy system.
- P/SIMS (Product/Services Inventory Management system) – provides information on capacity, tariffs, inventory and service availability. CLECs query this legacy system.
- OASIS (Obtain Available Services Information Systems) – Information on feature and rate availability. BellSouth queries this legacy system.

Benchmark

Parity + 2 seconds

Enforcement Mechanism

Tier-2

Implementation Date

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

TN-OSS-2: Interface Availability (Pre-Ordering/Ordering)²

Definition

Percent of time applications are functionally available as compared to scheduled availability. Calculations are based upon availability of applications and interfacing applications utilized by CLECs for pre-ordering and ordering. "Functional Availability" is defined as the number of hours in the reporting period that the applications/interfaces are available to users. "Scheduled Availability" is defined as the number of hours in the reporting period that the applications/interfaces are scheduled to be available. When comparing availability to the benchmark, scheduled availability will be defined as 7am-6pm EST.

Exclusions

CLEC-impacting troubles caused by factors outside of BellSouth's purview, e.g., troubles in customer equipment, troubles in networks owned by telecommunications companies other than BellSouth, etc.

Degraded service, e.g., slow response time, loss of non-critical functionality, etc.

Business Rules

This measurement captures the functional availability of applications/interfaces as a percentage of scheduled availability for the same systems. This systems measured in this calculation will be only those in which the CLECs have direct hands on access: TAG, EDI, LENS, RoboTag. All outages reported to BellSouth that in turn are posted to the Interconnection website (www.interconnection.bellsouth.com) under the change control process will constitute an outage and will be recorded in this measure. When comparing availability to the benchmark, scheduled availability will be defined as 7am-6pm EST.

Calculation

Interface Availability (Pre-Ordering/Ordering) = $(a \div b) \times 100$

- a = Functional Availability
- b = Scheduled Availability

Report Structure

- Not CLEC Specific
- Not Product/Service Specific
- State Specific

Disaggregation

- EDI
- TAG

² Derived from BellSouth SQM OSS-2: Interface Availability (Pre-Ordering/Ordering). See David Coon Direct Testimony, submitted July 16, 2001, Exhibit DAC-1 pp. 1-6 through 1-7.

TN-OSS-2: Interface Availability (Pre-Ordering/Ordering)

- LENS
- RoboTAG

Benchmark

- 99.5% during peak hours (7am-6pm EST.)

Enforcement Mechanism

Tier-2

Implementation Date

90 days after final order

TN-OSS-3: Interface Availability (Maintenance & Repair)³

Definition

Percent of time applications are functionally available as compared to scheduled availability. Calculations are based upon availability of applications and interfacing applications utilized by CLECs for maintenance and repair. "Functional Availability" is defined as the number of hours in the reporting period that the applications/interfaces are available to users. "Scheduled Availability" is defined as the number of hours in the reporting period that the applications/interfaces are scheduled to be available. Scheduled availability is posted on the Interconnection web site: (www.interconnection.bellsouth.com/oss/oss_hour.html)

Exclusions

- CLEC-impacting troubles caused by factors outside of BellSouth's purview, e.g., troubles in customer equipment, troubles in networks owned by telecommunications companies other than BellSouth, etc.
- Degraded service, e.g., slow response time, loss of non-critical functionality, etc.

Business Rules

This measurement captures the functional availability of applications/interfaces as a percentage of scheduled availability for the same systems. Only full outages are included in the calculations for this measure. Full outages are defined as occurrences of either of the following:

- Application/interfacing application is down or totally inoperative.
- Application is totally inoperative for customers attempting to access or use the application. This includes transport outages when they may be directly associated with a specific application. Comparison to an internal benchmark provides a vehicle for determining whether or not CLECs and retail BellSouth entities are given comparable opportunities for use of maintenance and repair systems.

Calculation

OSS Interface Availability $(a \div b) \times 100$

- a = Functional Availability
- b = Scheduled Availability

Report Structure

- Not CLEC Specific
- Not Product/Service Specific
- State Specific

³ Derived from BellSouth SQM OSS-3: Interface Availability (maintenance and repair). See David Coon Direct Testimony, submitted July 16, 2001, Exhibit DAC-1 pp. 1-8 through 1-9.

TN-OSS-3: Interface Availability (Maintenance & Repair)

Disaggregation

- BellSouth TAFI
- CLEC TAFI
- CLEC ECTA
- BellSouth & CLEC
 - CRIS
 - LMOS HOST
 - LNP
 - MARCH
 - OSPCM
 - PREDICTOR
 - SOCS

Benchmark

- 99.5%

Enforcement Mechanism

Tier-2

Implementation Date

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

TN-OSS-4: Response Interval (Maintenance & Repair)⁴

Definition

The response intervals are determined by subtracting the time a request is received on the BellSouth side of the interface from the time the response is received from the legacy system. Percentages of requests falling into each interval category are reported, along with the actual number of requests falling into those categories.

Exclusions

None

Business Rules

This measure is designed to monitor the time required for the CLEC and BellSouth interface system to obtain from BellSouth's legacy systems the information required to handle maintenance and repair functions. The clock starts on the date and time when the request is received on the BellSouth side of the interface and the clock stops when the response has been transmitted through that same point to the requester.

Note: The OSS Response Interval BellSouth Total Report is a combination of BellSouth Residence and Business Total.

Calculation

OSS Response Interval = (a - b)

- a = Query Response Date and Time
- b = Query Request Date and Time

Percent Response Interval (per category) = (c ÷ d) X 100

- c = Number of Response Intervals in category "X"
- d = Number of Queries Submitted in the Reporting Period

where, "X" is ≤ 4 , $>4 \leq 10$, ≤ 10 , > 10 , or >30 seconds

Report Structure

- Not CLEC Specific
- Not Product/Service Specific
- Regional Level

⁴ Derived from BellSouth SQM OSS-4: Response Interval (maintenance and repair). See David Coon Direct Testimony, submitted July 16, 2001, Exhibit DAC-1 pp. 1-10 through 1-11.

TN-OSS-4: Response Interval (Maintenance & Repair)

Disaggregation

- CRIS
- DLETH
- DLR
- LMOS
- LMOSupd
- LNP
- MARCH
- OSPCM
- Predictor
- SOCS
- NIW

Benchmark

- Parity with Retail

Enforcement Mechanism

Tier-2

Implementation Date

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

TN-PO-1: Loop Makeup - Response Time – Manual⁵

Definition

This report measures the average interval and percent within the interval from the submission of a Manual Loop Makeup Service Inquiry (LMUSI) to the distribution of Loop Makeup information back to the CLEC.

Exclusions

- Inquiries, which are submitted electronically.
- Designated Holidays (New Years, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas) are excluded from the interval calculation.
- Weekend hours from 5:00PM Friday until 8:00AM Monday are excluded from the interval calculation.
- Canceled Inquiries.

Business Rules

The CLEC Manual Loop Makeup Service Inquiry (LMUSI) process includes inquiries submitted via mail or FAX to BellSouth's Complex Resale Support Group (CRSG).

This measurement combines three intervals:

1. From receipt of the Service Inquiry for Loop Makeup to hand off to the Service Advocacy Center (SAC) for "Look-up."
2. From SAC start date to SAC complete date.
3. From SAC complete date to date the CRSB distributes loop makeup information back to the CLEC.

The "Receive Date" is defined as the date the Manual LMUSI is received by the CRSB. It is counted as day Zero. LMU "Return Date" is defined as the date the LMU information is sent back to the CLEC from BellSouth. The interval calculation is reset to Zero when a CLEC initiated change occurs on the Manual LMU request.

Note: The Loop Makeup Service Inquiry Form does not require the CLEC to furnish the type of Loop. The CLEC determines whether the loop makeup will support the type of service they wish to order or not and qualifies the loop. If the loop makeup will support the service, a firm order LSR is submitted by the CLEC.

Calculation

Response Interval = (a - b)

- a = Date and Time LMUSI returned to CLEC
- b = Date and Time the LMUSI is received

Average Interval = (c ÷ d)

⁵ Derived from BellSouth SQM PO-1: Loop Make-up Manual. See David Coon Direct Testimony, submitted July 16, 2001, Exhibit DAC-1 pp. 1-12 through 1-13.

TN-PO-1: Loop Makeup - Response Time – Manual

- c = Sum of all Response Intervals
 - d = Total Number of LMUSIs received within the reporting period
- Percent within interval = $(e \div f) \times 100$
- e = Total LMUSIs received within the interval
 - f = Total Number of LMUSIs processed within the reporting period

Report Structure

- CLEC Aggregate
- CLEC Specific
- Geographic Scope
 - State
- Interval for manual LMUs:
 - 0 – =1 day
 - >1 – =2 days
 - >2 – =3 days
 - 0 – =3 days
 - >3 – =6 days
 - >6 – =10 days
 - > 10 days

- Average Interval in days

Disaggregation

Loops

Benchmark

- 95% in 3 Business Days

Enforcement Mechanism

Tier-1

Tier-2

Implementation

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

TN-PO-2: Loop Make Up - Response Time - Electronic⁶

Definition

This report measures the average interval and the percent within the interval from the electronic submission of a Loop Makeup Service Inquiry (LMUSI) to the distribution of Loop Makeup information back to the CLEC.

Exclusions

- Manually submitted inquiries
- Designated Holidays (New Years, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas) are excluded from the interval calculation
- Canceled Requests
- Scheduled OSS Maintenance

Business Rules

The response interval starts when the CLEC's Mechanized Loop Makeup Service Inquiry (LMUSI) is submitted electronically through the Operational Support Systems interface, LENS, TAG or RoboTAG. It ends when BellSouth's Loop Facility Assignment and Control System (LFACS) responds electronically to the CLEC with the requested Loop Makeup data via LENS, TAG or RoboTAG Interfaces. Note: The Loop Makeup Service Inquiry Form does not require the CLEC to furnish the type of Loop. The CLEC determines whether the loop makeup will support the type of service they wish to order or not and qualifies the loop. If the loop makeup will support the service, a firm order LSR is submitted by the CLEC. EDI is not a pre-ordering system, and, therefore, is not applicable in this measure.

Calculation

Response Interval = (a - b)

- a = Date and Time LMUSI returned to CLEC
- b = Date and Time the LMUSI is received

Average Interval = (c ÷ d)

- c = Sum of all response intervals
- d = Total Number of LMUSIs received within the reporting period

Percent within interval = (e ÷ f) X 100

- e = Total LMUSIs received within the interval
- f = Total Number of LMUSIs processed within the reporting period

⁶ Derived from BellSouth SQM PO-2: Loop Makeup Electronic. See David Coon Direct Testimony, submitted July 16, 2001, Exhibit DAC-1 pp. 1-14 through 1-15.

TN-PO-2: Loop Make Up - Response Time - Electronic

Report Structure

- CLEC Aggregate
- CLEC Specific
- Geographic Scope
 - State
- Interval for electronic LMUs:
 - 0 – 1 minute
 - >1 – 5 minutes
 - 0 - =5 minutes
 - > 5 – 8 minutes
 - > 8 – 15 minutes
 - >15 minutes
- Average Interval in minutes

Disaggregation

Loops

Benchmark

- 95% in 1 Minute

Enforcement Mechanism

Tier-1

Tier-2

Implementation Date

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

TN-O-1: Acknowledgement Message Timeliness⁷

Definition

This measurement provides the response interval from the time an LSR or transmission (may contain multiple LSRs from one or more CLECs in multiple states) is electronically submitted via EDI or TAG respectively until an acknowledgement notice is sent by the system.

Exclusions

- Scheduled OSS Maintenance

Business Rules

The process includes EDI & TAG system functional acknowledgements for all messages/Local Service Requests (LSRs) which are electronically submitted by the CLEC. Users of EDI may package many LSRs into one transmission, which will receive the acknowledgement message. EDI users may place multiple LSRs in one "envelope" requesting service in one or more states, which will mask the identity of the state and CLEC. The start time is the receipt time of the message at BellSouth's side of the interface (gateway). The end time is when the acknowledgement is transmitted by BellSouth at BellSouth's side of the interface (gateway). If more than one CLEC uses the same ordering center (aggregator), an Acknowledgement Message will be returned to the "Aggregator", however, BellSouth will not be able to determine which specific CLEC or state this message represented.

Calculation

Response Interval = (a - b)

- a = Date and Time Acknowledgement Notices returned to CLEC
- b = Date and Time messages/LSRs electronically submitted by the CLEC via EDI or TAG respectively

Average Response Interval = (c ÷ d)

- c = Sum of all Response Intervals
- d = Total number of electronically submitted messages/LSRs received, from CLECs via EDI or TAG respectively, in the Reporting Period.

⁷ Derived from BellSouth SQM O-1: Acknowledge Message Timeliness. See David Coon Direct Testimony, submitted July 16, 2001, Exhibit DAC-1 pp. 2-1 through 2-2.

TN-O-1: Acknowledgement Message Timeliness

Reporting Structure

- CLEC Aggregate
- CLEC Specific/Aggregator
- Geographic Scope
 - State
- Electronically Submitted LSRs
 - 0 – =10 minutes
 - > 10 – =20 minutes
 - > 20 – =30 minutes
 - 0 – =30 minutes
 - > 30 – =45 minutes
 - > 45 – =60 minutes
 - > 60 – =120 minutes
 - > 120 minutes
- Average interval for electronically submitted messages/LSRs in minutes

Disaggregation

- EDI
- TAG

Benchmark

- EDI- 95% within 30 minutes
- TAG – 95% within 30 minutes

Enforcement Mechanism

Tier-1

Tier-2

Implementation Date

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

TN-O-2: Acknowledgement Message Completeness⁸

Definition

This measurement provides the percent of transmissions/LSRs received via EDI or TAG respectively, which are acknowledged electronically.

Exclusions

- Manually submitted LSRs
- Scheduled OSS Maintenance

Business Rules

EDI and TAG send Functional Acknowledgements for all transmissions/LSRs, which are electronically submitted by a CLEC. Users of EDI may package many LSRs from multiple states in one transmission. If more than one CLEC uses the same ordering center, an Acknowledgement Message will be returned to the "Aggregator". However, BellSouth will not be able to determine which specific CLEC this message represented. The Acknowledgement Message is returned prior to the determination of whether the transmission/ LSR will be partially mechanized or fully mechanized.

Calculation

Acknowledgement Completeness = $(a \div b) \times 100$

- a = Total number of Functional Acknowledgements returned in the reporting period for transmissions/LSRs electronically submitted by EDI or TAG respectively
- b = Total number of electronically submitted transmissions/LSRs received in the reporting period by EDI or TAG respectively.

Report Structure

- CLEC Aggregate
- CLEC Specific/Aggregator
- Geographic Scope
 - State

Note: The Acknowledgement message is generated before the system recognizes whether this electronic transmission will be partially or fully mechanized.

Disaggregation

- EDI
- TAG

⁸ Derived from BellSouth SQM O-2: Acknowledge Message Completeness. See David Coon Direct Testimony, submitted July 16, 2001, Exhibit DAC-1 pp. 2-3 through 2-4.

TN-O-2: Acknowledgement Message Completeness

Benchmark

100%

Enforcement Mechanism

Tier-1

Tier-2

Implementation Date

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

TN-O-3: Percent Flow-Through Service Requests (Summary)⁹

Definition

The percentage of Local Service Requests (LSR) and LNP Local Service Requests (LNP LSRs) submitted electronically via the CLEC mechanized ordering process that flow through and reach a status for a FOC to be issued, without manual intervention.

Exclusions

- Fatal Rejects
- Auto Clarification
- Manual Fallout
- CLEC System Fallout
- Scheduled OSS Maintenance

Business Rules

The CLEC mechanized ordering process includes all LSRs, including supplements (subsequent versions) which are submitted through one of the three gateway interfaces (TAG, EDI and LENS), that flow through and reach a status for a FOC to be issued, without manual intervention. These LSRs can be divided into two classes of service: Business and Residence, and two types of service: Resale, and Unbundled Network Elements (UNE). The CLEC mechanized ordering process does not include LSRs that are submitted manually (for example, fax and courier) or are not designed to flow through (for example, Manual Fallout.)

Definitions:

Fatal Rejects: Errors that prevent an LSR, submitted electronically by the CLEC, from being processed further. When an LSR is submitted by a CLEC, LEO/LNP Gateway will perform edit checks to ensure the data received is correctly formatted and complete. For example, if the PON field contains an invalid character, LEO/LNP Gateway will reject the LSR and the CLEC will receive a Fatal Reject.

Auto-Clarification: Clarifications that occur due to invalid data within the LSR. LESOG/LAUTO will perform data validity checks to ensure the data within the LSR is correct and valid. For example, if the address on the LSR is not valid according to RSAG, or if the LNP is not available for the NPA NXX requested, the CLEC will receive an Auto-Clarification.

⁹ Derived from BellSouth SQM O-3: Percent Flow-Through Service Requests (Summary). See David Coon Direct Testimony, submitted July 16, 2001, Exhibit DAC-1 pp. 2-5 through 2-7.

TN-O-3: Percent Flow-Through Service Requests (Summary)

Manual Fallout: Planned Fallout that occur by design. Certain LSRs are designed to fallout of the Mechanized Order Process due to their complexity. These LSRs are manually processed by the LCSC. When a CLEC submits an LSR, LESOG/LAUTO will determine if the LSR should be forwarded to LCSC for manual handling. Following are the categories for Manual Fallout:

1.) Complex* 2.) Special pricing plans 3.) Some partial migrations 4.) New telephone number not yet posted to BOCRIS 5.) Pending order review required 6.) CSR inaccuracies such as invalid or missing CSR data in CRIS 7.) Expedites (requested by the CLEC) 8.) Denials-restore and conversion, or disconnect and conversion orders 9.) Class of service invalid in certain states with some types of service 10.) Low volume such as activity type "T" (move) 11.) More than 25 business lines, or more than 15 loops 12.) Transfer of calls option for the CLEC end users 13.) Directory Listings (Indentation and Captions).

*See LSR Flow-Through Matrix following O-6 for a list of services, including complex services, and whether LSRs issued for the services are eligible to flow through.

Total System Fallout: Errors that require manual review by the LCSC to determine if the error is caused by the CLEC, or is due to BellSouth system functionality. If it is determined the error is caused by the CLEC, the LSR will be sent back to the CLEC for clarification. If it is determined the error is BellSouth caused, the LCSC representative will correct the error, and the LSR will continue to be processed.

Z Status: LSRs that receive a supplemental LSR submission prior to final disposition of the original LSR.

Calculation

Percent Flow Through = $a \div [b - (c + d + e + f)] \times 100$

- a = The total number of LSRs that flow through LESOG/LAUTO and reach a status for a FOC to be issued
- b = the number of LSRs passed from LEO/LNP Gateway to LESOG/LAUTO
- c = the number of LSRs that fall out for manual processing
- d = the number of LSRs that are returned to the CLEC for clarification
- e = the number of LSRs that contain errors made by CLECs
- f = the number of LSRs that receive a Z status

Percent Achieved Flow Through = $a \div [b - (c + d + e)] \times 100$

- a = the number of LSRs that flow through LESOG/LAUTO and reach a status for a FOC to be issued.
- b = the number of LSRs passed from LEO/LNP Gateway to LESOG/LAUTO
- c = the number of LSRs that are returned to the CLEC for clarification
- d = the number of LSRs that contain errors made by CLECs
- e = the number of LSRs that receive Z status

Report Structure

- CLEC Aggregate
- State

TN-O-3: Percent Flow-Through Service Requests (Summary)

Disaggregation

- Residence
- Business
- UNE
- LNP

Benchmark

- Residence 95%
- Business 90% (95% within 3 months)
- UNE 85% (90% within 3 months, 95% within 6 months)
- LNP 85% (90% within 3 months, 95% within 6 months)

Benchmarks do not apply to the "Percent Achieved Flow Through."

Enforcement Mechanism

Tier-2

Implementation Date

90 days from final order

TN-O-4: Percent Flow-Through Service Requests (Detail)¹⁰

Definition

A detailed list, by CLEC, of the percentage of Local Service Requests (LSR) and LNP Local Service Requests (LNP LSRs) submitted electronically via the CLEC mechanized ordering process that flow through and reach a status for a FOC to be issued, without manual human intervention.

Exclusions

- Fatal Rejects
- Auto Clarification
- Manual Fallout
- CLEC System Fallout
- Scheduled OSS Maintenance

Business Rules

The CLEC mechanized ordering process includes all LSRs, including supplements (subsequent versions) which are submitted through one of the three gateway interfaces (TAG, EDI and LENS), that flow through and reach a status for a FOC to be issued, without manual intervention. These LSRs can be divided into two classes of service: Business and Residence, and two types of service: Resale, and Unbundled Network Elements (UNE). The CLEC mechanized ordering process does not include LSRs which are submitted manually (for example, fax and courier) or are not designed to flow through (for example, Manual Fallout.)

Definitions:

Fatal Rejects: Errors that prevent an LSR, submitted electronically by the CLEC, from being processed further. When an LSR is submitted by a CLEC, LEO/LNP Gateway will perform edit checks to ensure the data received is correctly formatted and complete. For example, if the PON field contains an invalid character, LEO/LNP Gateway will reject the LSR and the CLEC will receive a Fatal Reject.

Auto-Clarification: Clarifications that occur due to invalid data within the LSR. LESOG/LAUTO will perform data validity checks to ensure the data within the LSR is correct and valid. For example, if the address on the LSR is not valid according to RSAG, or if the LNP is not available for the NPA NXX requested, the CLEC will receive an Auto-Clarification.

Manual Fallout: Planned Fallout that occur by design. Certain LSRs are designed to fallout of the Mechanized Order Process due to their complexity. These LSRs are manually processed by the LCSC. When a CLEC submits an LSR, LESOG/LAUTO will determine if the LSR should be forwarded to LCSC for manual handling. Following are the categories for Manual Fallout:

¹⁰ Derived from BellSouth SQM O-3: Percent Flow-Through Service Requests (Detail). See David Coon Direct Testimony, submitted July 16, 2001, Exhibit DAC-1 pp. 2-8 through 2-10.

TN-O-4: Percent Flow-Through Service Requests (Detail)

1.) Complex* 2.) Special pricing plans 3.) Some partial migrations 4.) New telephone number not yet posted to BOCRIS 5.) Pending order review required 6.) CSR inaccuracies such as invalid or missing CSR data in CRIS 7.) Expedites (requested by the CLEC) 8.) Denials-restore and conversion, or disconnect and conversion orders 9.) Class of service invalid in certain states with some types of service 10.) Low volume such as activity type "T" (move) 11.) More than 25 business lines, or more than 15 loops 12.) Transfer of calls option for the CLEC end users 13.) Directory Listings (Indentions and Captions).

*See LSR Flow-Through Matrix following O-6 for a list of services, including complex services, and whether LSRs issued for the services are eligible to flow through.

Total System Fallout: Errors that require manual review by the LCSC to determine if the error is caused by the CLEC, or is due to BellSouth system functionality. If it is determined the error is caused by the CLEC, the LSR will be sent back to the CLEC for clarification. If it is determined the error is BellSouth caused, the LCSC representative will correct the error, and the LSR will continue to be processed.

Z Status: LSRs that receive a supplemental LSR submission prior to final disposition of the original LSR.

Calculation

Percent Flow Through = $a \div [b - (c + d + e + f)] \times 100$

• a = The total number of LSRs that flow through LESOG/LAUTO and reach a status for a FOC to be issued

• b = the number of LSRs passed from LEO/LNP Gateway to LESOG/LAUTO

• c = the number of LSRs that fall out for manual processing

• d = the number of LSRs that are returned to the CLEC for clarification

• e = the number of LSRs that contain errors made by CLECs

• f = the number of LSRs that receive a Z status

Percent Achieved Flow Through = $a \div [b - (c + d + e)] \times 100$

• a = the number of LSRs that flow through LESOG/LAUTO and reach a status for a FOC to be issued.

• b = the number of LSRs passed from LEO/LNP Gateway to LESOG/LAUTO

• c = the number of LSRs that are returned to the CLEC for clarification

• d = the number of LSRs that contain errors made by CLECs

• e = the number of LSRs that receive Z status

TN-O-4: Percent Flow-Through Service Requests (Detail)

Report Structure

Provides the flow through percentage for each CLEC operating in Tennessee (by alias designation) submitting LSRs through the CLEC mechanized ordering process. The report provides the following:

- CLEC operating in Tennessee for Tennessee orders (by alias designation)
- Number of fatal rejects
- Mechanized interface used
- Total mechanized LSRs
- Total manual fallout
- Number of auto clarifications returned to CLEC
- Number of validated LSRs
- Number of BellSouth caused fallout
- Number of CLEC caused fallout
- Number of Service Orders Issued
- Base calculation
- CLEC error excluded calculation

This report is to only containing Tennessee specific information

Disaggregation

- Residence
- Business
- UNE
- LNP

Benchmark

- Residence 95%
- Business 90% (95% within 3 months)
- UNE 85% (90 % within 3 months, 95% within 6 months)
- LNP 85% (90% within 3 months, 95% within 6 months)

Benchmarks do not apply to the "Percent Achieved Flow Through."

Enforcement Mechanism

Tier-1

Implementation Date

90 days from final order

TN-O-5: Flow-Through Error Analysis¹¹

Definition

An analysis of each error type (by error code) that was experienced by the LSRs that did not flow through or reached a status for a FOC to be issued.

Exclusions

Each Error Analysis is error code specific, therefore exclusions are not applicable.

Business Rules

The CLEC mechanized ordering process includes all LSRs, including supplements (subsequent versions) which are submitted through one of the three gateway interfaces (TAG, EDI, and LENS), that flow through and reach a status for a FOC to be issued. The CLEC mechanized ordering process does not include LSRs, which are submitted manually (for example, fax and courier).

Calculation

Total for each error type.

Report Structure

Provides an analysis of each error type (by error code). The report is in descending order by count of each error code and provides the following:

- Error Type (by error code)
- Count of each error type
- Percent of each error type
- Cumulative percent
- Error Description
- CLEC Caused Count of each error code
- Percent of aggregate by CLEC caused count
- Percent of CLEC caused count
- BellSouth Caused Count of each error code
- Percent of aggregate by BellSouth caused count
- Percent of BellSouth by BellSouth caused count

This report should contain Tennessee specific information.

Disaggregation

Not Applicable

Enforcement Mechanism

Not Applicable

Implementation Date

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

¹¹ Derived from BellSouth SQM O-5: Flow-Through Error Analysis. See David Coon Direct Testimony, submitted July 16, 2001, Exhibit DAC-1 pp. 2-11 through 2-12.

TN-O-6: CLEC LSR Information¹²

Definition

A list with the flow through activity of LSRs by CC, PON and Version issued by each CLEC during the report period.

Exclusions

- Fatal Rejects
- LSRs submitted manually

Business Rules

The CLEC mechanized ordering process includes all LSRs, including supplements (subsequent versions) which are submitted through one of the three gateway interfaces (TAG, EDI, and LENS), that flow through and reach a status for a FOC to be issued. The CLEC mechanized ordering process does not include LSRs that are submitted manually (for example, fax and courier).

Calculation

NA

Report Structure

Provides a list with the flow through activity of LSRs by CC, PON and Ver, issued by each CLEC during the report period with an explanation of the columns and content. This report is available on a CLEC specific basis. The report provides the following for each LSR.

- CC
- PON
- Version
- Timestamp
- Type
- Err #
- Note or Error Description
- State

This report should contain Tennessee specific information

¹² Derived from BellSouth SQM O-6: CLEC LSR Information. See David Coon Direct Testimony, submitted July 16, 2001, Exhibit DAC-1 pp. 2-13 through 2-16.

TN-O-6: CLEC LSR Information

Disaggregation

Not Applicable

Benchmark

Not Applicable; however, BellSouth plan to increase flow-through eligibility to 95% or more products

Enforcement Mechanism

Not Applicable

Implementation Date

Improvement Plan outlining how and when more products will be eligible for flow-through due 90 days after final order.

TN-O-7: Percent Rejected Service Requests¹³

Definition

Percent Rejected Service Request is the percent of total Local Service Requests (LSRs) received which are rejected due to error or omission. An LSR is considered valid when it is submitted by the CLEC and passes edit checks to insure the data received is correctly formatted and complete.

Exclusions

- Service Requests canceled by the CLEC prior to being rejected/clarified
- Scheduled OSS Maintenance

Business Rules

Fully Mechanized: An LSR is considered "rejected" when it is submitted electronically but does not pass LEO edit checks in the ordering systems (EDI, LENS, TAG, LEO, LESOG, LNP Gateway and LAUTO) and is returned to the CLEC without manual intervention.

There are two types of "Rejects" in the Mechanized category: A Fatal Reject occurs when a CLEC attempts to electronically submit an LSR but required fields are either not populated or incorrectly populated and the request is returned to the CLEC before it is considered a valid LSR.

Fatal rejects are reported in a separate column and for informational purposes ONLY. Fatal rejects are excluded from the calculation of the percent of total LSRs rejected or the total number of rejected LSRs.

An Auto Clarification occurs when a valid LSR is electronically submitted but rejected from LESOG or LAUTO because it does not pass further edit checks for order accuracy. Partially Mechanized: A valid LSR, which is electronically submitted (via EDI, LENS, TAG) but cannot be processed electronically and "falls out" for manual handling. It is then put into "clarification" and sent back (rejected) to the CLEC.

Total Mechanized: Combination of Fully Mechanized and Partially Mechanized LSRs electronically submitted by the CLEC.

Non-Mechanized: LSRs which are faxed or mailed to the LCSC for processing and "clarified" (rejected) back to the CLEC by the BellSouth service representative.

Interconnection Trunks: Interconnection Trunks are ordered on Access Service Requests (ASRs). ASRs are submitted to and processed by the Local Interconnection Service Center (LISC). Trunk data is reported separately.

Calculation

Percent Rejected Service Requests = $(a \div b) \times 100$

¹³ Derived from BellSouth SQM O-7: Percent Rejected Service Requests. See David Coon Direct Testimony, submitted July 16, 2001, Exhibit DAC-1 pp. 2-17 through 2-18.

TN-O-7: Percent Rejected Service Requests

- a = Total Number of Rejected Service Requests in the Reporting Period
- b = Total Number of Service Requests Received in the Reporting Period

Report Structure

- Fully Mechanized, Partially Mechanized, Total Mechanized, Non-Mechanized
- CLEC Specific
- CLEC Aggregate
- Geographic Scope
 - State
- Product Specific Percent Rejected
- Total Percent Rejected

Disaggregation

Fully Mechanized, Partially Mechanized, and Non-Mechanized

1. Resold Residence POTS
2. Resold Business POTS
3. Resold Design
4. Resold PBX
5. Resold Centrex/Centrex-like
6. Resold BRI ISDN
7. Resold PRI ISDN
8. Resold DID Trunks
9. LNP
10. UNE Platform
11. 2 wire analog design
12. 2 wire analog non-design
13. UNE Digital Loop Less than DS1
14. UNE DS1
15. UNE DS3 and greater
16. Unbundled ISDN BRI
17. Unbundled ISDN PRI
18. Unbundled ADSL
19. Unbundled HDSL
20. UCL (short and long)
21. Unbundled 2 wire xDSL Loop
22. Unbundled 4 wire xDSL Loop
23. Other Unbundled Loops Design
24. Other Unbundled Loops Non-Design
25. Unbundled UDC/IDSL loop
26. UNE Switch Port
27. Local Interoffice Trunks
28. Line Sharing/High Frequency Spectrum UNE
29. Line Splitting/High Frequency Spectrum UNE
30. Enhanced Extended Loops (eels) Dispatch
31. Special Access to EELs Conversion

TN-O-7: Percent Rejected Service Requests

Benchmark

Not Applicable

Enforcement Mechanism

Not Applicable

Implementation Date

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

TN-O-8: Reject Interval¹⁴

Definition

Reject Interval is the average reject time from receipt of an LSR to the distribution of a Reject. An LSR is considered valid when it is submitted by the CLEC and passes edit checks to insure the data received is correctly formatted and complete.

Exclusions

- Service Requests canceled by CLEC prior to being rejected/clarified
- Designated Holidays (New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas) are excluded from the interval calculation
- LSRs which are identified and classified as "Projects"
- The following hours for Partially mechanized and Non-mechanized LSRs are excluded from the interval calculation:

Residence Resale Group – Monday through Saturday 7:00PM until 7:00AM

From 7:00 PM Saturday until 7:00 AM Monday

Business Resale, Complex, UNE Groups – Monday through Friday 6:00PM until 8:00AM From 6:00 PM Friday until 8:00 AM Monday

The hours excluded will be altered to reflect changes in the Center operating hours. The LCSC will accept faxed LSRs only during posted hours of operation. The interval will be the amount of time accrued from receipt of the LSR until normal closing of the center if an LSR is worked using overtime hours. In the case of a Partially Mechanized LSR received and worked after normal business hours, the interval will be set at one (1) minute.

- For ASRs processed in the Local Interconnection Service Center (LISC), weekends and holidays (New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas) are excluded from the calculation.

The exclusion of weekends begins at 12:01 AM Saturday until 12:00 midnight Sunday.

Holidays (New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas) are excluded from 12:01 AM until midnight.

- Scheduled OSS Maintenance

Business Rules

Fully Mechanized: The elapsed time from receipt of a valid electronically submitted LSR (date and time stamp in EDI, LENS or TAG) until the LSR is rejected (date and time stamp or reject in EDI, TAG or LENS). Auto Clarifications are considered in the Fully Mechanized category.

¹⁴ Derived from BellSouth SQM O-8: Reject Interval. See David Coon Direct Testimony, submitted July 16, 2001, Exhibit DAC-1 pp. 2-19 through 2-21.

TN-O-8: Reject Interval

Partially Mechanized: The elapsed time from receipt of a valid electronically submitted LSR (date and time stamp in EDI, LENS or TAG) until it falls out for manual handling. The stop time on partially mechanized LSRs is when the LCSC Service Representative clarifies the LSR back to the CLEC via LENS, EDI, or TAG.

Total Mechanized: Combination of Fully Mechanized and Partially Mechanized LSRs which are electronically submitted by the CLEC. **Non-Mechanized:** The elapsed time from receipt of a valid LSR (date and time stamp of FAX or date and time mailed LSR is received in the LCSC) until notice of the reject (clarification) is returned to the CLEC via LON.

Interconnection Trunks: Interconnection Trunks are ordered on Access Service Requests (ASRs). ASRs are submitted to and processed by the Local Interconnection Service Center (LISC). Trunk data is reported separately. All interconnection trunks are counted in the non-mechanized category.

Calculation

Reject Interval = (a - b)

- a = Date and Time of Service Request Rejection
- b = Date and Time of Service Request Receipt

Average Reject Interval = (c ÷ d)

- c = Sum of all Reject Intervals
- d = Number of Service Requests Rejected in Reporting Period

Reject Interval Distribution = (e ÷ f) X 100

- e = Service Requests Rejected in Interval
- f = Total Service Requests Rejected in the Reporting Period

Report Structure

- CLEC Specific
- CLEC Aggregate
- Fully Mechanized, Partially Mechanized, Total Mechanized, Non-Mechanized
- Geographic Scope
 - State
- Fully Mechanized:
 - 0 - =4 minutes
 - > 4 - =8 minutes
 - > 8 - =12 minutes
 - > 12 - =60 minutes
 - 0 - =1 hour
 - > 1 - =4 hours
 - > 4 - =8 hours
 - > 8 - =12 hours
 - > 12 - =16 hours
 - > 16 - =20 hours
 - > 20 - =24 hours
 - > 24 hours

TN-O-8: Reject Interval

- Partially Mechanized:

- 0 - =1 hour
- > 1 - =4 hours
- > 4 - =8 hours
- > 8 - =10 hours
- 0 - =10 hours
- > 10 - =18 hours
- 0 - =18 hours
- > 18 - =24 hours
- > 24 hours

- Non-mechanized:

- 0 - =1 hour
- > 1 - =4 hours
- > 4 - =8 hours
- > 8 - =12 hours
- > 12 - =16 hours
- > 16 - =20 hours
- > 20 - =24 hours
- 0 - =24 hours
- > 24 hours

- Trunks:

- =4 days
- > 4 - =8 days
- > 8 - =12 days
- > 12 - =14 days
- > 14 - =20 days
- 20 days

TN-O-8: Reject Interval

Disaggregation

Fully Mechanized, Partially Mechanized, Non-Mechanized, Interconnection Trunks

1. Resold Residence POTS
2. Resold Business POTS
3. Resold Design
4. Resold PBX
5. Resold Centrex/Centrex-like
6. Resold BRI ISDN
7. Resold PRI ISDN
8. Resold DID Trunks
9. LNP
10. UNE Platform
11. 2 wire analog design
12. 2 wire analog non-design
13. UNE Digital Loop Less than DS1
14. UNE DS1
15. UNE DS3 and greater
16. Unbundled ISDN BRI
17. Unbundled ISDN PRI
18. Unbundled ADSL
19. Unbundled HDSL
20. UCL (short and long)
21. Unbundled 2 wire xDSL Loop
22. Unbundled 4 wire xDSL Loop
23. Other Unbundled Loops Design
24. Other Unbundled Loops Non-Design
25. Unbundled UDC/IDSL loop
26. UNE Switch Port
27. Local Interoffice Trunks
28. Line Sharing/High Frequency Spectrum UNE
29. Line Splitting/High Frequency Spectrum UNE
30. Enhanced Extended Loops (eels) Dispatch
31. Special Access to EELs Conversion

Benchmark

Fully Mechanized 97% within 1 hour

Partially Mechanized 95% within 5 hours

Non-Mechanized 95% within 24 hours

Interconnection Trunks 95% within 36 hours

Enforcement Mechanism

Tier-1

Tier-2

Implementation Date

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

TN-O-9: Firm Order Confirmation Timeliness¹⁵

Definition

Interval for Return of a Firm Order Confirmation (FOC Interval) is the average response time from receipt of valid LSR to distribution of a Firm Order Confirmation.

Exclusions

- Rejected LSRs
- Designated Holidays (New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas) are excluded from the interval calculation.
- LSRs which are identified and classified as "Projects"
- The following hours for Partially Mechanized and Non-mechanized LSRs are excluded from the interval calculation:

Residence Resale Group – Monday through Saturday 7:00PM until 7:00AM
From 7:00 PM Saturday until 7:00 AM Monday.

Business Resale, Complex, UNE Groups – Monday through Friday 6:00PM until 8:00AM
From 6:00 PM Friday until 8:00 AM Monday.

The hours excluded will be altered to reflect changes in the Center operating hours. The LCSC will accept faxed LSRs only during posted hours of operation.

The interval will be the amount of time accrued from receipt of the LSR until normal closing of the center if an LSR is worked using overtime hours.

In the case of a Partially Mechanized LSR received and worked after normal business hours, the interval will be set at one (1) minute.

- For ASRs processed in the Local Interconnection Service Center (LISC), all hours outside of Monday - Friday, 8:00-4:30 CST, should be excluded.
- Scheduled OSS Maintenance

Business Rules

- Fully Mechanized: The elapsed time from receipt of a valid electronically submitted LSR (date and time stamp in EDI, LENS or TAG) until the LSR is processed, appropriate service orders are generated and a Firm Order Confirmation is returned to the CLEC via EDI, LENS or TAG.
- Partially Mechanized: The elapsed time from receipt of a valid electronically submitted LSR (date and time stamp in EDI, LENS, or TAG) which falls out for manual handling until appropriate service orders are issued by a BellSouth service representative via Direct Order Entry (DOE) or Service Order Negotiation Generation System (SONGS) to SOCS and a Firm Order Confirmation is returned to the CLEC via EDI, LENS, or TAG.
- Total Mechanized: Combination of Fully Mechanized and Partially Mechanized LSRs which are electronically submitted by the CLEC.

¹⁵ Derived from BellSouth SQM O-9: Firm Order Confirmation Timeliness. See David Coon Direct Testimony, submitted July 16, 2001, Exhibit DAC-1 pp. 2-22 through 2-24.

TN-O-9: Firm Order Confirmation Timeliness

- **Non-Mechanized:** The elapsed time from receipt of a valid paper LSR (date and time stamp of FAX or date and time paper LSRs received in LCSC) until appropriate service orders are issued by a BellSouth service representative via Direct Order Entry (DOE) or Service Order Negotiation Generation System (SONGS) to SOCS and a Firm Order Confirmation is sent to the CLEC via LON.
- **Interconnection Trunks:** Interconnection Trunks are ordered on Access Service Requests (ASRs). ASRs are submitted to and processed by the Local Interconnection Service Center (LISC). Trunk data is reported separately.

Calculation

Firm Order Confirmation Interval = (a - b)

- a = Date & Time of Firm Order Confirmation
- b = Date & Time of Service Request Receipt

Average FOC Interval = (c ÷ d)

- c = Sum of all FOC Intervals
- d = Total Number of Service Requests Confirmed in Reporting Period

FOC Interval Distribution (for each interval) = (e ÷ f) X 100

- e = Service Requests Confirmed in interval
- f = Total Service Requests Confirmed in the Reporting Period

Report Structure

- Fully Mechanized, Partially Mechanized, Total Mechanized, Non-Mechanized
 - CLEC Specific
 - CLEC Aggregate
- Geographic Scope
 - State
- Fully Mechanized:
 - 0 - =15 minutes
 - > 15 - =30 minutes
 - > 30 - =45 minutes
 - > 45 - =60 minutes
 - > 60 - =90 minutes
 - > 90 - =120 minutes
 - > 120 - =180 minutes
 - 0 - =3 hours
 - > 3 - =6 hours
 - > 6 - =12 hours
 - > 12 - =24 hours
 - > 24 - =48 hours
 - > 48 hours

TN-O-9: Firm Order Confirmation Timeliness

- Partially Mechanized:

- 0 - =4 hours
- > 4 - =8 hours
- > 8 - =10 hours
- 0 - =10 hours
- > 10 - =18 hours
- 0 - =18 hours
- > 18 - =24 hours
- 0 - =24 hours
- > 24 - =48 hours
- > 48 hours

- Non-Mechanized:

- 0 - =4 hours
- > 4 - =8 hours
- > 8 - =12 hours
- > 12 - =16 hours
- > 16 - =20 hours
- > 20 - =24 hours
- > 24 - =36 hours
- 0 - =36 hours
- > 36 - =48 hours
- > 48 hours

- Trunks:

- 0 - =5 days
- > 5 - =10 days
- 0 - =10 days
- > 10 - =15 days
- > 15 - =20 days
- 20 days

TN-O-9: Firm Order Confirmation Timeliness

Disaggregation

Fully Mechanized, Partially Mechanized, Non-Mechanized, Interconnection Trunks

1. Resold Residence POTS
2. Resold Business POTS
3. Resold Design
4. Resold PBX
5. Resold Centrex/Centrex-like
6. Resold BRI ISDN
7. Resold PRI ISDN
8. Resold DID Trunks
9.LNP
10. UNE Platform
11. 2 wire analog design
12. 2 wire analog non-design
13. UNE Digital Loop Less than DS1
14.UNE DS1
15. UNE DS3 and greater
16. Unbundled ISDN BRI
17. Unbundled ISDN PRI
18. Unbundled ADSL
19. Unbundled HDSL
20. UCL (short and long)
21. Unbundled 2 wire xDSL Loop
22 Unbundled 4 wire xDSL Loop
23 Other Unbundled Loops Design
24. Other Unbundled Loops Non-Design
25 Unbundled UDC/IDSL loop
26 UNE Switch Port
27 Local Interoffice Trunks
28 Line Sharing/High Frequency Spectrum UNE
29 Line Splitting/High Frequency Spectrum UNE
30 Enhanced Extended Loops (eels)Dispatch
31 Special Access to EELs Conversion

Benchmark

Fully Mechanized 95% within 1 hour

Partially Mechanized 95% within 5 hours

Non-Mechanized 95% within 24 hours

Interconnection Trunks 95% within 48 hours

Enforcement Mechanism

Tier-1

Tier-2

Implementation Date

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

TN-O-10: Service Inquiry with LSR Firm Order Confirmation (FOC) Response Time Manual¹⁶

Definition

This report measures the interval and the percent within the interval from the submission of a Service Inquiry (SI) with Firm Order LSR to the distribution of a Firm Order Confirmation (FOC).

Exclusions

- Designated Holidays (New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas) are excluded from the interval calculation.
- Weekend hours from 5:00PM Friday until 8:00AM Monday are excluded from the interval calculation of the Service Inquiry.
- Canceled Requests
- Electronically Submitted Requests
- For ASRs processed in the Local Interconnection Service Center (LISC), all hours outside of Monday - Friday, 8:00 - 4:30 CST, should be excluded.
- Scheduled OSS Maintenance

Business Rules

This measurement combines four intervals:

1. From receipt of Service Inquiry with LSR to hand off to the Service Advocacy Center (SAC) for Loop 'Look-up'.
2. From SAC start date to SAC complete date.
3. From SAC complete date to the Complex Resale Support Group (CRSG) complete date with hand off to LCSC.
4. From receipt of SI/LSR in the LCSC to Firm Order Confirmation.

Calculation

FOC Timeliness Interval = (a - b)

- a = Date and Time Firm Order Confirmation (FOC) for SI with LSR returned to CLEC
- b = Date and Time SI with LSR received

Average Interval = (c ÷ d)

- c = Sum of all FOC Timeliness Intervals
- d = Total number of SIs with LSRs received in the reporting period

Percent Within Interval = (e ÷ f) X 100

- e = Total number of Service Inquiries with LSRs received by the CRSG to distribution of FOC by the Local Carrier Service Center (LCSC)
- f = Total number of Service Inquiries with LSRs received in the reporting period

¹⁶ Derived from BellSouth SQM O-10: Service Inquiry with LSR Firm Order Confirmation (FOC) Response Time Manual. See David Coon Direct Testimony, submitted July 16, 2001, Exhibit DAC-1 pp. 2-25 through 2-26.

**TN-O-10: Service Inquiry with LSR Firm Order Confirmation (FOC) Response
Time Manual**

Report Structure

- CLEC Aggregate
- CLEC Specific
- Geographic Scope
 - State
- Intervals
 - 0 – =3 days
 - > 3 – =5 days
 - 0 – =5 days
 - > 5 – =7 days
 - > 7 – =10 days
 - > 10 – =15 days
 - > 15 days
- Average Interval measured in days

Disaggregation

ADSL, HDSL, UCL, IDSL (UDC), Interoffice Transport

Benchmark

95% within 5 days

Enforcement Mechanism

Tier-1

Tier-2

Implementation Date

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

TN-O-11: Firm Order Confirmation and Reject Response Completeness¹⁷

Definition

A response is expected from BellSouth for every Local Service Request transaction (version). More than one response or differing responses per transaction is not expected. Firm Order Confirmation and Reject Response Completeness is the corresponding number of Local Service Requests received to the combination of Firm Order Confirmation and Reject Responses.

Exclusions

- Service Requests canceled by the CLEC prior to FOC or Rejected/Clarified
- Scheduled OSS Maintenance

Business Rules

Mechanized – The number of FOCs or Auto Clarifications sent to the CLEC from LENS, EDI, TAG in response to electronically submitted LSRs (date and time stamp in LENS, EDI, TAG).

Partially Mechanized – The number of FOCs or Rejects sent to the CLEC from LENS, EDI, TAG in response to electronically submitted LSRs (date and time stamp in LENS, EDI, TAG), which fall out for manual handling by the LCSC personnel.

Total Mechanized – The number of the combination of Fully Mechanized and Partially Mechanized LSRs.

Non-Mechanized – The number of FOCs or Rejects sent to the CLEC via FAX Server in response to manually submitted LSRs (date and time stamp in FAX Server).

For CLEC Results:

Firm Order Confirmation and Reject Response Completeness is determined in two dimensions:

Percent responses is determined by computing the number of Firm Order Confirmations and Rejects transmitted by BellSouth and dividing by the number of Local Service Requests (all versions) received in the reporting period.

Percent of multiple responses is determined by computing the number of Local Service Request unique versions receiving more than one Firm Order Confirmation, Reject or the combination of the two and dividing by the number of Local Service Requests (all versions) received in the reporting period.

¹⁷ Derived from BellSouth TN-O-11: Firm Order Confirmation and Reject Response Completeness. See David Coon Direct Testimony, submitted July 16, 2001, Exhibit DAC-1 pp. 2-27 through 2-28.

TN-O-11: Firm Order Confirmation and Reject Response Completeness

Calculation

Firm Order Confirmation/Reject Response Completeness = $(a \div b) \times 100$

- a = Total Number of Service Requests for which a Firm Order Confirmation or Reject is Sent.
- b = Total Number of Service Requests Received in the Report Period

Firm Order Confirmation/Reject Response Completeness (Single Response) = $[(a + b) \div c] \times 100$

- a = Total Number of Single Firm Order Confirmations Per LSR Version
- b = Total Number of Single Reject Responses Per LSR Version
- c = Total Number of Service Requests (All Versions) Responded to in the Reporting Period

Report Structure

Fully Mechanized, Partially Mechanized, Total Mechanized, Non-Mechanized

- State
- CLEC Specific
- CLEC Aggregate
- BellSouth Specific

TN-O-11: Firm Order Confirmation and Reject Response Completeness

Disaggregation

Fully Mechanized, Partially Mechanized, Total Mechanized, Non-Mechanized

1. Resold Residence POTS
2. Resold Business POTS
3. Resold Design
4. Resold PBX
5. Resold Centrex/Centrex-like
6. Resold BRI ISDN
7. Resold PRI ISDN
8. Resold DID Trunks
9. LNP
10. UNE Platform
11. 2 wire analog design
12. 2 wire analog non-design
13. UNE Digital Loop Less than DS1
14. UNE DS1
15. UNE DS3 and greater
16. Unbundled ISDN BRI
17. Unbundled ISDN PRI
18. Unbundled ADSL
19. Unbundled HDSL
20. UCL (short and long)
21. Unbundled 2 wire xDSL Loop
22. Unbundled 4 wire xDSL Loop
23. Other Unbundled Loops Design
24. Other Unbundled Loops Non-Design
25. Unbundled UDC/IDSL loop
26. UNE Switch Port
27. Local Interoffice Trunks
28. Line Sharing/High Frequency Spectrum UNE
29. Line Splitting/High Frequency Spectrum UNE
30. Enhanced Extended Loops (eels) Dispatch
31. Special Access to EELs Conversion

Benchmark

95% returned

Enforcement Mechanism

Tier-1

Tier-2

Implementation Date

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

TN-O-12: Speed of Answer in Ordering Center¹⁸

Definition

Measures the average time a customer is in queue.

Exclusions

None

Business Rules

The clock starts when the appropriate option is selected (i.e., 1 for Resale Consumer, 2 for Resale Multiline, and 3 for UNE-LNP, etc.) and the call enters the queue for that particular group in the LCSC or CWINS. The clock stops when a BellSouth service representative in the LCSC or CWINS answers the call. The speed of answer is determined by measuring and accumulating the elapsed time from the entry of a CLEC call into the BellSouth automatic call distributor (ACD) until a service representative in BellSouth's Local Carrier Service Center (LCSC) or Customer Wholesale Interconnection Services Center (CWINS) answers the CLEC call.

Calculation

Speed of Answer in Ordering Center = $(a \div b)$

- a = Total seconds in queue
- b = Total number of calls answered in the Reporting Period

Report Structure

Aggregate

- CLEC
 - Local Carrier Service Center
 - Customer Wholesale Interconnection Network Services Center (formerly the UNE Center) (Provisioning).
- BellSouth
 - Business Service Center
 - Residence Service Center

Disaggregation

Aggregate

- CLEC
 - Local Carrier Service Center
 - Customer Wholesale Interconnection Network Services Center (formerly the UNE Center) (Provisioning).
- BellSouth
 - Business Service Center
 - Residence Service Center

¹⁸ Derived from BellSouth SQM O-12: Speed of Answer in Ordering Center. See David Coon Direct Testimony, submitted July 16, 2001, Exhibit DAC-1 pp. 2-29 through 2-30.

TN-O-12: Speed of Answer in Ordering Center

Benchmark

Greater than 95% of calls by center answered within 20 seconds and 100% of calls answered within 30 seconds.

Enforcement Mechanism

Tier-2

Implementation Date

90 days from final order

TN-P-1: Mean Held Order Interval & Distribution Intervals¹⁹

Definition

When delays occur in completing CLEC orders, the average period that CLEC orders are held for BellSouth reasons, pending a delayed completion, should be no worse for the CLEC when compared to BellSouth delayed orders. Calculation of the interval is the total days orders are held and pending but not completed that have passed the currently committed due date; divided by the total number of held orders. This report is based on orders still pending, held and past their committed due date at the close of the reporting period. The distribution interval is based on the number of orders held and pending but not completed over 15 and 90 days. (Orders reported in the ≥ 90 -day interval are also included in the ≥ 15 -day interval.)

Exclusions

- Order Activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Listing Orders, Test Orders, etc.). Order types may be N, C or T.
- Disconnect (D) & From (F) orders
- Orders with appointment code of 'A' for Rural orders.

Business Rules

Mean Held Order Interval: This metric is computed at the close of each report period. The held order interval is established by first identifying all orders, at the close of the reporting interval, that both have not been reported as completed in SOCS and have passed the currently committed due date for the order. For each such order, the number of calendar days between the earliest committed due date on which BellSouth had a company missed appointment and the close of the reporting period is established and represents the held order interval for that particular order. The held order interval is accumulated by the standard groupings, unless otherwise noted, and the reason for the order being held. The total number of days accumulated in a category is then divided by the number of held orders within the same category to produce the mean held order interval. The interval is by calendar days with no exclusions for Holidays (New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas) or Sundays. CLEC Specific reporting is by type of held order (facilities, equipment, other), total number of orders held, and the total and average days.

Held Order Distribution Interval: This measure provides data to report total days held and identifies these in categories of ≥ 15 days and ≥ 90 days. (Orders counted in ≥ 90 days are also included in ≥ 15 days).

¹⁹Derived from BellSouth SQM P-1: Mean Held Order Interval & Order Completion Interval Distribution. See Direct Testimony of David A. Coon filed July 16, 2001, Exhibit DAC-1, pp. 3-1 through 3-3.

TN-P-1: Mean Held Order Interval & Distribution Intervals

Calculation

Mean Held Order Interval = $a \div b$

- a = Sum of held-over-days for all Past Due Orders with a BellSouth Missed Appointment from the earlier BellSouth Missed Appointment.
- b = Number of Past Due Orders Held and Pending But Not Completed and past the committed due date

Held Order Distribution Interval (for each interval) = $(c \div d) \times 100$

- c = # of Orders Held for ≥ 15 days or # of Orders Held for ≥ 90 days
- d = Total # of Past Due Orders Held and Pending But Not Completed

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Circuit Breakout $< 10, \geq 10$ (except trunks)
- Tennessee Specific

Benchmark: Parity with BellSouth retail

Enforcement mechanism: Tier 1 and Tier 2

Implementation date: Ten (10) days after the Authority issues a final order, unless otherwise ordered.

Product Disaggregation and Retail Analogs for TN-P-1: Mean Held Order Interval & Distribution Intervals

No.	Product Level Disaggregation	Retail Analog
1	Resold Residence POTS	Retail Residence
2	Resold Business POTS	Retail Business
3	Resold Design	Retail Design
4	Resold PBX	Retail PBX
5	Resold Centrex/Centrex-like	Retail Centrex
6	Resold BRI ISDN	Retail ISDN BRI
7	Resold PRI ISDN	Retail ISDN PRI
8	Resold DID Trunks	Retail DID Trunks
9	UNE Platform – Dispatch In	Retail residence and business
10	UNE Platform – Dispatch Out	Retail residence and business
11	2-Wire Analog Design - Dispatch In	Retail residence and Business Dispatch
12	2-Wire Analog Design - Dispatch Out	Retail residence and Business Dispatch
13	2-Wire Analog Non-Design – Dispatch In	Retail residence and Business Dispatch
14	2-Wire Analog Non-Design – Dispatch Out	Retail residence and Business Dispatch
15	UNE Digital Loop Less than DS1 – Dispatch In	Retail residence and Business Dispatch
16	UNE Digital Loop Less than DS1 – Dispatch Out	Retail residence and Business Dispatch
17	UNE DS1	Retail Digital Loop DS1
18	UNE DS3 and greater	Retail Digital Loop DS3 or greater
19	Unbundled ISDN BRI	Retail ISDN BRI
20	Unbundled ISDN PRI	Retail ISDN PRI
21	Unbundled ADSL	ADSL provided to retail
22	Unbundled HDSL	ADSL provided to retail
23	UCL (short and long)	ADSL provided to retail
24	Unbundled 2 wire xDSL Loop	ADSL provided to retail
25	Unbundled 4 wire xDSL Loop	ADSL provided to retail
26	Other Unbundled Loops Design – Dispatch In	Retail residence and business design dispatch
27	Other Unbundled Loops Design – Dispatch Out	Retail residence and business design dispatch
28	Other Unbundled Loops Non-Design – Dispatch In	Retail residence and business design dispatch
29	Other Unbundled Loops Non-Design – Dispatch Out	Retail residence and business design dispatch
30	Unbundled UDC/IDSL loop	Retail ISDN BRI
31	UNE Switch Port	Residence and Business (POTS)
32	Local Interoffice Trunks	Retail DS1/DS3 Interoffice
33	Line Sharing/High Frequency Spectrum UNE	ADSL provided to retail
34	Line Splitting/High Frequency Spectrum UNE	ADSL provided to retail
35	Enhanced Extended Loops (EELs) Dispatch	Special Access (backhauled T1)

36	Special Access to EELs Conversion	Retail Project
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TN-P-2: Average Jeopardy Notice Interval

TN-P-3: Percentage of Orders Given Jeopardy Notices²⁰

Definition

When BellSouth can determine in advance that a committed due date is in jeopardy for facility delay, it will provide advance notice to the CLEC. The interval is from the date/time the notice is released to the CLEC/BellSouth systems until 5pm on the commitment date of the order. The Percent of Orders is the percentage of orders given jeopardy notices for facility delay in the count of orders confirmed in the report period.

Exclusions

- Orders held for CLEC end user reasons
- Disconnect (D) & From (F) orders
- Non-Dispatch Orders
- Orders with Jeopardy Notice when jeopardy is identified after 5pm on the due date (technician on premise has attempted to provide service but must refer to Engineering or Cable Repair for facility jeopardy).

Business Rules

The number of committed orders in a report period is the number of orders that have a due date in the reporting period. Jeopardy notices for interconnection trunks results are usually zero as these trunks seldom experience facility delays. The Committed due date is considered the Confirmed due date. This report measures dispatched orders only. If an order is originally sent as non-dispatch, and it is determined there is a facility delay, the order is converted to a dispatch code so the facility problem can be corrected. It will remain coded dispatched until completion.

Calculation

Jeopardy Interval = a - b

- a = Date and Time of Jeopardy Notice
- b = Date and Time of Scheduled Due Date on Service Order

Average Jeopardy Interval = c ÷ d

- c = Sum of all jeopardy intervals
- d = Number of Orders Notified of Jeopardy in Reporting Period

Percent of Orders Given Jeopardy Notice = (e ÷ f) X 100

- e = Number of Orders Given Jeopardy Notices in Reporting Period
- f = Number of Orders Confirmed (due) in Reporting Period

²⁰Derived from BellSouth SQM P-2: Average Jeopardy Notice Interval & Percentage of Orders Given Jeopardy Notices. See Direct Testimony of David A. Coon filed July 16, 2001, Exhibit DAC-1, pp. 3-4 through 3-6.

TN-P-2: Average Jeopardy Notice Interval

TN-P-3: Percentage of Orders Given Jeopardy Notices

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Dispatch Orders
- Mechanized Orders
- Non-Mechanized Orders
- Tennessee Specific

Benchmark:

TN-P-2: Average Jeopardy Notice Interval: 95% within at least 48 hours of 5:00 p.m. on the commitment date of the order, including all orders whether submitted through mechanized or non-mechanized means.

TN-P-3: Percentage of Orders Given Jeopardy Notices: Parity with BellSouth retail

Enforcement mechanism: Tier 1 and Tier 2

Implementation date: Ten (10) days after the Authority issues a final order, unless otherwise ordered.

Product disaggregation for TN-P-2: Average Jeopardy Notice Interval

No.	Product Level Disaggregation
1	Resold Residence POTS
2	Resold Business POTS
3	Resold Design
4	Resold PBX
5	Resold Centrex/Centrex-like
6	Resold BRI ISDN
7	Resold PRI ISDN
8	Resold DID Trunks
9	UNE Platform – Dispatch In
10	UNE Platform – Dispatch Out
11	2-Wire Analog Design - Dispatch In
12	2-Wire Analog Design - Dispatch Out
13	2-Wire Analog Non-Design – Dispatch In
14	2-Wire Analog Non-Design – Dispatch Out
15	UNE Digital Loop Less than DS1 – Dispatch In
16	UNE Digital Loop Less than DS1 – Dispatch Out
17	UNE DS1
18	UNE DS3 and greater
19	Unbundled ISDN BRI
20	Unbundled ISDN PRI
21	Unbundled ADSL
22	Unbundled HDSL
23	UCL (short and long)
24	Unbundled 2 wire xDSL Loop
25	Unbundled 4 wire xDSL Loop
26	Other Unbundled Loops Design – Dispatch In
27	Other Unbundled Loops Design – Dispatch Out
28	Other Unbundled Loops Non-Design – Dispatch In
29	Other Unbundled Loops Non-Design – Dispatch Out
30	Unbundled UDC/IDSL loop
31	UNE Switch Port
32	Local Interoffice Trunks
33	Line Sharing/High Frequency Spectrum UNE
34	Line Splitting/High Frequency Spectrum UNE
35	Enhanced Extended Loops (EELs) Dispatch
36	Special Access to EELs Conversion

Product disaggregation and retail analogs for TN-P-3: Percentage of Orders Given Jeopardy Notices

No.	Product Level Disaggregation	Retail Analog
1	Resold Residence POTS	Retail Residence
2	Resold Business POTS	Retail Business
3	Resold Design	Retail Design
4	Resold PBX	Retail PBX
5	Resold Centrex/Centrex-like	Retail Centrex
6	Resold BRI ISDN	Retail ISDN BRI
7	Resold PRI ISDN	Retail ISDN PRI
8	Resold DID Trunks	Retail DID Trunks
9	UNE Platform – Dispatch In	Retail residence and business
10	UNE Platform – Dispatch Out	Retail residence and business
11	2-Wire Analog Design - Dispatch In	Retail residence and Business Dispatch
12	2-Wire Analog Design - Dispatch Out	Retail residence and Business Dispatch
13	2-Wire Analog Non-Design – Dispatch In	Retail residence and Business Dispatch
14	2-Wire Analog Non-Design – Dispatch Out	Retail residence and Business Dispatch
15	UNE Digital Loop Less than DS1 – Dispatch In	Retail residence and Business Dispatch
16	UNE Digital Loop Less than DS1 – Dispatch Out	Retail residence and Business Dispatch
17	UNE DS1	Retail Digital Loop DS1
18	UNE DS3 and greater	Retail Digital Loop DS3 or greater
19	Unbundled ISDN BRI	Retail ISDN BRI
20	Unbundled ISDN PRI	Retail ISDN PRI
21	Unbundled ADSL	ADSL provided to retail
22	Unbundled HDSL	ADSL provided to retail
23	UCL (short and long)	ADSL provided to retail
24	Unbundled 2 wire xDSL Loop	ADSL provided to retail
25	Unbundled 4 wire xDSL Loop	ADSL provided to retail
26	Other Unbundled Loops Design – Dispatch In	Retail residence and business design dispatch
27	Other Unbundled Loops Design – Dispatch Out	Retail residence and business design dispatch
28	Other Unbundled Loops Non-Design – Dispatch In	Retail residence and business design dispatch
29	Other Unbundled Loops Non-Design – Dispatch Out	Retail residence and business design dispatch
30	Unbundled UDC/IDSL loop	Retail ISDN BRI
31	UNE Switch Port	Residence and Business (POTS)
32	Local Interoffice Trunks	Retail DS1/DS3 Interoffice
33	Line Sharing/High Frequency Spectrum UNE	ADSL provided to retail
34	Line Splitting/High Frequency Spectrum UNE	ADSL provided to retail
35	Enhanced Extended Loops (EELs) Dispatch	Special Access (backhauled T1)
36	Special Access to EELs Conversion	Retail Project

TN-P-4: Percent Missed Installation Appointments²¹

Definition

“Percent missed installation appointments” monitors the reliability of BellSouth commitments with respect to committed due dates to assure that the CLEC can reliably quote expected due dates to their retail customer as compared to BellSouth. This measure is the percentage of total orders processed for which BellSouth is unable to complete the service orders on the committed due dates and reported for Total misses and End User Misses.

Exclusions

- Canceled Service Orders
- Order Activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Listing Orders Test Orders, etc.). Order types may be N, C or T.
- Disconnect (D) & From (F) orders
- End User Misses on Local Interconnection Trunks

Business Rules

Percent Missed Installation Appointments (PMI) is the percentage of orders with completion dates in the reporting period that are past the original committed due date. The measurement will include the appointment time in those cases where the CLEC has ordered a time-specific appointment. Missed Appointments caused by end-user reasons will be included and reported separately. The first commitment date on the service order that is a missed appointment is the missed appointment code used for calculation whether it is a BellSouth missed appointment or an End User missed appointment. The “due date” is any time on the confirmed due date. Which means there cannot be a cutoff time for commitments, as certain types of orders are requested to be worked after standard business hours. Also, during Daylight Savings Time, field technicians are scheduled until 9PM in some areas and the customer is offered a greater range of intervals from which to select.

Calculation

Percent Missed Installation Appointments = $(a \div b) \times 100$

- a = Number of Orders with Completion date in Reporting Period past the Original Committed Due Date
- b = Number of Orders Completed in Reporting Period

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Report in Categories of <10 lines/circuits ≥10 lines/circuits
- Dispatch/Non-Dispatch
- Tennessee specific

²¹Derived from BellSouth SQM P-3: Percent Missed Installation Appointments. See Direct Testimony of David A. Coon filed July 16, 2001, Exhibit DAC-1, pp. 3-7 through 3-9.

TN-P-4: Percent Missed Installation Appointments,

Report Explanation: The difference between End User MA and Total MA is the result of BellSouth caused misses. Here, Total MA is the total percent of orders missed either by BellSouth or CLEC end user. The End User MA represents the percentage of orders missed by the CLEC or their end user.

Benchmark: Parity with BellSouth retail

Enforcement mechanism: Tier 1 and Tier 2

Implementation date: Within 90 days of final Order

Product disaggregation and retail analogs for TN-P-4: Percent Missed Installation Appointments

No.	Product Level Disaggregation	Retail Analog
1	Resold Residence POTS	Retail Residence
2	Resold Business POTS	Retail Business
3	Resold Design	Retail Design
4	Resold PBX	Retail PBX
5	Resold Centrex/Centrex-like	Retail Centrex
6	Resold BRI ISDN	Retail ISDN BRI
7	Resold PRI ISDN	Retail ISDN PRI
8	Resold DID Trunks	Retail DID Trunks
9	UNE Platform – Dispatch In	Retail residence and business
10	UNE Platform – Dispatch Out	Retail residence and business
11	2-Wire Analog Design - Dispatch In	Retail residence and Business Dispatch
12	2-Wire Analog Design - Dispatch Out	Retail residence and Business Dispatch
13	2-Wire Analog Non-Design – Dispatch In	Retail residence and Business Dispatch
14	2-Wire Analog Non-Design – Dispatch Out	Retail residence and Business Dispatch
15	UNE Digital Loop Less than DS1 – Dispatch In	Retail residence and Business Dispatch
16	UNE Digital Loop Less than DS1 – Dispatch Out	Retail residence and Business Dispatch
17	UNE DS1	Retail Digital Loop DS1
18	UNE DS3 and greater	Retail Digital Loop DS3 or greater
19	Unbundled ISDN BRI	Retail ISDN BRI
20	Unbundled ISDN PRI	Retail ISDN PRI
21	Unbundled ADSL	ADSL provided to retail
22	Unbundled HDSL	ADSL provided to retail
23	UCL (short and long)	ADSL provided to retail
24	Unbundled 2 wire xDSL Loop	ADSL provided to retail
25	Unbundled 4 wire xDSL Loop	ADSL provided to retail
26	Other Unbundled Loops Design – Dispatch In	Retail residence and business design dispatch
27	Other Unbundled Loops Design – Dispatch Out	Retail residence and business design dispatch
28	Other Unbundled Loops Non-Design – Dispatch In	Retail residence and business design dispatch
29	Other Unbundled Loops Non-Design – Dispatch Out	Retail residence and business design dispatch
30	Unbundled UDC/IDSL loop	Retail ISDN BRI
31	UNE Switch Port	Residence and Business (POTS)
32	Local Interoffice Trunks	Retail DS1/DS3 Interoffice
33	Line Sharing/High Frequency Spectrum UNE	ADSL provided to retail
34	Line Splitting/High Frequency Spectrum UNE	ADSL provided to retail
35	Enhanced Extended Loops (EELs) Dispatch	Special Access (backhauled T1)
36	Special Access to EELs Conversion	Retail Project

TN-P-5: Percent Completions/Attempts without notice or with less than 24 hours notice²²

Definition

Records the percentage of time that BellSouth attempts to deliver service to customers without providing at least 24 hours' notice to CLECs.

Exclusions

- Completions or Attempts Without Notice less than 24 hours' notice delivery that the CLEC specifically requested.

Business Rules

- **For CLEC Results:**
Calculation would exclude any successful or unsuccessful service delivery that the CLEC was informed of at least 24 hours in advance. ILEC may also exclude from calculation deliveries on less than 24 hours' notice that CLEC requested.
- **For ILEC Results:**
The ILEC reports completions for which ILEC technicians delivered service to customers without giving sufficient notice to customers, sales or to internal account team to arrange for appropriate vendors to be on hand. Calculation of insufficient notice is similar to CLEC calculation (none or less than 24 hours). Similar surprise service deliveries are calculated for ILEC affiliate's account representatives.

Calculation

Percent Completions or Attempts without Notice or with Less Than 24 Hours Notice
= [(Completion Dispatches (Successful and Unsuccessful) With no FOC Received Within 24 Hours of Due Date) / (All Completions)] X 100

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Tennessee Specific

Benchmark: Greater than 95 percent of Completion and Completion Attempts Should Receive More than 24 Hours Notice

Enforcement mechanism: Tier 1 and Tier 2

Implementation date: Within 90 days of final Order

²²Derived from CLEC-proposed measurement Percent Completions/Attempts without notice or with less than 24 hours notice. See Direct Testimony of Karen Kinard, filed August 10, 2001, pp. 14 & 23 and Exhibit KK-C, p. 4.

Product disaggregation for TN-P-5: Percent Completions/Attempts without notice or with less than 24 hours notice

No.	Product Level Disaggregation
1	Resold Residence POTS
2	Resold Business POTS
3	Resold Design
4	Resold PBX
5	Resold Centrex/Centrex-like
6	Resold BRI ISDN
7	Resold PRI ISDN
8	Resold DID Trunks
9	UNE Platform – Dispatch In
10	UNE Platform – Dispatch Out
11	2-Wire Analog Design - Dispatch In
12	2-Wire Analog Design - Dispatch Out
13	2-Wire Analog Non-Design – Dispatch In
14	2-Wire Analog Non-Design – Dispatch Out
15	UNE Digital Loop Less than DS1 – Dispatch In
16	UNE Digital Loop Less than DS1 – Dispatch Out
17	UNE DS1
18	UNE DS3 and greater
19	Unbundled ISDN BRI
20	Unbundled ISDN PRI
21	Unbundled ADSL
22	Unbundled HDSL
23	UCL (short and long)
24	Unbundled 2 wire xDSL Loop
25	Unbundled 4 wire xDSL Loop
26	Other Unbundled Loops Design – Dispatch In
27	Other Unbundled Loops Design – Dispatch Out
28	Other Unbundled Loops Non-Design – Dispatch In
29	Other Unbundled Loops Non-Design – Dispatch Out
30	Unbundled UDC/IDSL loop
31	UNE Switch Port
32	Local Interoffice Trunks
33	Line Sharing/High Frequency Spectrum UNE
34	Line Splitting/High Frequency Spectrum UNE
35	Enhanced Extended Loops (EELs) Dispatch
36	Special Access to EELs Conversion

TN-P-6: Average Completion Interval

TN-P-7: Order Completion Interval Distribution²³

Definition

The “average completion interval” measure monitors the interval of time it takes BellSouth to provide service for the CLEC or its own customers. The “Order Completion Interval Distribution” provides the percentages of orders completed within certain time periods. This report measures how well BellSouth meets the interval offered to customers on service orders.

Exclusions

- Canceled Service Orders
- Order Activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Listing Orders, Test Orders, etc.). Order types may be N, C or T.
- Disconnect (D&F) orders (Except “D” orders associated with LNP Standalone)
- “L” Appointment coded orders (where the customer has requested a later than offered interval)
- End User-Caused misses

Business Rules

The actual completion interval is determined for each order processed during the reporting period. The completion interval is the elapsed time from when BellSouth receives a valid LSR from the CLEC to BellSouth’s actual order completion date. The clock starts when a valid LSR is received from the CLEC and stops when the technician or system completes the order in SOCS. Elapsed time for each order is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the associated total number of orders completed. Orders that are worked on zero due dates are calculated with a .33-day interval (8 hours) in order to report a portion of a day interval. These orders are issued and worked/completed on the same day. They can be either flow through orders (no field work-non-dispatched) or field orders (dispatched).

The interval breakout for UNE and Design is: 0-5 = 0-≤5, 5-10 = >5-≤10, 10-15 = >10-≤15, 15-20 = >15-≤20, 20-25 = >20-≤25, 25-30 = >25-≤30, and > 30.

Calculation

Completion Interval = (a - b)

- a = Completion Date
- b = Date/Time of Receipt of Valid LSR from CLEC (Application Date)

Average Completion Interval = (c ÷ d)

- c = Sum of all Completion Intervals
- d = Count of Orders Completed in Reporting Period

Order Completion Interval Distribution (for each interval) = (e ÷ f) X 100

- e = Service Orders Completed in “X” days
- f = Total Service Orders Completed in Reporting Period

²³Derived from BellSouth SQM P-4: Average Completion Interval (OCI) & Order Completion Interval Distribution See Direct Testimony of David A. Coon filed July 16, 2001, Exhibit DAC-1, pp. 3-10 through 3-12.

TN-P-6: Average Completion Interval

TN-P-7: Order Completion Interval Distribution

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Dispatch/Non-Dispatch categories applicable to all levels except trunks
- Residence & Business reported in day intervals = 0,1,2,3,4,5,5+
- UNE and Design reported in day intervals of 0-5 = $0 \leq 5$, 5-10 = $5 < 10$, 10-15 = $10 \leq 15$, 15-20 = $15 < 20$, 20-25 = $20 \leq 25$, 25-30 = $25 < 30$, and > 30
- All Levels are reported < 10 line/circuits; ≥ 10 line/circuits (except trunks)
- ISDN Orders included in Non-Design
- Tennessee specific

Benchmark: 95 percent within “x” days unless otherwise noted

Enforcement mechanism: Tier 1 and Tier 2

Implementation date: Within 90 days of final Order

Product disaggregation for:**TN-P-6: Average Completion Interval****TN-P-7: Order Completion Interval Distribution**

No.	Product Level Disaggregation	Retail Analog
1	Resold Residence POTS	Retail Residence
2	Resold Business POTS	Retail Business
3	Resold Design	Retail Design
4	Resold PBX	Retail PBX
5	Resold Centrex/Centrex-like	Retail Centrex
6	Resold BRI ISDN	Retail ISDN BRI
7	Resold PRI ISDN	Retail ISDN PRI
8	Resold DID Trunks	Retail DID Trunks
9	UNE Platform – Dispatch In	Retail residence and business
10	UNE Platform – Dispatch Out	Retail residence and business
11	2-Wire Analog Design - Dispatch In	Retail residence and Business Dispatch
12	2-Wire Analog Design - Dispatch Out	Retail residence and Business Dispatch
13	2-Wire Analog Non-Design – Dispatch In	Retail residence and Business Dispatch
14	2-Wire Analog Non-Design – Dispatch Out	Retail residence and Business Dispatch
15	UNE Digital Loop Less than DS1 – Dispatch In	Retail residence and Business Dispatch
16	UNE Digital Loop Less than DS1 – Dispatch Out	Retail residence and Business Dispatch
17	UNE DS1	Retail Digital Loop DS1
18	UNE DS3 and greater	Retail Digital Loop DS3 or greater
19	Unbundled ISDN BRI	Retail ISDN BRI
20	Unbundled ISDN PRI	Retail ISDN PRI
21	Unbundled ADSL	ADSL provided to retail
22	Unbundled HDSL	ADSL provided to retail
23	UCL (short and long)	ADSL provided to retail
24	Unbundled 2 wire xDSL Loop	ADSL provided to retail
25	Unbundled 4 wire xDSL Loop	ADSL provided to retail
26	Other Unbundled Loops Design – Dispatch In	Retail residence and business design dispatch
27	Other Unbundled Loops Design – Dispatch Out	Retail residence and business design dispatch
28	Other Unbundled Loops Non-Design – Dispatch In	Retail residence and business design dispatch
29	Other Unbundled Loops Non-Design – Dispatch Out	Retail residence and business design dispatch
30	Unbundled UDC/IDSL loop	Retail ISDN BRI
31	UNE Switch Port	Residence and Business (POTS)
32	Local Interoffice Trunks	Retail DS1/DS3 Interoffice
33	Line Sharing/High Frequency Spectrum UNE	ADSL provided to retail
34	Line Splitting/High Frequency Spectrum UNE	ADSL provided to retail
35	Enhanced Extended Loops (EELs) Dispatch	Special Access (backhauled T1)
36	Special Access to EELs Conversion	Retail Project

TN-P-8: Average Completion Notice Interval²⁴

Definition

The Completion Notice Interval is the elapsed time between the BellSouth reported completion of work and the issuance of a valid completion notice to the CLEC.

Exclusions

- Cancelled Service Orders
- Order Activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Listing Orders, Test Orders, etc.). Order types may be N, C or T.
- D&F orders (Exception: "D" orders associated with LNP Standalone)

Business Rules

Measurement on interval of completion date and time entered by a field technician on dispatched orders, and 5PM start time on the due date for non-dispatched orders; to the release of a notice to the CLEC/BellSouth of the completion status. The field technician notifies the CLEC the work was complete and then he/she enters the completion time stamp information in his/her computer. This information switches through to the SOCS systems either completing the order or rejecting the order to the Work Management Center (WMC). If the completion is rejected, it is manually corrected and then completed by the WMC. The notice is returned on each individual order. The start time for all orders is the completion stamp either by the field technician or the 5PM due date stamp; the end time for mechanized orders is the time stamp the notice was transmitted to the CLEC interface (LENS, EDI, OR TAG). For non-mechanized orders the end timestamp will be timestamp of order update to C-SOTS system.

Calculation

Completion Notice Interval = (a - b)

- a = Date and Time of Notice of Completion
- b = Date and Time of Work Completion

Average Completion Notice Interval = $c \div d$

- c = Sum of all Completion Notice Intervals
- d = Number of Orders with Notice of Completion in Reporting Period

²⁴ Derived from BellSouth SQM P-5: Average Completion Notice Interval. See Direct Testimony of David A. Coon filed July 16, 2001, Exhibit DAC-1, pp. 3-13 through 3-15.

TN-P-8: Average Completion Notice Interval

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Mechanized Orders
- Non-Mechanized Orders
- Reporting intervals in Hours; 0,1-2,2-4,4-8,8-12,12-24, ≥ 24 plus Overall Average Hour Interval
(The categories are inclusive of these time intervals: $0-1 = 0 \leq 1$; $1-2 = >1 \leq 2$; $2-4 = >2 \leq 4$, etc.)
- Reported in categories of <10 line / circuits; ≥ 10 line/circuits (except trunks)
- Tennessee Specific

Benchmark: Parity with BellSouth retail

Enforcement mechanism: Tier 1 and Tier 2

Implementation date: Ten (10) days after the Authority issues a final order, unless otherwise ordered.

Product disaggregation and retail analogs for TN-P-8: Average Completion Notice Interval

No.	Product Level Disaggregation	Retail Analog
1	Resold Residence POTS	Retail Residence
2	Resold Business POTS	Retail Business
3	Resold Design	Retail Design
4	Resold PBX	Retail PBX
5	Resold Centrex/Centrex-like	Retail Centrex
6	Resold BRI ISDN	Retail ISDN BRI
7	Resold PRI ISDN	Retail ISDN PRI
8	Resold DID Trunks	Retail DID Trunks
9	UNE Platform – Dispatch In	Retail residence and business
10	UNE Platform – Dispatch Out	Retail residence and business
11	2-Wire Analog Design - Dispatch In	Retail residence and Business Dispatch
12	2-Wire Analog Design - Dispatch Out	Retail residence and Business Dispatch
13	2-Wire Analog Non-Design – Dispatch In	Retail residence and Business Dispatch
14	2-Wire Analog Non-Design – Dispatch Out	Retail residence and Business Dispatch
15	UNE Digital Loop Less than DS1 – Dispatch In	Retail residence and Business Dispatch
16	UNE Digital Loop Less than DS1 – Dispatch Out	Retail residence and Business Dispatch
17	UNE DS1	Retail Digital Loop DS1
18	UNE DS3 and greater	Retail Digital Loop DS3 or greater
19	Unbundled ISDN BRI	Retail ISDN BRI
20	Unbundled ISDN PRI	Retail ISDN PRI
21	Unbundled ADSL	ADSL provided to retail
22	Unbundled HDSL	ADSL provided to retail
23	UCL (short and long)	ADSL provided to retail
24	Unbundled 2 wire xDSL Loop	ADSL provided to retail
25	Unbundled 4 wire xDSL Loop	ADSL provided to retail
26	Other Unbundled Loops Design – Dispatch In	Retail residence and business design dispatch
27	Other Unbundled Loops Design – Dispatch Out	Retail residence and business design dispatch
28	Other Unbundled Loops Non-Design – Dispatch In	Retail residence and business design dispatch
29	Other Unbundled Loops Non-Design – Dispatch Out	Retail residence and business design dispatch
30	Unbundled UDC/IDSL loop	Retail ISDN BRI
31	UNE Switch Port	Residence and Business (POTS)
32	Local Interoffice Trunks	Retail DS1/DS3 Interoffice
33	Line Sharing/High Frequency Spectrum UNE	ADSL provided to retail
34	Line Splitting/High Frequency Spectrum UNE	ADSL provided to retail
35	Enhanced Extended Loops (EELs) Dispatch	Special Access (backhauled T1)
36	Special Access to EELs Conversion	Retail Project

TN-P-9: Coordinated Customer Conversions Interval²⁵

Definition

This report measures the average time it takes BellSouth to disconnect an unbundled loop from the BellSouth switch and cross connect it to CLEC equipment. This measurement applies to service orders with INP and with LNP, and where the CLEC has requested BellSouth to provide a coordinated cut over.

Exclusions

- Any order canceled by the CLEC will be excluded from this measurement
- Delays due to CLEC following disconnection of the unbundled loop
- Unbundled Loops where there is no existing subscriber loop and loops where coordination is not requested.

Business Rules

When the service order includes INP, the interval includes the total time for the cut over including the translation time to place the line back in service on the ported line. When the service order includes LNP, the interval only includes the total time for the cut over (the port of the number is controlled by the CLEC). If IDLC is involved, a four-hour window applies to the start time (8 A.M. to Noon or 1 P.M. to 5 P.M.) This applies if BellSouth notifies the CLEC by 10:30 A.M. on the day before the due date that the service is on IDLC.

Calculation

Coordinated Customer Conversions Interval = (a - b)

- a = Completion Date and Time for Cross Connection of a Coordinated Unbundled Loop
- b = Disconnection Date and Time of an Coordinated Unbundled Loop

Percent Coordinated Customer Conversions (for each interval) = $(c \div d) \times 100$

- c = Total number of Coordinated Customer Conversions for each interval
- d = Total Number of Unbundled Loop with Coordinated Conversions (items) for the reporting period

Report Structure

- CLEC Specific
- CLEC Aggregate
- The interval breakout is 0-5 = 0-≤5, 5-15 = >5-≤15, >15 = 15 and greater, plus Overall Average Interval.
- Tennessee specific

Benchmark: At least 95 percent within 15 minutes; 98% within 15 minutes after 6 months

Enforcement mechanism: Tier 1 and Tier 2

Implementation Date: Ten (10) days after the Authority issues a final order, unless otherwise ordered.

²⁵ Derived from BellSouth SQM P-6: Coordinated Customer Conversions Interval. See Direct Testimony of David A. Coon filed July 16, 2001, Exhibit DAC-1, pp. 3-16 through 3-17.

Product disaggregation for TN-P-9: Coordinated Customer Conversions Interval

No.	Product Level Disaggregation
1	Resold Residence POTS
2	Resold Business POTS
3	Resold Design
4	Resold PBX
5	Resold Centrex/Centrex-like
6	Resold BRI ISDN
7	Resold PRI ISDN
8	Resold DID Trunks
9	UNE Platform – Dispatch In
10	UNE Platform – Dispatch Out
11	2-Wire Analog Design - Dispatch In
12	2-Wire Analog Design - Dispatch Out
13	2-Wire Analog Non-Design – Dispatch In
14	2-Wire Analog Non-Design – Dispatch Out
15	UNE Digital Loop Less than DS1 – Dispatch In
16	UNE Digital Loop Less than DS1 – Dispatch Out
17	UNE DS1
18	UNE DS3 and greater
19	Unbundled ISDN BRI
20	Unbundled ISDN PRI
21	Unbundled ADSL
22	Unbundled HDSL
23	UCL (short and long)
24	Unbundled 2 wire xDSL Loop
25	Unbundled 4 wire xDSL Loop
26	Other Unbundled Loops Design – Dispatch In
27	Other Unbundled Loops Design – Dispatch Out
28	Other Unbundled Loops Non-Design – Dispatch In
29	Other Unbundled Loops Non-Design – Dispatch Out
30	Unbundled UDC/IDSL loop
31	UNE Switch Port
32	Local Interoffice Trunks
33	Line Sharing/High Frequency Spectrum UNE
34	Line Splitting/High Frequency Spectrum UNE
35	Enhanced Extended Loops (EELs) Dispatch
36	Special Access to EELs Conversion

TN-P-10: Coordinated Customer Conversions - Hot Cut Timeliness Within Interval and Average Interval²⁶

Definition

Measures whether BellSouth begins the cut over of an unbundled loop on a coordinated and/or a time specific order at the CLEC requested start time. It measures the percentage of orders where the cut begins within 15 minutes of the requested start time of the order and the average interval.

Exclusions

- Any order canceled by the CLEC will be excluded from this measurement
- Delays caused by the CLEC
- Unbundled Loops where there is no existing subscriber loop and loops where coordination is not requested
- All unbundled loops on multiple loop orders after the first loop

Business Rules

The cut is considered on time if it starts 15 minutes before or after the requested start time. Using the scheduled time and the actual cut over start time, the measurement will calculate the percent within interval and the average interval. If a cut involves multiple lines, the cut will be considered "on time" if the first line is cut within the interval. ≤ 15 minutes includes intervals that began 15:00 minutes or less before the scheduled cut time and cuts that began 15 minutes or less after the scheduled cut time; > 15 minutes, ≤ 30 minutes includes cuts within 15:00 – 30:00 minutes either prior to or after the scheduled cut time; > 30 minutes includes cuts greater than 30:00 minutes either prior to or after the scheduled cut time. If IDLC is involved, a four-hour window applies to the start time. (8 A.M. to Noon or 1 P.M. to 5 P.M.) This only applies if BellSouth notifies the CLEC by 10:30 A.M. on the day before the due date that the service is on IDLC.

Calculation

% within Interval = $(a \div b) \times 100$

- a = Total Number of Coordinated Unbundled Loop Orders for the interval
- b = Total Number of Coordinated Unbundled Loop Orders for the reporting period

Interval = $(c - d)$

- c = Scheduled Time for Cross Connection of a Coordinated Unbundled Loop Order
- d = Actual Start Date and Time of a Coordinated Unbundled Loop Order

Average Interval = $(e \div f)$

- Sum of all Intervals
- Total Number of Coordinated Unbundled Loop Orders for the reporting period

²⁶ Derived from BellSouth SQM P-6A: Coordinated Customer Conversions – Hot Cut Timeliness % Within Interval and Average Interval. See Direct Testimony of David A. Coon filed July 16, 2001, Exhibit DAC-1, pp. 3-18 through 3-19.

TN-P-10: Coordinated Customer Conversions - Hot Cut Timeliness Within Interval and Average Interval

Report Structure

- CLEC Specific
- CLEC Aggregate
- Reported in intervals of early, on time and late cuts:
 - ≤15 minutes
 - > 15 - ≤30 minutes
 - >30 - ≤60 minutes
 - > 60 - ≤120 minutes
 - >120 - ≤180 minutes
 - > 180 - ≤240 minutes
 - ≤240 minutes
 - > 240 minutes
- Overall Average Interval
- Tennessee Specific

Benchmark: 95 percent within plus or minus 15 minutes of the scheduled start time for SL1²⁷ and SL2²⁸ time specific and non-time specific orders and 95 percent within a four-hour window for SL1 and SL2 IDLC.

Enforcement mechanism: Tier 1 and Tier 2

Implementation date: Ten (10) days after the Authority issues a final order, unless otherwise ordered.

No.	Product Level Disaggregation
1	UNE
2	SL1
3	SL2

²⁷ SL1 = BellSouth's term for an unbundled voice loop (non-designed)

²⁸ SL2 = BellSouth's term for an unbundled voice loop (designed)

TN-P-11: Coordinated Customer Conversions - Average Recovery Time²⁹

Definition

Measures the time between notification and resolution by BellSouth of a service outage found that can be isolated to the BellSouth side of the network. The time between notification and resolution by BellSouth must be measured to ensure that CLEC customers do not experience unjustifiable lengthy service outages during a Coordinated Customer Conversion. This report measures outages associated with Coordinated Customer Conversions prior to service order completion.

Exclusions

- Cut-overs where service outages are due to CLEC caused reasons
- Cut-overs where service outages are due to end-user caused reasons

Business Rules

Measures the outage duration time related to Coordinated Customer Conversions from the initial trouble notification until the trouble has been restored and the CLEC has been notified. The duration time is defined as the time from the initial trouble notification until the trouble has been restored and the CLEC has been notified. The interval is calculated on the total outage time for the circuits divided by the total number of outages restored during the report period to give the average outage duration.

Calculation

Recovery Time = (a - b)

- a = Date & Time That Trouble is Closed by CLEC
- b = Date & Time Initial Trouble is Opened with BellSouth

Average Recovery Time = (c ÷ d)

- c = Sum of all the Recovery Times
- d = Number of Troubles Referred to BellSouth

Report Structure

- CLEC Specific
- CLEC Aggregate
- Tennessee Specific

Benchmark: N/A (diagnostic only)

Enforcement mechanism: None

Implementation date: Ten (10) days after the Authority issues a final order, unless otherwise ordered.

No.	Product Level Disaggregation
1	Unbundled Loops with INP
2	Unbundled Loops with LNP

²⁹ Derived from BellSouth SQM P-6B: Coordinated Customer Conversions – Average Recovery Time. See Direct Testimony of David A. Coon filed July 16, 2001, Exhibit DAC-1, pp. 3-20 through 3-21.

TN-P-12: Hot Cut Conversions – Percentage of Provisioning Troubles Received Within 7 Days of a Completed Service Order³⁰

Definition

Percent Provisioning Troubles received within 7 days of a completed service order associated with a Coordinated and Non-Coordinated Customer Conversion. Measures the quality and accuracy of Hot Cut Conversion Activities.

Exclusions

- Any order canceled by the CLEC
- Troubles caused by Customer Provided Equipment
- LMOS - Code 7 (Test OK), Code 8 (Found OK-In), Code 9 (Found OK-Out)
- WFA - No Trouble Found (NTF)

Business Rules

Measures the quality and accuracy of completed service orders associated with Coordinated and Non-Coordinated Hot Cut Conversions. The first trouble report received on a circuit ID within 7 days following a service order completion is counted in this measure. Subsequent trouble reports are measured in Repeat Report Rate. Reports are calculated searching in the prior report period for completed Coordinated and Non-Coordinated Hot Cut Conversion service orders and following 7 days after the completion of the service order for a trouble report issue date.

Calculation

% Provisioning Troubles within 7 days of service order completion = $(a \div b) \times 100$

- a = The sum of all Hot Cut Circuits with a trouble within 7 days following service order(s) completion
- b = The total number of Hot Cut service order circuits completed in the previous report calendar month

Report Structure

- CLEC Specific
- CLEC Aggregate
- Dispatch/Non-Dispatch
- Tennessee Specific

Benchmark: No more than five percent

Enforcement mechanism: Tier 1 and Tier 2

Implementation date: Ten (10) days after the Authority issues a final order, unless otherwise ordered.

No.	Product Level Disaggregation
1	UNE Loops Design
2	UNE Loops Non-Design

³⁰ Derived from BellSouth SQM P-6C: Hot Cut Conversions – Percentage of Provisioning Troubles Received Within 7 Days of a Completed Service Order. See Direct Testimony of David A. Coon filed July 16, 2001, Exhibit DAC-1, pp. 3-22 through 3-23.

TN-P-13: P-7: Cooperative Acceptance Testing – Percentage of xDSL Loops Tested³¹

Definition

Determines the percentage of xDSL loops that successfully pass cooperative acceptance testing.

Exclusions

- Testing failures due to CLEC (incorrect contact number, CLEC not ready, etc.)
- xDSL lines with no request for cooperative testing

Business Rules

When a BellSouth technician finishes delivering an order for an xDSL loop where the CLEC order calls for cooperative testing at the customer's premise, the BellSouth technician is to call a toll free number to the CLEC testing center. The BellSouth technician and the CLEC representative at the center then test the line. As an example of the type of testing performed, the testing center may ask the technician to put a short on the line so that the center can run a test to see if it can identify the short. A loop will be considered successfully cooperatively tested when both the CLEC and BellSouth representatives agree that the loop has passed the cooperative testing.

Calculation

Cooperative Acceptance Testing - % of xDSL Loops Tested = $(a \div b) \times 100$

- a = Total number of successful xDSL cooperative tests for xDSL lines where cooperative testing was requested in the reporting period
- b = Total Number of xDSL line tests requested by the CLEC and scheduled in the reporting period

Report Structure

- CLEC Specific
- CLEC Aggregate
- Type of Loop Tested
- Tennessee Specific

Benchmark: 95 percent of lines successfully passing cooperative testing

Enforcement mechanism: Tier 1 and Tier 2

Implementation date: Within 90 days of final Order

No.	Product Level Disaggregation
1	ASDL
2	HDSL
3	UCL
4	"Other"

³¹ Derived from BellSouth SQM P-7 Cooperative Acceptance Testing - % of xDSL Loops Tested. See Direct Testimony of David A. Coon filed July 16, 2001, Exhibit DAC-1, pp. 3-24 through 3-25.

TN-P-14: Percent of Timely Loop Modification/De-Conditioning on xDSL Loops³²

Definition

Some xDSL loops require modification/De-Conditioning to support xDSL services, including the removal of load coils, excessive bridge taps and removal of repeaters.

Exclusions

- Requests cancelled by the CLEC

Business Rules

Director Greer proposes that parties be required to file appropriate Business Rules within ten (10) days of the Order.

Calculation

[(Number of xDSL loops on which loop modification/de-conditioning was completed within established interval)/Number of xDSL loops on which loop modification/de-conditioning was requested)]

Report Structure

- CLEC Specific
- Specific as to the type of loop tested
- Tennessee Specific

Benchmark: 95 percent within five (5) business days

Enforcement mechanism: Tier 1 and Tier 2

Implementation date: Within 90 days of final Order

Product disaggregation:

No.	Product Level Disaggregation
1	2-Wire DSL
2	4-Wire DSL
3	Line Sharing
4	Line Splitting

³² Derived from CLEC-proposed measurement Percent of Timely Loop Modification/De-Conditioning on xDSL Loops. See Direct Testimony of Karen Kinard, filed July 16, 2001, p. 26, Exhibit KK-C, p. 10 and Exhibit KK-E, p. 7.

TN-P-15: Percent Provisioning Troubles Within 30 Days of Service Order Activity Completion³³

Definition

Percent Provisioning Troubles within 30 days of Service Order Completion measures the quality and accuracy of Service order activities.

Exclusions

- Canceled Service Orders
- Order Activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Listing Orders, Test Orders, etc.). Order types may be N, C or T.
- D & F orders
- Trouble reports caused and closed out to Customer Provided Equipment (CPE)

Business Rules

Measures the quality and accuracy of completed orders. The first trouble report from a service order after completion is counted in this measure. Subsequent trouble reports are measured in Repeat Report Rate. Reports are calculated searching in the prior report period for completed service orders and following 30 days after completion of the service order for a trouble report issue date. D & F orders are excluded as there is no subsequent activity following a disconnect.

Calculation

% Provisioning Troubles within 30 days of Service Order Activity = $(a \div b) \times 100$

- a = Trouble reports on all completed orders 30 days following service order(s) completion
- b = All Service Orders completed in the previous report calendar month

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Reported in categories of <10 line/circuits; ≥10 line/circuits (except trunks)
- Dispatch/Non-Dispatch (except trunks)
- Tennessee Specific

Benchmark: Parity with BellSouth retail

Enforcement mechanism: Tier 1 and Tier 2

Implementation date: Ten (10) days after the Authority issues a final order, unless otherwise ordered.

³³ Derived from BellSouth SQM P-8: Percent Provisioning Troubles Within 30 Days of Service Order Activity Completion. See Direct Testimony of David A. Coon, filed July 16, 2001, Exhibit DAC-1, pp. 3-26 through 3-27.

**Product disaggregation and retail analogs for TN-P-15: Percent Provisioning Troubles
Within 30 Days of Service Order Activity Completion**

No.	Product Level Disaggregation	Retail Analog
1	Resold Residence POTS	Retail Residence
2	Resold Business POTS	Retail Business
3	Resold Design	Retail Design
4	Resold PBX	Retail PBX
5	Resold Centrex/Centrex-like	Retail Centrex
6	Resold BRI ISDN	Retail ISDN BRI
7	Resold PRI ISDN	Retail ISDN PRI
8	Resold DID Trunks	Retail DID Trunks
9	UNE Platform – Dispatch In	Retail residence and business
10	UNE Platform – Dispatch Out	Retail residence and business
11	2-Wire Analog Design - Dispatch In	Retail residence and Business Dispatch
12	2-Wire Analog Design - Dispatch Out	Retail residence and Business Dispatch
13	2-Wire Analog Non-Design – Dispatch In	Retail residence and Business Dispatch
14	2-Wire Analog Non-Design – Dispatch Out	Retail residence and Business Dispatch
15	UNE Digital Loop Less than DS1 – Dispatch In	Retail residence and Business Dispatch
16	UNE Digital Loop Less than DS1 – Dispatch Out	Retail residence and Business Dispatch
17	UNE DS1	Retail Digital Loop DS1
18	UNE DS3 and greater	Retail Digital Loop DS3 or greater
19	Unbundled ISDN BRI	Retail ISDN BRI
20	Unbundled ISDN PRI	Retail ISDN PRI
21	Unbundled ADSL	ADSL provided to retail
22	Unbundled HDSL	ADSL provided to retail
23	UCL (short and long)	ADSL provided to retail
24	Unbundled 2 wire xDSL Loop	ADSL provided to retail
25	Unbundled 4 wire xDSL Loop	ADSL provided to retail
26	Other Unbundled Loops Design – Dispatch In	Retail residence and business design dispatch
27	Other Unbundled Loops Design – Dispatch Out	Retail residence and business design dispatch
28	Other Unbundled Loops Non-Design – Dispatch In	Retail residence and business design dispatch
29	Other Unbundled Loops Non-Design – Dispatch Out	Retail residence and business design dispatch
30	Unbundled UDC/IDSL loop	Retail ISDN BRI
31	UNE Switch Port	Residence and Business (POTS)
32	Local Interoffice Trunks	Retail DS1/DS3 Interoffice
33	Line Sharing/High Frequency Spectrum UNE	ADSL provided to retail
34	Line Splitting/High Frequency Spectrum UNE	ADSL provided to retail
35	Enhanced Extended Loops (EELs) Dispatch	Special Access (backhauled T1)
36	Special Access to EELs Conversion	Retail Project

TN-P-16: Service Order Accuracy³⁴

Definition

The “service order accuracy” measurement measures the accuracy and completeness of a sample of BellSouth service orders by comparing what was ordered and what was completed.

Exclusions

- Cancelled Service Orders
- Order Activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Listing Orders, Test Orders, etc.)
- D & F orders

Business Rules

A statistically valid sample of service orders, completed during a monthly reporting period, is compared to the original account profile and the order that the CLEC sent to BellSouth. An order is “completed without error” if all service attributes and account detail changes (as determined by comparing the original order) completely and accurately reflect the activity specified on the original order and any supplemental CLEC order. For both small and large sample sizes, when a Service Request cannot be matched with a corresponding Service Order, it will not be counted. For small sample sizes an effort will be made to replace the service request.

Calculation

Percent Service Order Accuracy = $(a \div b) \times 100$

- a = Orders Completed without Error
- b = Orders Completed in Reporting Period

Report Structure

- CLEC Aggregate
- Reported in categories of <10 line/circuits; ≥ 10 line/circuits
- Dispatch / No Dispatch
- Tennessee Specific

Benchmark: 95 percent accurate

Enforcement mechanism: Tier 1 and Tier 2

Implementation date: Ten (10) days after the Authority issues a final order, unless otherwise ordered.

³⁴ Derived from BellSouth SQM P-12: Service Order Accuracy. See Rebuttal Testimony of David A. Coon, Filed August 10, 2001, p. 57 and Exhibit DAC-R3, pp. 1-2.

Product disaggregation for P-TN-16: Service Order Accuracy

No.	Product Level Disaggregation
1	Resold Residence POTS
2	Resold Business POTS
3	Resold Design
4	Resold PBX
5	Resold Centrex/Centrex-like
6	Resold BRI ISDN
7	Resold PRI ISDN
8	Resold DID Trunks
9	UNE Platform – Dispatch In
10	UNE Platform – Dispatch Out
11	2-Wire Analog Design - Dispatch In
12	2-Wire Analog Design - Dispatch Out
13	2-Wire Analog Non-Design – Dispatch In
14	2-Wire Analog Non-Design – Dispatch Out
15	UNE Digital Loop Less than DS1 – Dispatch In
16	UNE Digital Loop Less than DS1 – Dispatch Out
17	UNE DS1
18	UNE DS3 and greater
19	Unbundled ISDN BRI
20	Unbundled ISDN PRI
21	Unbundled ADSL
22	Unbundled HDSL
23	UCL (short and long)
24	Unbundled 2 wire xDSL Loop
25	Unbundled 4 wire xDSL Loop
26	Other Unbundled Loops Design – Dispatch In
27	Other Unbundled Loops Design – Dispatch Out
28	Other Unbundled Loops Non-Design – Dispatch In
29	Other Unbundled Loops Non-Design – Dispatch Out
30	Unbundled UDC/IDSL loop
31	UNE Switch Port
32	Local Interoffice Trunks
33	Line Sharing/High Frequency Spectrum UNE
34	Line Splitting/High Frequency Spectrum UNE
35	Enhanced Extended Loops (EELs) Dispatch
36	Special Access to EELs Conversion

TN-P-17: Total Service Order Cycle Time (TSOCT)³⁵

Definition

This report measures the total service order cycle time from receipt of a valid service order request to the return of a completion notice to the CLEC Interface.

Exclusions

- Canceled Service Orders
- Order Activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Listing Orders, Test Orders, etc.). Order types may be N, C or T.
- D (Disconnect - Except "D" orders associated with LNP Standalone) and F (From) orders. (From is disconnect side of a move order when the customer moves to a new address)
- "L" Appointment coded orders (where the customer has requested a later than offered interval)
- Orders with CLEC/Subscriber caused delays or CLEC/Subscriber requested due date changes

Business Rules

The interval is determined for each order processed during the reporting period. This measurement combines three reports: FOC Timeliness, Average Order Completion Interval and Average Completion Notice Interval. For UNE xDSL Loop, this measurement combines Service Inquiry Interval (SI), FOC Timeliness, Average Completion Interval, and Average Completion Notice Interval. This interval starts with the receipt of a valid service order request and stops when a completion notice is sent to the CLEC Interface (LENS, TAG OR EDI) and the BellSouth Legacy Systems. Elapsed time for each order is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the associated total number of orders completed. Orders that are worked on zero due dates are calculated with a .33 day interval (8 hours) in order to report a portion of a day interval. These orders are issued and worked/completed on same day. They can be either flow through orders (no field work-non-dispatched) or field orders (dispatched). Reporting is by Fully Mechanized, Partially Mechanized and Non-Mechanized receipt of LSRs.

Calculation

Total Service Order Cycle Time = (a - b)

- a = Service Order Completion Notice Date
- b = Service Request Receipt Date

Average Total Service Order Cycle Time = (c ÷ d)

- c = Sum of all Total Service Order Cycle Times
- d = Total Number Service Orders Completed in Reporting Period

Total Service Order Cycle Time Interval Distribution (for each interval) = (e ÷ f) X 100

- e = Total Number of Service Requests Completed in "X" minutes/hours
- f = Total Number of Service Requests Received in Reporting Period

³⁵ Derived from BellSouth SQM P-9: Total Service Order Cycle Time (TSOCT). See Direct Testimony of David A. Coon filed July 16, 2001, Exhibit DAC-1, pp. 3-28 through 3-29 and Matrix 1, filed August 20, 2001.

TN-P-17: Total Service Order Cycle Time (TSOCT)

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Fully Mechanized; Partially Mechanized; Non-Mechanized
- Report in categories of <10 line/circuits; ≥ 10 line/circuits (except trunks)
- Dispatch/Non-Dispatch categories applicable to all levels except trunks
- Intervals 0-5, 5-10, 10-15, 15-20, 20-25, 25-30, ≥ 30 Days. The interval breakout is: $0-5 = 0 \leq 5$, $5-10 = >5 \leq 10$, $10-15 = >10 \leq 15$, $15-20 = >15 \leq 20$, $20-25 = >20 \leq 25$, $25-30 = >25 \leq 30$, and >30 .
- Tennessee Specific

Benchmark: N/A (diagnostic only)

Enforcement mechanism: None

Implementation date: Ten (10) days after the Authority issues a final order, unless otherwise ordered.

Product disaggregation for TN-P-17: Total Service Order Cycle Time

No.	Product Level Disaggregation
1	Resold Residence POTS
2	Resold Business POTS
3	Resold Design
4	Resold PBX
5	Resold Centrex/Centrex-like
6	Resold BRI ISDN
7	Resold PRI ISDN
8	Resold DID Trunks
9	UNE Platform – Dispatch In
10	UNE Platform – Dispatch Out
11	2-Wire Analog Design - Dispatch In
12	2-Wire Analog Design - Dispatch Out
13	2-Wire Analog Non-Design – Dispatch In
14	2-Wire Analog Non-Design – Dispatch Out
15	UNE Digital Loop Less than DS1 – Dispatch In
16	UNE Digital Loop Less than DS1 – Dispatch Out
17	UNE DS1
18	UNE DS3 and greater
19	Unbundled ISDN BRI
20	Unbundled ISDN PRI
21	Unbundled ADSL
22	Unbundled HDSL
23	UCL (short and long)
24	Unbundled 2 wire xDSL Loop
25	Unbundled 4 wire xDSL Loop
26	Other Unbundled Loops Design – Dispatch In
27	Other Unbundled Loops Design – Dispatch Out
28	Other Unbundled Loops Non-Design – Dispatch In
29	Other Unbundled Loops Non-Design – Dispatch Out
30	Unbundled UDC/IDSL loop
31	UNE Switch Port
32	Local Interoffice Trunks
33	Line Sharing/High Frequency Spectrum UNE
34	Line Splitting/High Frequency Spectrum UNE
35	Enhanced Extended Loops (EELs) Dispatch
36	Special Access to EELs Conversion

TN-P-18: LNP - Average Time of Out of Service for LNP Conversions³⁶

Definition

Average time to facilitate the LNP activation request in BellSouth's network.

Exclusions

- CLEC-caused errors
- NPAC caused errors unless caused by BellSouth
- Stand Alone LNP Orders with more than 500 number activations

Business Rules

The Start time is the Receipt of the NPAC broadcast activation message in BellSouth's LSMS. The End time is when the Provisioning event is successfully completed in BellSouth's network as reflected in BellSouth's LSMS. Calculate the total minutes of difference between the start time and end time in minutes for LNP activations during the reporting period.

Calculation

Time Out of Service = (a - b)

- a = LNP Conversion Stop Time
- b = LNP Conversion Start Time

Average Out of Service Time for LNP Conversions = (c ÷ d) X 100

- c = Sum of all "Time out of Service" measures for the reporting period
- d = Total number of LNP activations for the reporting period

Report Structure

- CLEC Specific
- CLEC Aggregate
- Geographic Scope
- State, Region

Benchmark: 95 percent completed within 60 minutes

Enforcement mechanism: Tier 1 and Tier 2

Implementation date: Ten (10) days after the Authority issues a final order, unless otherwise ordered.

Product Disaggregation: LNP Stand-alone

³⁶ Derived from BellSouth SQM 10A: LNP - Average Time of Out of Service for LNP Conversions. See Direct Testimony of David A. Coon filed July 16, 2001, p. 31 and Exhibit DAC-1, pp. 3-30 through 3-31.

TN-P-19: LNP – Percentage of Time BellSouth Applies the 10-digit Trigger Prior to the LNP Order Due Date³⁷

Definition

Percentage of time BellSouth applies 10-digit trigger for LNP Telephone Numbers prior to the due date.

Exclusions

- Excludes Remote Call Forwarding, DIDs, and ISDN Data TNs
- Excludes CLEC or Customer caused misses or delays.

Business Rules

Obtain number of LNP TNs where the 10-digit trigger was applicable prior to due date, and the total number of LNP TNs where the 10-digit trigger was applicable.

Calculation

Percentage of 10-digit applications = $(a \div b) \times 100$

- a = Count of LNP TNs for which 10-digit trigger was applicable prior to due date
- b = Total LNP TNs for which 10-digit triggers were applied

Report Structure

- CLEC Specific
- CLEC Aggregate
- Geographic Scope
 - State, Region

Benchmark: 95 percent

Enforcement mechanism: Tier 1 and Tier 2

Implementation date: Ten (10) days after the Authority issues a final order, unless otherwise ordered.

Disaggregation: LNP Stand-alone

³⁷ Derived from BellSouth SQM P-10B: LNP – Percentage of Time BellSouth Applies the 10-digit Trigger Prior to the LNP Order Due Date. See Direct Testimony of David A. Coon filed July 16, 2001, p. 31; Exhibit DAC-1, p. 3-31 through 3-32.

TN-P-20: Percentage of Time the Old Service Provider Releases the Subscription Prior to the Expiration of the Second 9-Hour Timer³⁸

Definition

Percentage of time the old service provider releases subscription(s) to NPAC within the first (T1) or the second (T2) 9-hour timers.

Exclusions

- Customer caused or requested delays
- NPAC caused delays unless caused by BellSouth
- Cases where BellSouth did release but the New Service Provider did not respond prior to the expiration of the T2 timer. This sequence of events causes the NPAC to send a cancel of BellSouth's release request. In these cases, BellSouth may have to re-work to release the TN so it can be ported to meet the date.

Business Rules

Number of LNP TNs for which subscription to NPAC was released prior to the expiration of the second 9-hour (T2) timer.

Calculation

$$\frac{[(\text{Number of LNP TNs for which subscription to NPAC was released prior to the expiration of the second 9-hour timer (T2)})]}{[\text{total number of LNP TNs for which the subscription was released}]} \times 100$$

Report Structure

- CLEC specific
- CLEC aggregate
- Tennessee specific

Benchmark: 96.5 percent

Enforcement mechanism: Tier 1 and Tier 2

Implementation date: Within 90 days of final Order

Product Disaggregation: LNP Stand-alone

³⁸Derived from measurements ordered by the Authority in the DeltaCom arbitration. See Docket No. 99-00430; reflected on Appendix Performance Measurements Business Rules [Version 1.6], p. 108; originally Texas Measurement No. 92.

TN-P-21: LNP - Percent Missed Installation Appointments³⁹

Definition

“Percent missed installation appointments” monitors the reliability of BellSouth commitments with respect to committed due dates to assure that CLECs can reliably quote expected due dates to their retail customer as compared to BellSouth. This measure is the percentage of total orders processed for which BellSouth is unable to complete the service orders on the committed due dates and reported for total misses and End User Misses.

Exclusions

- Canceled Service Orders
- Order Activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Listing Orders, Test Orders, etc.) where identifiable

Business Rules

Percent Missed Installation Appointments (PMI) is the percentage of total orders processed for which BellSouth is unable to complete the service orders on the committed due dates. Missed Appointments caused by end-user reasons will be included and reported in a separate category. The first commitment date on the service order that is a missed appointment is the missed appointment code used for calculation whether it is a BellSouth missed appointment or an End User missed appointment. The “due date” is any time on the confirmed due date, which means there cannot be a cutoff time for commitments as certain types of orders are requested to be worked after standard business hours.

Calculation

LNP Percent Missed Installation Appointments = $(a \div b) \times 100$

- a = Number of Orders with Completion date in Reporting Period past the Original Committed Due Date
- b = Number of Orders Completed in Reporting Period

Report Structure

- CLEC Specific
- CLEC Aggregate
- Geographic Scope
 - State/Region
- Report in Categories of <10 lines/circuits ≥10 lines/circuits (except trunks)

Report explanation: Total Missed Appointments is the total percent of orders missed either by BellSouth or the CLEC end user. End User MA represents the percentage of orders missed by the CLEC end user. The difference between End User Missed Appointments and Total Missed Appointments is the result of BellSouth caused misses.

Benchmark: 95 percent of due dates met

Enforcement mechanism: Tier 1 and Tier 2

Implementation date: Ten (10) days after the Authority issues a final order, unless otherwise ordered.

³⁹ Derived from BellSouth SQM P-11: LNP - Percent Missed Installation Appointments. See Direct Testimony of David A. Coon, filed July 16, 2001, pp. 47-48 and Exhibit DAC-1, pp. 3-33 through 3-34.

Product disaggregation for TN-P-21: LNP - Percent Missed Installation Appointments

No.	Product Level Disaggregation
1	Resold Residence POTS
2	Resold Business POTS
3	Resold Design
4	Resold PBX
5	Resold Centrex/Centrex-like
6	Resold BRI ISDN
7	Resold PRI ISDN
8	Resold DID Trunks
9	UNE Platform – Dispatch In
10	UNE Platform – Dispatch Out
11	2-Wire Analog Design - Dispatch In
12	2-Wire Analog Design - Dispatch Out
13	2-Wire Analog Non-Design – Dispatch In
14	2-Wire Analog Non-Design – Dispatch Out
15	UNE Digital Loop Less than DS1 – Dispatch In
16	UNE Digital Loop Less than DS1 – Dispatch Out
17	UNE DS1
18	UNE DS3 and greater
19	Unbundled ISDN BRI
20	Unbundled ISDN PRI
21	Unbundled ADSL
22	Unbundled HDSL
23	UCL (short and long)
24	Unbundled 2 wire xDSL Loop
25	Unbundled 4 wire xDSL Loop
26	Other Unbundled Loops Design – Dispatch In
27	Other Unbundled Loops Design – Dispatch Out
28	Other Unbundled Loops Non-Design – Dispatch In
29	Other Unbundled Loops Non-Design – Dispatch Out
30	Unbundled UDC/IDSL loop
31	UNE Switch Port
32	Local Interoffice Trunks
33	Line Sharing/High Frequency Spectrum UNE
34	Line Splitting/High Frequency Spectrum UNE
35	Enhanced Extended Loops (EELs) Dispatch
36	Special Access to EELs Conversion

TN-B-1: Invoice Accuracy⁴⁰

Definition

This measure provides the percentage of accuracy of the billing invoices rendered to CLECs during the current month.

Exclusions

- Adjustments not related to billing errors (e.g., credits for service outage, special promotion credits, adjustments to satisfy the customer)
- Test Accounts

Business Rules

The accuracy of billing invoices delivered by BellSouth to the CLEC must enable them to provide a degree of billing accuracy comparative to BellSouth bills rendered to retail customers of BellSouth. CLECs request adjustments on bills determined to be incorrect. The BellSouth Billing verification process includes manually analyzing a sample of local bills from each bill period. The bill verification process draws from a mix of different customer billing options and types of service. An end-to-end auditing process is performed for new products and services. Internal measurements and controls are maintained on all billing processes.

Calculation

Invoice Accuracy = $[(a - b) \div a] \times 100$

- a = Absolute Value of Total Billed Revenues during current month
- b = Absolute Value of Billing Related Adjustments during current month

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Geographic Scope
 - Region
 - State

Benchmark: Parity with BellSouth retail

Enforcement mechanism: Tier 1 and Tier 2

Implementation date: Ten (10) days after the Authority issues a final order, unless otherwise ordered.

Product disaggregation and retail analogs:

No.	Product Level Disaggregation	Retail Analog
1	Resale	Retail Residence & Business POTS
2	UNE	Retail Residence & Business POTS
3	<i>Interconnection Trunks</i>	Retail DS1/DS3 Interoffice

⁴⁰ Derived from BellSouth SQM B-1: Invoice Accuracy. See Direct Testimony of David A. Coon filed July 16, 2001, Exhibit DAC-1, pp. 5-1 through 5-2.

TN-B-2: Mean Time to Deliver Invoices⁴¹

Definition

This report measures the mean interval for timeliness of billing records delivered to CLECs in an agreed upon format. CRIS-based invoices are measured in business days, and CABS-based invoices in calendar days.⁴²

Exclusions

Any invoices rejected due to formatting or content errors.

Business Rules

Bill Distribution is calculated as follows: CRIS BILLS-The number of workdays is reported for CRIS bills. This is calculated by counting the Bill Period date as the first work day. Weekends and holidays (New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas) are excluded when counting workdays. J/N Bills are counted in the CRIS workday category for the purposes of the measurement since their billing account number (Q account) is provided from the CRIS system. CABS BILLS-The number of calendar days is reported for CABS bills. This is calculated by counting the day following the Bill Period date as the first calendar day. Weekends and holidays (New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas) are included when counting the calendar days.⁴³

Calculation

Invoice Timeliness = (a - b)

- a = Invoice Transmission Date
- b = Close Date of Scheduled Bill Cycle

Mean Time To Deliver Invoices = (c ÷ d)

- c = Sum of all Invoice Timeliness intervals
- d = Count of Invoices Transmitted in Reporting Period

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Geographic Scope
 - Region
 - State

Benchmark: Parity with BellSouth retail

Enforcement mechanism: Tier 1 and Tier 2

⁴¹ Derived from BellSouth SQM B-2: Mean Time to Deliver Invoices. See Direct Testimony of David A. Coon filed July 16, 2001, Exhibit DAC-1, pp. 5-3 through 5-4.

⁴² Director Greer believes that this text represents the correct Definition, although BellSouth's proposed SQM placed this text under the heading, "Business Rules."

⁴³ Director Greer believes that this text represents the correct Business Rules, although BellSouth's proposed SQM placed this text under the heading, "Definition."

TN-B-2: Mean Time to Deliver Invoices

Implementation date: Ten (10) days after the Authority issues a final order, unless otherwise ordered.

Product disaggregation and retail analogs:

No.	Product Level Disaggregation	Retail Analog
1	CRIS-based invoices	Retail Residence & Business POTS
2	CABS-based invoices for UNE	Retail Residence & Business POTS
3	CABS-based for Interconnection Trunks	Retail DS1/DS3 Interoffice

TN-B-3: Percent Billing Errors Corrected in x Days⁴⁴

Definition

Measures the timely correction of Daily Usage File (DUF) errors and timely carrier bill adjustments.

Exclusions

Adjustments disputed by ILEC (but must be reported separately)

Business rules

- This measurement applies to the daily usage feed and carrier wholesale bill adjustments.
- Performance for the DUF measurement is measured at two levels:
- Severity 1 Bill Affecting = where X = 3 business days with a maximum of 5 business days to correct error
- Severity 2 Non-Bill Affecting = where X = 3 business days with a maximum of 10 business days to correct error
- Elapsed time is measured in days/hours. Clock starts when ILEC receives the CLEC's query or request for an adjustment (whether in electronic, written or voice form), and the clock stops when the CLEC receives the correct usage record from the ILEC.
- The ILEC shall send correct usage record within X days/hours of receipt of a query.
- The ILEC will adjust bill within X days (generally next CLEC bill unless adjustment request received after middle of the month).
- Only usage records fully corrected to the CLEC's specifications will be considered timely.
- Excluded situations:
 - CLEC may agree to exclude adjustments disputed by ILEC from metric. If ILEC does not wish to pursue mutual agreement on such exclusion, ILEC must report separately the number of queries in dispute at end of the month as separate sub-metric.

Calculation

Percent Billing Errors Corrected in X Days = $\sum [\text{Number of ILEC Responses in X Days/Hours}] / (\text{Total Number of Queries in Reporting Period}) \times 100$

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- BellSouth Affiliates
- Tennessee Specific

⁴⁴ Derived from CLEC-proposed measurement Percent Billing Errors Corrected in x Days. See Direct Testimony of Karen Kinard filed July 16, 2001, pp. 26-27 and Exhibit KK-C, p. 11.

TN-B-3: Percent Billing Errors Corrected in x Days,

Benchmark:

- For “Severity 1” (bill affecting) errors, 90 percent of errors must be corrected within 24 business hours and 100% within five business days.
- For “Severity 2” (non-bill affecting), 90 percent of errors must be corrected within three business days and 100% within ten business days.

Enforcement mechanism: Tier 1 and Tier 2

Implementation date: Within 90 days of final Order

Product disaggregation:

No.	Product Level Disaggregation
1	DUF
2	Carrier Wholesale Bill

TN-B-4: Usage Data Delivery Accuracy⁴⁵

Definition

This measurement captures the percentage of recorded usage that is delivered error free and in an acceptable format to the appropriate CLEC. These percentages will provide the necessary data for use as a comparative measurement for BellSouth performance. This measurement captures Data Delivery Accuracy rather than the accuracy of the individual usage recording.

Exclusions

None

Business Rules

The accuracy of the data delivery of usage records delivered by BellSouth to the CLEC must enable them to provide a degree of accuracy comparative to BellSouth bills rendered to their retail customers. If errors are detected in the delivery process, they are investigated, evaluated and documented. Errors are corrected and the data retransmitted to the CLEC.

Calculation

Usage Data Delivery Accuracy = $(a - b) \div a \times 100$

- a = Total number of usage data packs sent during current month
- b = Total number of usage data packs requiring retransmission during current month

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Geographic Scope
 - Region
 - Tennessee

Benchmark: Parity with BellSouth retail

Enforcement mechanism: Tier 1 and Tier 2

Implementation date: Ten (10) days after the Authority issues a final order, unless otherwise ordered.

Product disaggregation: None

⁴⁵ Derived from BellSouth SQM TN-B-3: Usage Data Delivery Accuracy. See Direct Testimony of David A. Coon filed July 16, 2001, Exhibit DAC-1, p. 5-5 through 5-6.

TN-B-5: Usage Data Delivery Completeness⁴⁶

Definition

This measurement provides percentage of complete and accurately recorded usage data (usage recorded by BellSouth and usage recorded by other companies and sent to BellSouth for billing) that is processed and transmitted to the CLEC within thirty (30) days of the message recording date. A parity measure is also provided showing completeness of BellSouth messages processed and transmitted via CMDS. BellSouth delivers its own retail usage from recording location to billing location via CMDS as well as delivering billing data to other companies. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.

Exclusions

None

Business Rules

The purpose of these measurements is to demonstrate the level of quality of usage data delivered to the appropriate CLEC. Method of delivery is at the option of the CLEC.

Calculation

Usage Data Delivery Completeness = $(a \div b) \times 100$

- a = Total number of Recorded usage records delivered during current month that are within thirty (30) days of the message recording date
- b = Total number of Recorded usage records delivered during the current month

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Region
- Tennessee

Benchmark: 98 percent within 30 calendar days

Enforcement mechanism: Tier 1 and Tier 2

Implementation date: Ten (10) days after the Authority issues a final order, unless otherwise ordered.

Product disaggregation: None

⁴⁶ Derived from BellSouth SQM B-4: Usage Data Delivery Completeness. See Direct Testimony of David A. Coon filed July 16, 2001, p. 61, Exhibit DAC-1, pp. 5-7 through 5-8.

TN-B-6: Usage Data Delivery Timeliness⁴⁷

Definition

This measurement provides a percentage of recorded usage data (usage recorded by BellSouth and usage recorded by other companies and sent to BellSouth for billing) that is delivered to the appropriate CLEC within six (6) calendar days from the receipt of the initial recording. A parity measure is also provided showing timeliness of BellSouth messages processed and transmitted via CMDS. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.

Exclusions

None

Business Rules

The purpose of this measurement is to demonstrate the level of timeliness for processing and transmission of usage data delivered to the appropriate CLEC. The usage data will be mechanically transmitted or mailed to the CLEC data processing center once daily. The Timeliness interval of usage recorded by other companies is measured from the date BellSouth receives the records to the date BellSouth distributes to the CLEC. Method of delivery is at the option of the CLEC.

Calculation

Usage Data Delivery Timeliness Current month = $(a \div b) \times 100$

- a = Total number of usage records sent within six (6) calendar days from initial recording/receipt
- b = Total number of usage records sent

Report Structure

- CLEC Aggregate
- CLEC Specific
- BellSouth Aggregate
- Region
- Tennessee Specific

Benchmark: 95 percent within six (6) calendar days

Enforcement mechanism: Tier 1 and Tier 2

Implementation date: Ten (10) days after the Authority issues a final order, unless otherwise ordered.

Product Disaggregation: None

⁴⁷ Derived from BellSouth SQM B-5: Usage Data Delivery Timeliness. See Direct Testimony of David A. Coon, p. 61, Exhibit DAC-1, pp. 5-9 through 5-10.

TN-B-7: Mean Time to Deliver Usage⁴⁸

Definition

This measurement provides the average time it takes to deliver Usage Records to a CLEC. A parity measure is also provided showing timeliness of BellSouth messages processed and transmitted via CMDS. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.

Exclusions

None

Business Rules

The purpose of this measurement is to demonstrate the average number of days it takes BellSouth to deliver Usage data to the appropriate CLEC. Usage data is mechanically transmitted or mailed to the CLEC data processing center once daily. Method of delivery is at the option of the CLEC.

Calculation

Mean Time to Deliver Usage = $(a \times b) \div c$

- a = Volume of Records Delivered
- b = Estimated number of days to deliver
- c = Total Record Volume Delivered

Note: Any usage record falling in the 30+ day interval will be added using an average figure of 31.5 days.

Report Structure

- CLEC Aggregate
- CLEC Specific
- BellSouth Aggregate
- Region
- Tennessee Specific

Benchmark: Less than or equal to five (5) days

Enforcement mechanism: Tier 1 and Tier 2

Implementation date: Ten (10) days after the Authority issues a final order, unless otherwise ordered.

Product Disaggregation: None

⁴⁸ Derived from BellSouth SQM B-6 Mean Time to Deliver Usage. See Direct Testimony of David A. Coon filed July 16, 2001, p. 61, Exhibit DAC-1, pp. 5-11 through 5-12.

TN-B-8: Recurring Charge Completeness⁴⁹

Definition

This measure captures percentage of fractional recurring charges appearing on the correct bill.

Exclusions

None

Business Rules

The effective date of the recurring charge must be within 30 days of the bill date for the charge to appear on the correct bill.

Calculation

Recurring Charge Completeness = $(a \div b) \times 100$

- a = Count of fractional recurring charges that are on the correct bill 1
- b = Total count of fractional recurring charges that are on the correct bill
- 1 Correct bill = next available bill

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Tennessee Specific

Benchmark: Parity with retail for Resale and 90 percent for UNE and Interconnection

Enforcement mechanism: Tier 1 and Tier 2

Report: State specific

Implementation date: Ten (10) days after the Authority issues a final order, unless otherwise ordered.

Product disaggregation and retail analogs:

No.	Product Level Disaggregation	Retail Analog
1	Resale	Retail Residence & Business POTS
2	UNE	Retail Residence & Business POTS
3	Interconnection Trunks	Retail DS1/DS3 Interoffice

⁴⁹ Derived from BellSouth SQM B-7: Recurring Charge Completeness. See Direct Testimony of David A. Coon filed July 16, 2001, p. 61, Exhibit DAC-1, p. 5-13.

TN-B-9: Non-Recurring Charge Completeness⁵⁰

Definition

This measure captures percentage of non-recurring charges appearing on the correct bill.

Exclusions

None

Business Rules

The effective date of the non-recurring charge must be within 30 days of the bill date for the charge to appear on the correct bill.

Calculation

Non-Recurring Charge Completeness = $(a \div b) \times 100$

- a = Count of non-recurring charges that are on the correct bill 1
- b = Total count of non-recurring charges that are on the correct bill
- 1 Correct bill = next available bill

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Tennessee Specific

Benchmark: Parity with retail for Resale and 90 percent for UNE and Interconnection

Enforcement mechanism: Tier 1 and Tier 2

Implementation date: Ten (10) days after the Authority issues a final order, unless otherwise ordered.

Product disaggregation, retail analog and benchmark:

No.	Product Level Disaggregation	Retail Analog
1	Resale	Retail Residence & Business POTS
2	UNE	90 Percent
3	Interconnection Trunks	90 Percent

⁵⁰ Derived from BellSouth SQM B-8: Non-Recurring Charge Completeness. See Direct Testimony of David A. Coon filed July 16, 2001, p. 61, Exhibit DAC-1, p. 5-14.

TN-M&R-1: Missed Repair Appointments⁵¹

Definition

The percent of trouble reports not cleared by the committed date and time.

Exclusions

- Trouble tickets canceled at the CLEC request prior to appointment date
- BellSouth trouble reports associated with internal or administrative service
- Customer Provided Equipment (CPE) troubles or CLEC Equipment Trouble

Business Rules

The negotiated commitment date and time is established when the repair report is received. The cleared time is the date and time that BellSouth personnel clear the trouble and closes the trouble report in his/her Computer Access Terminal (CAT) or workstation. If this is after the Commitment time, the report is flagged as a "Missed Commitment" or a missed repair appointment. When the data for this measure is collected for BellSouth and a CLEC, it can be used to compare the percentage of the time repair appointments are missed due to BellSouth reasons. (No access reports are not part of this measure because they are not a missed appointment.) Note: Appointment intervals vary with force availability in the POTS environment. Specials and Trunk intervals are standard interval appointments of no greater than 24 hours.

Calculation

Percentage of Missed Repair Appointments = $(a \div b) \times 100$

- a = Count of Customer Troubles Not Cleared by the Quoted Commitment Date and Time
- b = Total Trouble reports closed in Reporting Period

Report Structure

- Dispatch / Non-Dispatch
- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate

⁵¹ Measure is a derivative of BST's 3/12/01 SQMs except for levels of disaggregation and benchmarks which are from DeltaCom. One level of disaggregation was added which is Line Splitting/High Frequency Spectrum UNE and UCL (short and long).

TN-M&R-1: Missed Repair Appointments Disaggregation**Tennessee Specific**

No.	Product Level Disaggregation	Retail Analog
1	Resold Residence POTS	Retail Residence
2	Resold Business POTS	Retail Business
3	Resold Design	Retail Design
4	Resold PBX	Retail PBX
5	Resold Centrex/Centrex-like	Retail Centrex
6	Resold BRI ISDN	Retail ISDN BRI
7	Resold PRI ISDN	Retail ISDN PRI
8	Resold DID Trunks	Retail DID Trunks
9	LNP	Retail residence and business
10	UNE Platform	Retail residence and business
11	2-Wire Analog Design	Retail residence and Business Dispatch
12	2-Wire Analog Non-Design	Retail residence and Business Dispatch
13	UNE Digital Loop Less than DS1	Retail residence and Business Dispatch
14	UNE DS1	Retail Digital Loop DS1
15	UNE DS3 and greater	Retail Digital Loop DS3 or greater
16	Unbundled ISDN BRI	Retail ISDN BRI
17	Unbundled ISDN PRI	Retail ISDN PRI
18	Unbundled ADSL	ADSL provided to retail
19	Unbundled HDSL	ADSL provided to retail
20	UCL (short and long)	ADSL provided to retail
21	Unbundled 2 wire xDSL Loop	ADSL provided to retail
22	Unbundled 4 wire xDSL Loop	ADSL provided to retail
23	Other Unbundled Loops Design	Retail residence and business design dispatch
24	Other Unbundled Loops Non-Design	Retail residence and business design dispatch
25	Unbundled UDC/IDSL loop	Retail ISDN BRI
26	UNE Switch Port	Residence and Business (POTS)
27	Local Interoffice Trunks	Retail DS1/DS3 Interoffice
28	Line Sharing/High Frequency Spectrum UNE	ADSL provided to retail
29	Line Splitting/High Frequency Spectrum UNE	ADSL provided to retail
30	Enhanced Extended Loops (EELs) Dispatch	Special Access (backhauled T1)
31	Special Access to EELs Conversion	Retail Project

Benchmark

Standard 1% missed

Enforcement Mechanism

Tier 1 and Tier 2

Implementation Date

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

TN-M&R-2: Customer Trouble Report Rate⁵²

Definition

Percent of initial and repeated customer direct or referred troubles reported within a calendar month per 100 lines/circuits in service.

Exclusions

- Trouble tickets canceled at the CLEC request prior to appointment date.
- BellSouth trouble reports associated with internal or administrative service.
- Customer Provided Equipment (CPE) troubles or CLEC Equipment Trouble.

Business Rules

Customer Trouble Report Rate is computed by accumulating the number of maintenance initial and repeated trouble reports during the reporting period. The resulting number of trouble reports are divided by the total "number of service" lines, ports or combination that exist for the CLECs and BellSouth respectively at the end of the report month.

Calculation

Customer Trouble Report Rate = $(a \div b) \times 100$

- a = Count of Initial and Repeated Trouble Reports closed in the Current Period
- b = Number of Service Access Lines in service at End of the Report Period

Report Structure

- Dispatch/Non-Dispatch
- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate

⁵² Measure is a derivative of BST's 3/12/01 SQMs except for levels of disaggregation and benchmarks which are from DeltaCom. One level of disaggregation was added which is Line Splitting/High Frequency Spectrum UNE and UCL (short and long).

TN-M&R-2: Customer Trouble Report Rate Disaggregation
Tennessee Specific

No.	Product Level Disaggregation	Retail Analog
1	Resold Residence POTS	Retail Residence
2	Resold Business POTS	Retail Business
3	Resold Design	Retail Design
4	Resold PBX	Retail PBX
5	Resold Centrex/Centrex-like	Retail Centrex
6	Resold BRI ISDN	Retail ISDN BRI
7	Resold PRI ISDN	Retail ISDN PRI
8	Resold DID Trunks	Retail DID Trunks
9	LNP	Retail residence and business
10	UNE Platform	Retail residence and business
11	2-Wire Analog Design	Retail residence and Business Dispatch
12	2-Wire Analog Non-Design	Retail residence and Business Dispatch
13	UNE Digital Loop Less than DS1	Retail residence and Business Dispatch
14	UNE DS1	Retail Digital Loop DS1
15	UNE DS3 and greater	Retail Digital Loop DS3 or greater
16	Unbundled ISDN BRI	Retail ISDN BRI
17	Unbundled ISDN PRI	Retail ISDN PRI
18	Unbundled ADSL	ADSL provided to retail
19	Unbundled HDSL	ADSL provided to retail
20	UCL (short and long)	ADSL provided to retail
21	Unbundled 2 wire xDSL Loop	ADSL provided to retail
22	Unbundled 4 wire xDSL Loop	ADSL provided to retail
23	Other Unbundled Loops Design	Retail residence and business design dispatch
24	Other Unbundled Loops Non-Design	Retail residence and business design dispatch
25	Unbundled UDC/IDSL loop	Retail ISDN BRI
26	UNE Switch Port	Residence and Business (POTS)
27	Local Interoffice Trunks	Retail DS1/DS3 Interoffice
28	Line Sharing/High Frequency Spectrum UNE	ADSL provided to retail
29	Line Splitting/High Frequency Spectrum UNE	ADSL provided to retail
30	Enhanced Extended Loops (EELs) Dispatch	Special Access (backhauled T1)
31	Special Access to EELs Conversion	Retail Project

Benchmark

Parity/Retail

Enforcement Mechanism

Tier 1 and Tier 2

Implementation Date

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

TN-M&R-3: Maintenance Average Duration⁵³

Definition

The Average duration of Customer Trouble Reports from the receipt of the Customer Trouble Report to the time the trouble report is cleared.

Exclusions

- Trouble tickets canceled at the CLEC request prior to appointment date.
- BellSouth trouble reports associated with internal or administrative service
- Customer Provided Equipment (CPE) troubles or CLEC Equipment Trouble

Business Rules

For Average Duration the clock starts on the date and time of the receipt of a correct repair request. The clock stops on the date and time the service is restored and the BellSouth or CLEC customer is notified (when the technician completes the trouble ticket on his/her CAT or work systems).

Calculation

Maintenance Duration = (a - b)

- a = Date and Time of Service Restoration
- b = Date and Time Trouble Ticket was Opened

Average Maintenance Duration = (c ÷ d)

- c = Total of all maintenance durations in the reporting period
- d = Total Closed Troubles in the reporting period

Report Structure

- Dispatch/Non-Dispatch
- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate

⁵³ Measure is a derivative of BST's 3/12/01 SQMs except for levels of disaggregation and benchmarks which are from DeltaCom. One level of disaggregation was added which is Line Splitting/High Frequency Spectrum UNE and UCL (short and long).

TN-M&R-3: Maintenance Average Duration Disaggregation
Tennessee Specific

No.	Product Level Disaggregation	Retail Analog
1	Resold Residence POTS	Retail Residence
2	Resold Business POTS	Retail Business
3	Resold Design	Retail Design
4	Resold PBX	Retail PBX
5	Resold Centrex/Centrex-like	Retail Centrex
6	Resold BRI ISDN	Retail ISDN BRI
7	Resold PRI ISDN	Retail ISDN PRI
8	Resold DID Trunks	Retail DID Trunks
9	LNP	Retail residence and business
10	UNE Platform	Retail residence and business
11	2-Wire Analog Design	Retail residence and Business Dispatch
12	2-Wire Analog Non-Design	Retail residence and Business Dispatch
13	UNE Digital Loop Less than DS1	Retail residence and Business Dispatch
14	UNE DS1	Retail Digital Loop DS1
15	UNE DS3 and greater	Retail Digital Loop DS3 or greater
16	Unbundled ISDN BRI	Retail ISDN BRI
17	Unbundled ISDN PRI	Retail ISDN PRI
18	Unbundled ADSL	ADSL provided to retail
19	Unbundled HDSL	ADSL provided to retail
20	UCL (short and long)	ADSL provided to retail
21	Unbundled 2 wire xDSL Loop	ADSL provided to retail
22	Unbundled 4 wire xDSL Loop	ADSL provided to retail
23	Other Unbundled Loops Design	Retail residence and business design dispatch
24	Other Unbundled Loops Non-Design	Retail residence and business design dispatch
25	Unbundled UDC/IDSL loop	Retail ISDN BRI
26	UNE Switch Port	Residence and Business (POTS)
27	Local Interoffice Trunks	Retail DS1/DS3 Interoffice
28	Line Sharing/High Frequency Spectrum UNE	ADSL provided to retail
29	Line Splitting/High Frequency Spectrum UNE	ADSL provided to retail
30	Enhanced Extended Loops (EELs) Dispatch	Special Access (backhauled T1)
31	Special Access to EELs Conversion	Retail Project

Benchmark

Parity/Retail

Enforcement Mechanism

Tier 1 and Tier 2

Implementation Date

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

TN-M&R-4: Percent Repeat Troubles within 30 Days⁵⁴

Definition

Closed trouble reports on the same line/circuit as a previous trouble report received within 30 calendar days as a percent of total troubles closed.

Exclusions

- Trouble tickets canceled at the CLEC request prior to appointment date.
- BellSouth trouble reports associated with internal or administrative service
- Customer Provided Equipment (CPE) troubles or CLEC Equipment Trouble

Business Rules

Includes customer trouble reports received within 30 days of an original customer trouble report.

Calculation

Percent Repeat Troubles within 30 Days = $(a \div b) \times 100$

- a = Count of closed Customer Troubles where more than one trouble report was logged for the same service line within a continuous 30 days
- b = Total Trouble Reports Closed in Reporting Period

Report Structure

- Dispatch/Non-Dispatch
- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate

⁵⁴ Measure is a derivative of BST's 3/12/01 SQMs except for levels of disaggregation and benchmarks which are from DeltaCom. One level of disaggregation was added which is Line Splitting/High Frequency Spectrum UNE and UCL (short and long).

TN-M&R-4: Percent Repeat Troubles within 30 Days Disaggregation
Tennessee Specific

No.	Product Level Disaggregation	Retail Analog
1	Resold Residence POTS	Retail Residence
2	Resold Business POTS	Retail Business
3	Resold Design	Retail Design
4	Resold PBX	Retail PBX
5	Resold Centrex/Centrex-like	Retail Centrex
6	Resold BRI ISDN	Retail ISDN BRI
7	Resold PRI ISDN	Retail ISDN PRI
8	Resold DID Trunks	Retail DID Trunks
9	LNP	Retail residence and business
10	UNE Platform	Retail residence and business
11	2-Wire Analog Design	Retail residence and Business Dispatch
12	2-Wire Analog Non-Design	Retail residence and Business Dispatch
13	UNE Digital Loop Less than DS1	Retail residence and Business Dispatch
14	UNE DS1	Retail Digital Loop DS1
15	UNE DS3 and greater	Retail Digital Loop DS3 or greater
16	Unbundled ISDN BRI	Retail ISDN BRI
17	Unbundled ISDN PRI	Retail ISDN PRI
18	Unbundled ADSL	ADSL provided to retail
19	Unbundled HDSL	ADSL provided to retail
20	UCL (short and long)	ADSL provided to retail
21	Unbundled 2 wire xDSL Loop	ADSL provided to retail
22	Unbundled 4 wire xDSL Loop	ADSL provided to retail
23	Other Unbundled Loops Design	Retail residence and business design dispatch
24	Other Unbundled Loops Non-Design	Retail residence and business design dispatch
25	Unbundled UDC/IDSL loop	Retail ISDN BRI
26	UNE Switch Port	Residence and Business (POTS)
27	Local Interoffice Trunks	Retail DS1/DS3 Interoffice
28	Line Sharing/High Frequency Spectrum UNE	ADSL provided to retail
29	Line Splitting/High Frequency Spectrum UNE	ADSL provided to retail
30	Enhanced Extended Loops (EELs) Dispatch	Special Access (backhauled T1)
31	Special Access to EELs Conversion	Retail Project

Benchmark

Parity/Retail

Enforcement Mechanism

Tier 1 and Tier 2

Implementation Date

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

TN-M&R-5: Out of Service (OOS) > 24 Hours⁵⁵

Definition

For Out of Service Troubles (no dial tone, cannot be called or cannot call out) the percentage of Total OOS Troubles cleared in excess of 24 hours. (All design services are considered to be out of service).

Exclusions

- Trouble Reports canceled at the CLEC request prior to appointment date.
- BellSouth Trouble Reports associated with administrative service
- Customer Provided Equipment (CPE) Troubles or CLEC Equipment Troubles.

Business Rules

Customer Trouble reports that are out of service and cleared in excess of 24 hours. The clock begins when the trouble report is created in LMOS/WFA and the trouble is counted if the elapsed time exceeds 24 hours.

Calculation

Out of Service (OOS) > 24 hours = $(a \div b) \times 100$

- a = Total Cleared Troubles OOS > 24 Hours
- b = Total OOS Troubles in Reporting Period

Report Structure

- Dispatch/Non-Dispatch
- CLEC Specific
- BellSouth Aggregate
- CLEC Aggregate

⁵⁵ Measure is a derivative of BST's 3/12/01 SQMs except for levels of disaggregation and benchmarks which are from DeltaCom. One level of disaggregation was added which is Line Splitting/High Frequency Spectrum UNE and UCL (short and long).

TN-M&R-5: Out of Service (OOS) > 24 Hours Disaggregation**Tennessee Specific**

No.	Product Level Disaggregation	Retail Analog
1	Resold Residence POTS	Retail Residence
2	Resold Business POTS	Retail Business
3	Resold Design	Retail Design
4	Resold PBX	Retail PBX
5	Resold Centrex/Centrex-like	Retail Centrex
6	Resold BRI ISDN	Retail ISDN BRI
7	Resold PRI ISDN	Retail ISDN PRI
8	Resold DID Trunks	Retail DID Trunks
9	LNP	Retail residence and business
10	UNE Platform	Retail residence and business
11	2-Wire Analog Design	Retail residence and Business Dispatch
12	2-Wire Analog Non-Design	Retail residence and Business Dispatch
13	UNE Digital Loop Less than DS1	Retail residence and Business Dispatch
14	UNE DS1	Retail Digital Loop DS1
15	UNE DS3 and greater	Retail Digital Loop DS3 or greater
16	Unbundled ISDN BRI	Retail ISDN BRI
17	Unbundled ISDN PRI	Retail ISDN PRI
18	Unbundled ADSL	ADSL provided to retail
19	Unbundled HDSL	ADSL provided to retail
20	UCL (short and long)	ADSL provided to retail
21	Unbundled 2 wire xDSL Loop	ADSL provided to retail
22	Unbundled 4 wire xDSL Loop	ADSL provided to retail
23	Other Unbundled Loops Design	Retail residence and business design dispatch
24	Other Unbundled Loops Non-Design	Retail residence and business design dispatch
25	Unbundled UDC/IDSL loop	Retail ISDN BRI
26	UNE Switch Port	Residence and Business (POTS)
27	Local Interoffice Trunks	Retail DS1/DS3 Interoffice
28	Line Sharing/High Frequency Spectrum UNE	ADSL provided to retail
29	Line Splitting/High Frequency Spectrum UNE	ADSL provided to retail
30	Enhanced Extended Loops (EELs) Dispatch	Special Access (backhauled T1)
31	Special Access to EELs Conversion	Retail Project

Benchmark

- (1) Out of service where a dispatch is required: 90% resolved within 4 hours, 95% resolved within 8 hours, 99% resolved within 16 hours
- (2) Out of service conditions where no dispatch is required: 85% resolved within 2 hours, 95% resolved within 3 hours, 99% resolved within 4 hours.
- (3) All troubles resolved within 24 hours.

Note: Hours are calendar day hours.

Enforcement Mechanism:

Tier 1 and Tier 2

Implementation Date:

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

TN-M&R-6: Average Answer Time – Repair Centers⁵⁶

Definition

This report measures the average time a customer is in queue.

Exclusions

None

Business Rules

The clock starts when a CLEC Representative or BellSouth customer makes a choice on the Repair Center's menu and is put in queue for the next repair attendant. The clock stops when the repair attendant answers the call (abandoned calls are not included).

Note: The Total Column is a combined BellSouth Residence and Business number.

Calculation

Answer Time for BellSouth Repair Centers = (a - b)

- a = Time BellSouth Repair Attendant Answers Call

- b = Time of entry into queue after ACD Selection

Average Answer Time for BellSouth Repair Centers = (c ÷ d)

- c = Sum of all Answer Times

- d = Total number of calls by reporting period

Report Structure

- CLEC Aggregate

- BellSouth Aggregate

⁵⁶ Measure is a derivative of BST's 3/12/01 SQMs except for levels of disaggregation and benchmarks which are from DeltaCom. One level of disaggregation was added which is Line Splitting/High Frequency Spectrum UNE and UCL (short and long).

TN-M&R-6: Average Answer Time – Repair Centers Disaggregation
Tennessee Specific

No.	Product Level Disaggregation	Retail Analog
1	Resold Residence POTS	Retail Residence
2	Resold Business POTS	Retail Business
3	Resold Design	Retail Design
4	Resold PBX	Retail PBX
5	Resold Centrex/Centrex-like	Retail Centrex
6	Resold BRI ISDN	Retail ISDN BRI
7	Resold PRI ISDN	Retail ISDN PRI
8	Resold DID Trunks	Retail DID Trunks
9	LNP	Retail residence and business
10	UNE Platform	Retail residence and business
11	2-Wire Analog Design	Retail residence and Business Dispatch
12	2-Wire Analog Non-Design	Retail residence and Business Dispatch
13	UNE Digital Loop Less than DS1	Retail residence and Business Dispatch
14	UNE DS1	Retail Digital Loop DS1
15	UNE DS3 and greater	Retail Digital Loop DS3 or greater
16	Unbundled ISDN BRI	Retail ISDN BRI
17	Unbundled ISDN PRI	Retail ISDN PRI
18	Unbundled ADSL	ADSL provided to retail
19	Unbundled HDSL	ADSL provided to retail
20	UCL (short and long)	ADSL provided to retail
21	Unbundled 2 wire xDSL Loop	ADSL provided to retail
22	Unbundled 4 wire xDSL Loop	ADSL provided to retail
23	Other Unbundled Loops Design	Retail residence and business design dispatch
24	Other Unbundled Loops Non-Design	Retail residence and business design dispatch
25	Unbundled UDC/IDSL loop	Retail ISDN BRI
26	UNE Switch Port	Residence and Business (POTS)
27	Local Interoffice Trunks	Retail DS1/DS3 Interoffice
28	Line Sharing/High Frequency Spectrum UNE	ADSL provided to retail
29	Line Splitting/High Frequency Spectrum UNE	ADSL provided to retail
30	Enhanced Extended Loops (EELs) Dispatch	Special Access (backhauled T1)
31	Special Access to EELs Conversion	Retail Project

Benchmark

- (1) Greater than 95% of calls, by center, are answered within 20 seconds.
- (2) 100% of all calls answered within 30 seconds.

Enforcement Mechanism

Tier 1 and Tier 2

Implementation Date

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

TN-M&R-7: Mean Time To Notify CLEC of Network Outages⁵⁷

Definition

This report measures the time it takes for the BellSouth Network Management Center (NMC) to notify the CLEC of major network outages.

Exclusions

None

Business Rules

BellSouth will inform the CLEC of any major network outages (key customer accounts) via a page or email. When the BellSouth NMC becomes aware of a network incident, the CLEC and BellSouth will be notified electronically. The notification time for each outage will be measured in minutes and divided by the number of outages for the reporting period. These are broadcast messages. It is up to those receiving the message to determine if they have customers affected by the incident.

Calculation

Time to Notify CLEC = (a - b)

- a = Date and Time BellSouth Notified CLEC
- b = Date and Time BellSouth Detected Network Incident

Mean Time to Notify CLEC = (c ÷ d)

- c = Sum of all Times to Notify CLEC
- d = Count of Network Incidents

Report Structure

- BellSouth Aggregate
- CLEC Aggregate
- CLEC Specific

Disaggregation

All Network Outages
Tennessee Specific

Benchmark

Parity by Design

Enforcement Mechanism

Tier 1 and Tier 2

Implementation Date

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

⁵⁷ Measure is a derivative of BST's 3/12/01 SQMs.

TN-C-1: Collocation Average Response Time⁵⁸

Definition

Measures the average time (counted in calendar days) from the receipt of a complete and accurate collocation application (including receipt of application fee if required) to the date BellSouth returns a response electronically or in writing. Within the presubscribed number of calendar days after having received a bona fide application for physical collocation, BellSouth must respond as to whether space is available or not.

Exclusions

Any application canceled by the CLEC prior to the benchmark interval.

Business Rules

The clock starts on the date that BellSouth receives a complete and accurate collocation application accompanied by the appropriate application fee if required. The clock stops on the date that BellSouth returns a response. The clock will restart upon receipt of changes to the original application request.

Calculation

Response Time = (a - b)

- a = Request Response Date
- b = Request Submission Date

Average Response Time = (c ÷ d)

- c = Sum of all Response Times
- d = Count of Responses Returned within Reporting Period

Report Structure

- Individual CLEC (alias) aggregate
- Aggregate of all CLECs

Disaggregation

Tennessee Specific
Caged, Cageless, Virtual and Adjacent

Benchmark

95% within 10 calendar days

Enforcement Mechanism

Tier 1 and Tier 2

Implementation Date

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

⁵⁸ Measure is a derivative of BST's 3/12/01 SQMs except for benchmarks which are from DeltaCom.

TN-C-2: Collocation Average Arrangement Time⁵⁹

Definition

Measures the average time (counted in calendar days) from receipt of a complete and accurate Bona Fide firm order (including receipt of appropriate fee if required) to the date BellSouth completes the collocation arrangement and notifies the CLEC.

Exclusions

- Any Bona Fide firm order canceled by the CLEC prior to the benchmark interval.
- Any Bona Fide firm order with a CLEC-negotiated interval longer than the benchmark interval.

Business Rules

The clock starts on the date that BellSouth receives a complete and accurate Bona Fide firm order accompanied by the appropriate fee.

The clock stops on the date that BellSouth completes the collocation arrangement and notifies the CLEC.

Calculation

Arrangement Time = (a - b)

- a = Date Collocation Arrangement is Complete
- b = Date Order for Collocation Arrangement Submitted

Average Arrangement Time = (c ÷ d)

- c = Sum of all Arrangement Times
- d = Total Number of Collocation Arrangements Completed during Reporting Period.

Report Structure

- Individual CLEC (alias) aggregate
- Aggregate of all CLECs

Disaggregation

Tennessee Specific
Caged, Cageless, Virtual, and Adjacent

Benchmark

95% Benchmark

- (1) 90 calendar days for Adjacent and Caged Physical Collocation
- (2) 30 calendar days for Cageless or Virtual Collocation

Enforcement Mechanism

Tier 1 and Tier 2

Implementation Date

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

⁵⁹ Measure is a derivative of BST's 3/12/01 SQMs except for benchmarks which are from DeltaCom.

TN-C-3: Collocation Percent of Due Dates Missed⁶⁰

Definition

Measures the percent of missed due dates for both virtual and physical collocation arrangements.

Exclusions

Any Bona Fide firm order canceled by the CLEC prior to the benchmark interval.

Business Rules

Percent Due Dates Missed is the percent of total collocation arrangements which BellSouth is unable to complete by end of the BellSouth committed due date. The clock starts on the date that BellSouth receives a complete and accurate Bona Fide firm order accompanied by the appropriate fee if required. The arrangement is considered a missed due date if it is not completed on or before the committed due date.

Calculation

% of Due Dates Missed = $(a \div b) \times 100$

- a = Number of Completed Orders that were not completed within BellSouth Committed Due Date during Reporting Period
- b = Number of Orders Completed in Reporting Period

Report Structure

- Individual CLEC (alias) aggregate
- Aggregate of all CLECs

Disaggregation

Tennessee Specific

Caged

Cageless

Virtual

Adjacent

Benchmark

Zero misses of committed due dates.

Enforcement Mechanism

Tier 1 and Tier 2

Implementation Date

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

⁶⁰ Measure is a derivative of BST's 3/12/01 SQMs except for benchmarks which are from DeltaCom.

TN-OS-/DA-1: Speed to Answer Performance/Average Speed to Answer - Toll⁶¹

Definition

Measurement of the average time in seconds calls wait before answered by a toll or directory assistance operator.

Exclusions

None

Business Rules

The clock starts when the customer enters the queue and the clock stops when a BellSouth representative answers the call or the customer abandons the call. The length of each call is determined by measuring, using a scanning technique, and accumulating the elapsed time from the entry of a customer call into the BellSouth call management system queue until the customer call is abandoned or transferred to BellSouth personnel assigned to handle calls for assistance. The system makes no distinction between CLEC customers and BellSouth customers.

Calculation

Speed to Answer Performance/Average Speed to Answer - Toll = $a \div b$

- a = Total queue time
- b = Total calls answered

Note: Total queue time includes time that answered calls wait in queue as well as time abandoned calls wait in queue prior to abandonment.

Report Structure

- Reported for the aggregate of BellSouth and CLECs
 - State

Disaggregation

- Operator Service
- Directory Assistance

Enforcement Mechanism

Parity by Design

Implementation

90 days from final order

⁶¹ Derived from BellSouth SQM OS-1: Speed to Answer Toll. *See David Coon Direct Testimony*, submitted July 16, 2001, Exhibit DAC-1 pp. 6-1 through 6-2.

TN-OS/DA-2: Speed to Answer Performance/Percent Answered with “X” Seconds ⁶²

Definition

Measurement of the percent of toll calls and directory assistance calls that are answered in less than ten seconds

Exclusions

None

Business Rules

The clock starts when the customer enters the queue and the clock stops when a BellSouth representative answers the call or the customer abandons the call. The length of each call is determined by measuring, using a scanning technique, and accumulating the elapsed time from the entry of a customer call into the BellSouth call management system queue until the customer call is abandoned or transferred to BellSouth personnel assigned to handle calls for assistance. The system makes no distinction between CLEC customers and BellSouth customers.

Calculation

The Percent Answered within “X” Seconds measurement for toll is derived by using the BellCore Statistical Answer Conversion Tables, to convert the Average Speed to Answer measure into a percent of calls answered within “X” seconds. The BellCore Conversion Tables are specific to the defined parameters of work time, number of operators, max queue size and call abandonment rates.

Report Structure

- Reported for the aggregate of BellSouth and CLECs
 - State

Disaggregation

- Operator Service
- Directory Assistance

Benchmark

Parity by Design

Enforcement Mechanism

Not Applicable

Implementation Date

90 days from final order

⁶² Derived from BellSouth SQM OS-2: Speed to Answer. *See David Coon Direct Testimony*, submitted July 16, 2001, Exhibit DAC-1 p. 6-3.

D-1: Average Database Update Interval⁶³

Definition

This report measures the interval from receipt of the database change request to the completion of the update to the database for Line Information Database (LIDB), Directory Assistance and Directory Listings. For E-911, see Section 8.

Exclusions

- Updates canceled by the CLEC
- Initial update when supplemented by CLEC
- BellSouth updates associated with internal or administrative use of local services

Business Rules

The interval for this measure begins with the date and time stamp of when the LSR requesting the change was received by the LCSC. The end time stamp is the date and time of completion of updates to the system. For BellSouth Results: The BellSouth computation is identical to that for the (starting when the request is placed to the BellSouth Business Office) CLEC with the clarifications noted below. Other Clarifications and Qualification:

- For LIDB, the elapsed time for a BellSouth update is measured from the point in time when the request for change or addition is made.
- Results for the CLECs are captured and reported at the update level by Reporting Dimension (see below).
- The Completion Date is the date upon which BellSouth issues the Update Completion Notice to the CLEC.
- If the CLEC initiates a supplement to the originally submitted update and the supplement reflects changes in customer requirements (rather than responding to BellSouth initiated changes), then the update submission date and time will be the date and time of BellSouth receipt of a syntactically correct update supplement. Update activities responding to BellSouth initiated changes will not result in changes to the update submission date and time used for the purposes of computing the update completion interval.
- Elapsed time is measured in hours and hundredths of hours rounded to the nearest tenth of an hour.
- Because this should be a highly automated process, the accumulation of elapsed time continues through off-schedule, weekends and holidays (New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas); however, scheduled maintenance windows are excluded.

⁶³ Derived from BellSouth SQM D-1: Average Database Update Interval. See David Coon Direct Testimony, submitted July 16, 2001, Exhibit DAC-1 p. 6-3.

D-1: Average Database Update Interval

Calculation

Update Interval = (a - b)

- a = Completion Date & Time of Database Update
- b = Submission Date and Time of Database Change

Average Update Interval = (c ÷ d)

- c = Sum of all Update Intervals
- d = Total Number of Updates Completed During Reporting Period

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate

Disaggregation

- LIDB
- Directory Listing
- Directory Assistance

Benchmark

95% within 72 hours

Enforcement Mechanism

Tier-1

Tier-2

Implementation Date

90 days from final order

TN-D-2: Percent Database Update Accuracy⁶⁴

Definition

This report measures the accuracy of database updates by BellSouth for Line Information Database (LIDB), Directory Assistance, and Directory Listings using a statistically valid sample of LSRs/Orders in a manual review. This manual review is not conducted on BellSouth Retail Orders.

Exclusions

- Updates canceled by the CLEC
- Initial update when supplemented by CLEC
- CLEC orders that had CLEC errors
- BellSouth updates associated with internal or administrative use of local services.

Business Rules

For each update completed during the reporting period, the original update that the CLEC sent to BellSouth is compared to the database following completion of the update by BellSouth. An update is "completed without error" if the database completely and accurately reflects the activity specified on the original and supplemental update (orders) submitted by the CLEC. Each database (LIDB, Directory Assistance, and Directory Listings) should be separately tracked and reported. A statistically valid sample of CLEC Orders is pulled each month. That sample will be used to test the accuracy of the database update process. This is a manual process.

Calculation

Percent Update Accuracy = $(a \div b) \times 100$

- a = Number of Updates Completed Without Error
- b = Number Updates Completed

Report Structure

- CLEC Aggregate
- State Specific (Tennessee)

Disaggregation

- LIDB
- Directory Assistance
- Directory Listing

Benchmark

- 95% Accurate

Enforcement Mechanism

Tier-2

Implementation Date

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

⁶⁴ Derived from BellSouth SQM D-2: Percent Database Update Accuracy. See David Coon Direct Testimony, submitted July 16, 2001, Exhibit DAC-1 pp. 7-3 through 7-4.

TN-D-3: Percent NXXs and LRNs Loaded by the LERG Effective Date⁶⁵

Definition

Measurement of the percent of NXX(s) and Location Routing Numbers LRN(s) loaded in end office and/or tandem switches by the Local Exchange Routing Guide (LERG) effective date when facilities are in place. BellSouth has a single provisioning process for both NXX(s) and LRN(s). In this measure, BellSouth will identify whether or not a particular NXX has been flagged as LNP capable (set triggers for dips) by the LERG effective date. An LRN is assigned by the owner of the switch and is placed into the software translations for every switch to be used as an administrative pointer to route NXX(s) in LNP capable switches. The LRN is a result of Local Number Porting and is housed in a national database provided by the Number Portability Administration Center (NPAC). The switch owner is responsible for notifying NPAC and requesting the effective date that will be reflected in the LERG. The national database downloads routing tables into BellSouth Service Control Point (SCP) regional databases, which are queried by switches when routing ported numbers. The basic NXX routing process includes the addition of all NXX(s) in the response translations. This addition to response translations is what supports LRN routing. Routing instructions for all NXX(s), including LRN(s), are received from the Advance Routing & Trunking System (ARTS) and all routing, including response, is established based on the information contained in the Translation Work Instructions (TWINS) document.

Exclusions

- Activation requests where the CLEC's interconnection arrangements and facilities are not in place by the LERG effective date.

Business Rules

Data for the initial NXX(s) and LRN(s) in a local calling area will be based on the LERG effective date or completion of the initial interconnection trunk group(s), whichever is longer. Data for additional NXX(s) in the local calling area will be based on the LERG effective date. The LERG effective date is loaded into the system at the request of the CLEC. It is contingent upon the CLEC to engineer, order, and install interconnection arrangements and facilities prior to that date. The total Count of NXX(s) and LRN(s) that were scheduled to be loaded and those that were loaded by the LERG effective date in BellSouth switches will be captured in the Work Force Administration -Dispatch In database.

⁶⁵ Derived from BellSouth SQM D-3: Percent NXXs and LRNs Loaded by the LERG Effective Date). See David Coon Direct Testimony, submitted July 16, 2001, Exhibit DAC-1 pp. 7-5 through 7-6.

TN-D-3: Percent NXXs and LRNs Loaded by the LERG Effective Date

Calculation

Percent NXXs/LRNs Loaded and Tested Prior to the LERG Effective Date = $(a \div b) \times 100$

- a = Count of NXXs and LRNs loaded by the LERG effective date
- b = Total NXXs and LRNs scheduled to be loaded by the LERG effective date

Report Structure

- CLEC Specific
- CLEC Aggregate

Disaggregation

Not Applicable

Benchmark

100% by LERG effective date

Enforcement Mechanism

Tier-2

Implementation Date

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

TN-E-1: Timeliness⁶⁶

Definition

Measures the percent of batch orders for E911 database updates (to CLEC resale and BellSouth retail records) processed successfully within a 24-hour period.

Exclusions

- Any resale order canceled by a CLEC
- Facilities-based CLEC orders

Business Rules

The 24-hour processing period is calculated based on the date and time processing starts on the batch orders and the date and time processing stops on the batch orders. Mechanical processing starts when SCC (the BellSouth E911 vendor) receives E911 files containing batch orders extracted from the BellSouth Service Order Control System (SOCS). Processing stops when SCC loads the individual records to the E911 database. The E911 database includes updates to the Automatic Location Identification (ALI) database. The system makes no distinction between CLEC resale records and BellSouth retail records.

Calculation

$E911 \text{ Timeliness} = (a \div b) \times 100$

- a = Number of batch orders processed within 24 hours
- b = Total number of batch orders submitted

Report Structure

Reported for the aggregate of CLEC resale updates and BellSouth retail updates

- State

Disaggregation

Not Applicable

Benchmark

Parity by Design

Enforcement Mechanism

Not Applicable

Implementation Date

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

⁶⁶ Derived from BellSouth SQM E-1: Timeliness. See *David Coon Direct Testimony*, submitted July 16, 2001, Exhibit DAC-1 pp. 8-1 through 8-2.

TN-E-2: Accuracy⁶⁷

Definition

Measures the percent of E911 telephone number (TN) record updates (to CLEC resale and BellSouth retail records) processed successfully for E911 (including the Automatic Location Identification (ALI) database).

Exclusions

- Any resale order canceled by a CLEC
- Facilities-based CLEC orders

Business Rules

Accuracy is based on the number of records processed without error at the conclusion of the processing cycle. Mechanical processing starts when SCC (the BellSouth E911 vendor) receives E911 files containing telephone number (TN) records extracted from BellSouth's Service Order Control System (SOCS). The system makes no distinction between CLEC resale records and BellSouth retail records.

Calculation

$E911 \text{ Accuracy} = (a \div b) \times 100$

- a = Number of record individual updates processed with no errors
- b = Total number of individual record updates

Report Structure

Reported for the aggregate of CLEC resale updates and BellSouth retail updates

- State

Disaggregation

Not Applicable

Benchmark

Parity by Design

Enforcement Mechanism

Not Applicable

Implementation Date

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

⁶⁷ Derived from BellSouth SQM E-2: Accuracy. See David Coon Direct Testimony, submitted July 16, 2001, Exhibit DAC-1 pp. 8-3 through 8-4.

TN-E-3: Mean Interval⁶⁸

Definition

Measures the mean interval processing of E911 batch orders (to update CLEC resale and BellSouth retail records) including processing against the Automatic Location Identification (ALI) database.

Exclusions

- Any resale order canceled by a CLEC
- Facilities-based CLEC orders

Business Rules

The processing period is calculated based on the date and time processing starts on the batch orders and the date and time processing stops on the batch orders. Data is posted in 4-hour increments up to and beyond 24 hours. The system makes no distinction between CLEC resale records and BellSouth retail records.

Calculation

E911 Interval = (a - b)

- a = Date and time of batch order completion
- b = Date and time of batch order submission

E911 Mean Interval = (c ÷ d)

- c = Sum of all E911 Intervals
- d = Number of batch orders completed

Report Structure

Reported for the aggregate of CLEC resale updates and BellSouth retail updates

- State

Disaggregation

Not Applicable

Benchmark

Parity by Design

Enforcement Mechanism

Not Applicable

Implementation Date

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

⁶⁸ Derived from BellSouth SQM E-3: Mean Interval. See *David Coon Direct Testimony*, submitted July 16, 2001, Exhibit DAC-1 pp. 8-5 through 8-6.

TN-TGP-1: Trunk Group Performance-Aggregate⁶⁹

Definition

The Trunk Group Performance report displays, over a reporting cycle, aggregate, average trunk group blocking data for each hour of each day of the reporting cycle, for both CLEC affecting and BellSouth affecting trunk groups.

Exclusions

- Trunk groups for which valid data is not available for an entire study period
- Duplicate trunk group information
- Trunk groups blocked due to CLEC network/equipment failure
- Trunk groups blocked due to CLEC delayed or refused orders
- Increases in volume due to CLEC lack of informing BellSouth within a reasonable timeframe
- Final groups actually overflowing, not blocking

Business Rules

The purpose of the Trunk Group Performance Report is to provide trunk-blocking measurements on CLEC and BellSouth trunk groups for comparison only. It is not the intent of the report that it be used for network management and/or engineering.

Monthly Average Blocking:

- The reporting cycle includes both business and non-business days in a calendar month.
- Monthly average blocking values are calculated for each trunk group for each of the 24 time consistent hours across a reporting cycle.

Aggregate Monthly Blocking:

- Used to compare aggregate blocking across trunk groups which terminate traffic at CLEC points of presence versus BellSouth switches.
- Aggregate monthly blocking data is calculated for each hour of the day across all trunk groups assigned to a category.

Trunk Categorization:

This report displays, over a reporting cycle, aggregate, average blocking data for each hour of a day. Therefore, for each reporting cycle, 24 blocking data points are generated for two aggregate groups of selected trunk groups. These groups are CLEC affecting and BellSouth affecting trunk groups. In order to assign trunk groups to each aggregate group, all trunk groups are first assigned to a category. A trunk group's end points and the type of traffic that is transmitted on it define a category. Selected categories of trunk groups are assigned to the aggregate groups so that trunk reports can be generated. The categories to which trunk groups have been assigned for this report are as follows.

⁶⁹ Derived from BellSouth SQM TGP-1: Trunk Group Performance-Aggregate. See David Coon Direct Testimony, submitted July 16, 2001, Exhibit DAC-1 pp. 9-1 through 9-2.

TN-TGP-1: Trunk Group Performance-Aggregate

CLEC Affecting Categories:

	Point A	Point B
Category 1:	BellSouth End Office	BellSouth Access Tandem
Category 3:	BellSouth End Office	CLEC Switch
Category 4:	BellSouth Local Tandem	CLEC Switch
Category 5:	BellSouth Access Tandem	CLEC Switch
Category 10:	BellSouth End Office	BellSouth Local Tandem
Category 16:	BellSouth Tandem	BellSouth Tandem

BellSouth Affecting Categories:

	Point A	Point B
Category 1:	BellSouth End Office	BellSouth Access Tandem
Category 9:	BellSouth End Office	BellSouth End Office
Category 10:	BellSouth End Office	BellSouth Local Tandem
Category 16:	BellSouth Tandem	BellSouth Tandem

Calculation

Monthly Average Blocking:

- For each hour of the day, each day's raw data are summed across all valid measurements days in a report cycle for blocked and attempted calls.
- The sum of the blocked calls is divided by the total number of calls attempted in a reporting period.

Aggregate Monthly Blocking:

- For each hour of the day, the monthly sums of the blocked and attempted calls from each trunk group are separately aggregated over all trunk groups within each assigned category.
- The total blocked calls is divided by the total call attempts within a group to calculate an aggregate monthly blocking for each assigned group.
- The result is an aggregate monthly average blocking value for each of the 24 hours by group.
- The difference between the CLEC and BellSouth affecting trunk groups are also calculated for each hour.

Report Structure

- CLEC Aggregate
 - State
- BellSouth Aggregate
 - State

Disaggregation

CLEC Aggregate (for CLECs in Tennessee)
BellSouth Aggregate

TN-TGP-1: Trunk Group Performance-Aggregate

Benchmark

BellSouth aggregate

Any 2 hour period in 24 hours where CLEC blockage exceeds
BellSouth blockage by more than 0.5% using trunk groups 1,
3, 4, 5, 10, 16 for CLECs and 1,9,10,16 for BellSouth.

Enforcement Mechanism

Tier-2

Implementation Date

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

TN-TGP-2: Trunk Group Performance-CLEC Specific⁷⁰

Definition

The Trunk Group Performance report displays, over a reporting cycle, aggregate, average trunk group blocking data for each hour of each day of the reporting cycle, for both CLEC affecting and BellSouth affecting trunk groups.

Exclusions

- Trunk groups for which valid data is not available for an entire study period
- Duplicate trunk group information
- Trunk groups blocked due to CLEC network/equipment failure
- Trunk groups blocked due to CLEC delayed or refused orders
- Increases in volume due to CLEC lack of informing BellSouth within a reasonable timeframe
- Final groups actually overflowing, not blocking

Business Rules

The purpose of the Trunk Group Performance Report is to provide trunk-blocking measurements on CLEC and BellSouth trunk groups for comparison only. It is not the intent of the report that it be used for network management and/or engineering.

Monthly Average Blocking:

- The reporting cycle includes both business and non-business days in a calendar month.
- Monthly average blocking values are calculated for each trunk group for each of the 24 time consistent hours across a reporting cycle.

Aggregate Monthly Blocking:

- Used to compare aggregate blocking across trunk groups which terminate traffic at CLEC points of presence versus BellSouth switches.
- Aggregate monthly blocking data is calculated for each hour of the day across all trunk groups assigned to a category.

Trunk Categorization:

- This report displays, over a reporting cycle, aggregate, average blocking data for each hour of a day. Therefore, for each reporting cycle, 24 blocking data points are generated for two aggregate groups of selected trunk groups. These groups are CLEC affecting and BellSouth affecting trunk groups. In order to assign trunk groups to each aggregate group, all trunk groups are first assigned to a category. A trunk group's end points and the type of traffic that is transmitted on it define a category. Selected categories of trunk groups are assigned to the aggregate groups

⁷⁰ Derived from BellSouth SQM TGP-1: Trunk Group Performance-Aggregate. See David Coon Direct Testimony, submitted July 16, 2001, Exhibit DAC-1 pp. 9-3 through 9-4.

TN-TGP-2: Trunk Group Performance-CLEC Specific

so that trunk reports can be generated. The categories to which trunk groups have been assigned for this report are as follows.

CLEC Affecting Categories:

	Point A	Point B
Category 1:	BellSouth End Office	BellSouth Access Tandem
Category 3:	BellSouth End Office	CLEC Switch
Category 4:	BellSouth Local Tandem	CLEC Switch
Category 5:	BellSouth Access Tandem	CLEC Switch
Category 10:	BellSouth End Office	BellSouth Local Tandem
Category 16:	BellSouth Tandem	BellSouth Tandem

BellSouth Affecting Categories:

	Point A	Point B
Category 1:	BellSouth End Office	BellSouth Access Tandem
Category 9:	BellSouth End Office	BellSouth End Office
Category 10:	BellSouth End Office	BellSouth Local Tandem
Category 16:	BellSouth Tandem	BellSouth Tandem

Calculation

Monthly Average Blocking:

- For each hour of the day, each day's raw data are summed across all valid measurements days in a report cycle for blocked and attempted calls.
- The sum of the blocked calls is divided by the total number of calls attempted in a reporting period.

Aggregate Monthly Blocking:

- For each hour of the day, the monthly sums of the blocked and attempted calls from each trunk group are separately aggregated over all trunk groups within each assigned category.
- The total blocked calls is divided by the total call attempts within a group to calculate an aggregate monthly blocking for each assigned group.
- The result is an aggregate monthly average blocking value for each of the 24 hours by group.
- The difference between the CLEC and BellSouth affecting trunk groups are also calculated for each hour.

Report Structure

- CLEC Specific
 - State

Disaggregation

CLEC trunk group (state specific)

TN-TGP-2: Trunk Group Performance-CLEC Specific

Benchmark

Any 2 hour period in 24 hours where CLEC blockage exceeds BellSouth blockage by more than 0.5% using trunk groups 1, 3, 4, 5, 10, 16 for CLECs and 1,9,10,16 for BellSouth

Enforcement Mechanism

Tier-1

Implementation Date

Ten (10) days after the Authority issues a final order, unless otherwise ordered.

Special Access Measures

From:
Rebuttal

Futbish
Testimony
8/10/01



ILEC PERFORMANCE
MEASUREMENTS & STANDARDS

in the
Ordering, Provisioning,
and
Maintenance & Repair
of

ACCESS SERVICE

National Carrier Management and Initiatives

Issued: June 26, 2001

ILEC Performance Measurements and Standards

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ILEC Performance Measurements and Standards

Overview

The purpose of this document is to establish a core set of measures to monitor the quality and timeliness of access services being provided to WorldCom by the Regional Bell Operating Companies (RBOC's) and certain Non-RBOC Incumbent Local Exchange Carriers, hereinafter collectively referred to as "ILECs". These measures cover the essential aspects of Ordering, Provisioning, and Maintenance & Repair activities, and will become the model for WorldCom internal ILEC performance reporting as well as the proposed model for ILEC Self Reporting

Our intent is to measure ILEC performance on all WorldCom requests for exchange access service ordered via an Access Service Request (ASR). The scope is inclusive of both special access and switched access service requests. It is also inclusive of dedicated exchange access connections utilizing any of WorldCom's IXC, or local service, based products, not addressed in a Local Interconnection Agreement, when requested on an ASR

This document will be reviewed with each RBOC and certain ILECs in the hope that they will incorporate this set of common measures and methodology into their self-reporting, and assist in driving toward industry standard performance measures. Industry standard measures, along with the use of common methods and terminology, will benefit all parties by reducing misunderstandings and focusing efforts on the shared goal of providing excellent customer service.

WorldCom, as a very large customer of ILEC access services, has also developed these performance measurements and standards to: 1) help insure we are receiving the quality of service we and our customers expect, both now and over time; and 2) help insure we are being treated fairly, in our dual role as both customer and competitor, as the RBOC's, and other ILECs, increasingly participate in the competitive long distance business.

ILEC Performance Measurements and Standards

Reporting Dimensions

All WorldCom business units, including UUNET, are combined into one WorldCom total, with the following reporting dimensions for all measurements.

- Special Access disaggregated by bandwidth
- Switched Access
- State Total
- ILEC Total

Special Access is any exchange access service that provides a transmission path between two or more points, either directly, or through a central office, where bridging or multiplexing functions are performed, not utilizing ILEC end office switches.

Special access services include dedicated and shared facilities configured to support analog/voice grade service, metallic and/or telegraph service, audio, video, digital data service (DDS), digital transport and high capacity service (DS1, DS3 and OCn), collocation transport, links for SS7 signaling and database queries, SONET access including OC-192 based dedicated SONET ring access, and broadband services.

Exclusions: Special access requests related to unbundled transport or unbundled multiplexing orders are excluded, as these orders/circuits should be accounted for in Local Performance Measures.

Switched Access is an exchange access service comprised of a local switching function, multiplexing equipment, and a switch termination, connected by a transport facility configured, or connected to, another carrier's location and providing access to end user dial tone lines served by an ILEC.

Switched access services include all feature group trunk services, and related local switching services, common carrier line services and functions, and local transport services, such as entrance facilities, 'direct-trunked transport' or direct end office trunks, and switched transport over dedicated, shared, or tandem-based connections.

Exclusions: Switched access requests related to local interconnection, E911 trunks, Local Operator Services, and Local Directory Assistance trunks are excluded, as these orders/circuits should be accounted for in Local Performance Measures.

The reporting period is the calendar month, unless otherwise noted, with all averages or percentages displayed to two decimal points.

ILEC Performance Measurements and Standards

ORDERING

Measurement: FOC Receipt

Description

The Firm Order Confirmation (FOC) is the ILEC response to a WorldCom Access Service Request (ASR), whether an initial or supplement ASR, that provides WorldCom with the specific Due Date on which the requested circuit or circuits will be installed. The performance standard for FOCs received within the standard interval is expressed as a percentage of the total FOCs received during the reporting period.

Calculation Methodology

FOC Receipt - Distribution:

(FOC Receipt Date – ASR Sent Date), for each FOC received during reporting period, distributed by:
0 day, 1 day, 2 days, through 10 days and > 10 days

Percent Meeting Performance Standard:

$$\frac{[\text{Count FOCs received where (FOC Receipt Date – ASR Sent Date)} \leq \text{Performance Standard}]}{\text{Total FOCs received during reporting period}} \times 100$$

Business Rules

1. Counts are based on each instance an FOC is received from the ILEC. If one or more Supplement ASRs are issued to correct or change a request, each corresponding FOC, which is received during the reporting period, is counted and measured.
2. Days shown are business days, Monday to Friday, excluding National Holidays. Activity starting on a weekend, or holiday, will reflect a start date of the next business day, and activity ending on a weekend, or holiday, will be calculated with an end date of the last previous business day.
3. Projects are included. Determination of what is identified as a project varies by ILEC and should not alter the need to ensure that service is provided within expected intervals.

Exclusions

- Unsolicited FOCs
- Disconnect ASRs
- Cancelled ASRs
- Record ASRs

Levels of Disaggregation

Special Access

- DS0
- DS1
- DS3
- OCn

Switched Access

Performance Standard

Percent FOCs Received within Standard

- Special Access
 - DS0 98% within 2 business days
 - DS1 98% within 2 business days
 - DS3 98% within 5 business days

Switched Access - TBD

FOC Receipt Distribution - Diagnostic

ILEC Performance Measurements and Standards

ORDERING

Measurement: FOC Receipt Past Due

Description

The FOC Receipt Past Due measure tracks all open ASR requests that have not received an FOC from the ILEC within the expected FOC receipt interval, as of the last day of the reporting period. This measure gauges the magnitude of late FOCs and is essential to ensure that FOCs are being received in a timely manner from the ILECs.

Calculation Methodology

FOC Receipt - Percent Past Due:

$$\frac{\text{Sum of ASRs without a FOC Received where (End of Reporting Period - ASR Sent Date > Expected FOC Receipt Interval)}}{\text{Total number of ASRs sent during reporting period}} \times 100$$

Business Rules

1. All counts are based on the latest ASR request sent to the ILEC. Where an ASR was not responded to, and a subsequent ASR is sent, only the latest ASR would be recorded as Past Due.
2. The Expected FOC Receipt Interval, used in the calculations, will be the interval identified in the Performance Standards for the FOC Receipt measure.
3. Days shown are business days, Monday to Friday, excluding National Holidays. Activity starting on a weekend, or holiday, will reflect a start date of the next business day, and activity ending on a weekend, or holiday, will be calculated with an end date of the last previous business day.
4. Projects are included. Determination of what is identified as a project varies by ILEC and should not alter the need to ensure that service is provided within expected intervals.

Exclusions

- Unsolicited FOCs
- Disconnect ASRs
- Cancelled ASRs
- Record ASRs

Levels of Disaggregation

Special Access

Without Open Query/With Open Query

- DS0
- DS1
- DS3
- OCn

Switched Access

Without Open Query/With Open Query

Performance Standard

FOC Receipt Past Due - Without Open Query - < 2 % FOC Receipt Past Due
FOC Receipt Past Due - With Open Query - Diagnostic

ILEC Performance Measurements and Standards

ORDERING

Measurement: Offered Versus Requested Due Date

Description

The Offered Versus Requested Due Date measure reflects the degree to which the ILEC is committing to install service on the WorldCom Requested Due Date (WRDD), when WorldCom specifically requests a Due Date that is equal to or greater than the ILEC stated interval.

Calculation Methodology

Percent Offered with WorldCom Requested Due Date:

$$\frac{[\text{Count of circuits where (FOC Due Date = WRDD)}]}{[\text{Total number of circuits where (WRDD - ASR Sent Date) = > ILEC Stated Interval}]} \times 100$$

Business Rules

1. Measures are based on the last ASR sent and the associated FOC Due Date received from the ILEC.
2. Selection is based on circuits completed by the ILEC during the reporting period. An ASR may provision more than one circuit and ILECs may break the ASR into separate internal orders, however, the ASR is not considered completed for measurement purposes until all circuits are completed.
3. Days shown are business days, Monday to Friday, excluding National Holidays. Activity starting on a weekend, or holiday, will reflect a start date of the next business day, and activity ending on a weekend, or holiday, will be calculated with an end date of the last previous business day.
4. Projects are included. Determination of what is identified as a project varies by ILEC and should not alter the need to ensure that service is provided within expected intervals.

Exclusions

- Unsolicited FOCs
- Disconnect ASRs
- Cancelled ASRs
- Record ASRs

Levels of Disaggregation

Special Access

- DS0
- DS1
- DS3
- OCn

Switched Access

Performance Standard

ILEC Stated Intervals - To be determined by ILEC

Special Access

- DS0 - TBD
- DS1 - TBD
- DS3 - TBD
- OCn - TBD

Switched Access - TBD

Percent Offered with WRDD where WRDD = > ILEC Stated Interval - 100%

ILEC Performance Measurements and Standards

PROVISIONING

Measurement: On Time Performance To FOC Due Date

Description

On Time Performance To FOC Due Date measures the percentage of circuits that are completed on the FOC Due Date, as recorded from the FOC received in response to the last ASR sent. Customer Not Ready (CNR) situations may result in an installation delay. The On Time Performance To FOC Due Date is calculated both with CNR consideration, i.e. measuring the percentage of time the service is installed on the FOC due date while counting CNR coded orders as an appointment met, and without CNR consideration.

Calculation Methodology

Percent On Time Performance to FOC Due Date – With CNR Consideration:

$$\frac{[(\text{Count of Circuits Completed on or before ILEC Committed Due Date} + \text{Count of Circuits Completed after FOC Due Date with a verifiable CNR code}) / (\text{Count of Circuits Completed in Reporting Period})] \times 100}{1}$$

Percent On Time Performance to FOC Due Date – Without CNR Consideration:

$$\frac{[(\text{Count of Circuits Completed on or before ILEC Committed Due Date}) / (\text{Count of Circuits Completed in Reporting Period})] \times 100}{1}$$

Note: The denominator for both calculations is the total count of circuits completed during the reporting period, including all circuits, with and without a CNR code.

Business Rules

1. Measures are based on the last ASR sent and the associated FOC Due Date received from the ILEC.
2. Selection is based on circuits completed by the ILEC during the reporting period. An ASR may provision more than one circuit and ILECs may break the ASR into separate internal orders, however, the ASR is not considered completed for measurement purposes until all circuits are completed.
3. The ILEC Completion Date is the date upon which the ILEC completes installation of the circuit, as noted on a completion advice to WorldCom.
4. Projects are included. Determination of what is identified as a project varies by ILEC and should not alter the need to ensure that service is provided on the FOC Due Date.
5. A Customer Not Ready (CNR) is defined as a verifiable situation beyond the normal control of the ILEC that prevents the ILEC from completing an order, including the following: WorldCom is not ready; end user is not ready; connecting company, or third party supplier, is not ready. The ILEC must ensure that established procedures are followed to notify WorldCom of a CNR situation and allow a reasonable period of time for WorldCom to correct.

Exclusions

- Unsolicited FOCs
- Disconnect ASRs
- Cancelled ASRs
- Record ASRs

Levels of Disaggregation

Special Access

With CNRs/Without CNRs

- DS0
- DS1
- DS3
- OCn

Switched Access

With CNRs/Without CNRs

Performance Standard

On Time to FOC Due Date - With CNR Consideration	- 98 % On Time
On Time to FOC Due Date - Without CNR Consideration	- Diagnostic

ILEC Performance Measurements and Standards

PROVISIONING

Measurement: Days Late

Description

Days Late captures the magnitude of the delay, both in average and distribution, for those circuits not completed on the FOC Due Date, and the delay was not a result of a verifiable CNR situation.

Calculation Methodology

Average Days Late:

$$\frac{\sum[\text{Circuit Completion Date} - \text{ILEC Committed Due Date (for all Circuits Completed Beyond ILEC Committed Due Date without a CNR code)}]}{(\text{Count of Circuits Completed Beyond ILEC Committed Due Date without a CNR code})}$$

Distribution:

ASR Completion Date – ILEC Committed Due Date (for all ASRs Completed Beyond ILEC Committed Due Date without a CNR code) distributed by: 1 day, 2-5 Days, 6-10 Days, 11-20 Days, 21- 30 Days, 31-40 Days, and > 40 Days

Business Rules

1. Measures are based on the last ASR sent and the associated FOC Due Date received from the ILEC.
2. Selection is based on circuits completed by the ILEC during the reporting period. An ASR may provision more than one circuit and ILECs may break the ASR into separate internal orders, however, the ASR is not considered completed for measurement purposes until all circuits are completed.
3. Days shown are business days, Monday to Friday, excluding National Holidays. Activity starting on a weekend, or holiday, will reflect a start date of the next business day, and activity ending on a weekend, or holiday, will be calculated with an end date of the last previous business day.
4. Projects are included. Determination of what is identified as a project varies by ILEC and should not alter the need to ensure that service is provided on the FOC Due Date.
5. A Customer Not Ready (CNR) is defined as a verifiable situation beyond the normal control of the ILEC that prevents the ILEC from completing an order, including the following: WorldCom is not ready; end user is not ready; connecting company, or third party supplier, is not ready. The ILEC must ensure that established procedures are followed to notify WorldCom of a CNR situation and allow a reasonable period of time for WorldCom to correct.

Exclusions

- Unsolicited FOCs
- Disconnect ASRs
- Cancelled ASRs
- Record ASRs

Levels of Disaggregation

Special Access

- DS0
- DS1
- DS3
- OCn

Switched Access

Performance Standard

Days Late - Average < 3 Days
Days Late Distribution - Diagnostic

ILEC Performance Measurements and Standards

PROVISIONING

Measurement: Average Intervals – Requested / Offered / Installation

Description

The intent of this measure is to capture three important aspects of the provisioning process and display them in relation to each other. The Average WorldCom Requested Interval, the Average ILEC Offered Interval, and the Average Installation Interval provide a comprehensive view of provisioning with the ultimate goal to have these three intervals equal.

Calculation Methodology

Average WorldCom Requested Interval:

$\text{Sum (WRDD – ASR Sent Date)} / \text{Total Circuits Completed during reporting period}$

Average ILEC Offered Interval:

$\text{Sum (FOC Due Date – ASR Sent Date)} / \text{Total Circuits Completed during reporting period}$

Average Installation Interval:

$\text{Sum (ILEC Completion Date – ASR Sent Date)} / \text{Total Circuits Completed during reporting period}$

Business Rules

1. Measures are based on the last ASR sent and the associated FOC Due Date received from the ILEC.
2. Selection is based on circuits completed by the ILEC during the reporting period. An ASR may provision more than one circuit and ILECs may break the ASR into separate internal orders, however, the ASR is not considered completed for measurement purposes until all circuits are completed.
3. Days shown are business days, Monday to Friday, excluding National Holidays. Activity starting on a weekend, or holiday, will reflect a start date of the next business day, and activity ending on a weekend, or holiday, will be calculated with an end date of the last previous business day.
4. Projects are included. Determination of what is identified as a project varies by ILEC and should not alter the need to ensure that service is provided within expected intervals.
5. The Average Installation Interval includes all completions.

Exclusions

- Unsolicited FOCs
- Disconnect ASRs
- Cancelled ASRs
- Record ASRs

Levels of Disaggregation

Special Access

- DS0
- DS1
- DS3
- OCn

Switched Access

Performance Standard

Average Requested Interval	- Diagnostic
Average Offered Interval	- Diagnostic
Average Installation Interval	- Diagnostic

ILEC Performance Measurements and Standards

PROVISIONING

Measurement: Past Due Circuits

Description

The Past Due Circuits measure provides a snapshot view of circuits not completed as of the end of the reporting period. The count is taken from those circuits that have received an FOC Due Date but the date has passed. Results are separated into those held for ILEC reasons and those held for WorldCom reasons (CNRs). A diagnostic measure, Percent Cancellations After FOC Due Date, is included to show a percent of all cancellations processed during the reporting period where the cancellation took place after the FOC Due Date had passed and is shown as a percentage of total circuits cancelled or completed.

Calculation Methodology

Held Circuits Distribution:

Count of all circuits past the FOC Due Date that have not been reported as completed (Calculated as last day of reporting period - FOC Due Date) Distributed by: 1-5 days, 6-10 days, 11-20 days, 21-30 days, 31-40 Days, > 40 days

Percent Cancellations After FOC Due Date:

[Count (All circuits cancelled during reporting period, that were Past Due at the end of the previous reporting period, where (Date Cancelled > FOC Due Date) / (Total circuits Past Due at the end of the previous reporting period) x 100

Business Rules

1. Calculation of Held Circuits is based on the most recent ASR and associated FOC Due Date.
2. An ASR may provision more than one circuit and ILECs may break the ASR into separate internal orders, however, the ASR is not considered completed for measurement purposes until all segments are completed.
3. Days shown are business days, Monday to Friday, excluding National Holidays. Activity starting on a weekend, or holiday, will reflect a start date of the next business day, and activity ending on a weekend, or holiday, will be calculated with an end date of the last previous business day.
4. Projects are included. Determination of what is or is not identified as a project varies by ILEC and should not alter the need to ensure that service is provided on the FOC Due Date.
5. A Customer Not Ready (CNR) is defined as a verifiable situation beyond the normal control of the ILEC that prevents the ILEC from completing an order, including the following: WorldCom is not ready; end user is not ready; connecting company, or third party supplier, is not ready. The ILEC must ensure that established procedures are followed to notify WorldCom of a CNR situation and allow a reasonable period of time for WorldCom to correct.

Exclusions

- Unsolicited FOCs
- Disconnect ASRs
- Record ASRs

Levels of Disaggregation

ILEC Reasons/WCOM Reasons including CNRs

Special Access

- DS0
- DS1
- DS3
- OCn

Switched Access

Performance Standard

Past Due Circuits for ILEC Reasons - Less than 3 % > 5 days beyond FOC Due Date
Percent Cancellation After FOC Due Date - Diagnostic

ILEC Performance Measurements and Standards

PROVISIONING

Measurement: New Installation Trouble Report Rate

Description

New Installation Trouble Report Rate measures the quality of the installation work by capturing the rate of trouble reports on new circuits within 30 calendar days of the installation.

Calculation Methodology

Trouble Report Rate Within 30 Calendar Days of Installation:

$$\frac{[\text{Count (trouble reports within 30 Calendar Days of Installation)} / (\text{Total Number of Circuits Installed in the Report Period})] \times 100}{}$$

Business Rules

1. The ILEC Completion Date is the date upon which the ILEC completes installation of the circuit, as noted on a completion advice to WorldCom.
2. The calculation for the preceding 30 calendar days is based on the creation date of the trouble ticket.

Exclusions

- Trouble tickets that are canceled at WorldCom's request
- WorldCom, IXC, CPE (Customer Premise Equipment), or other customer caused troubles
- ILEC trouble reports associated with administrative service
- Tickets used to track referrals of misdirected calls
- WorldCom request for informational tickets

Levels of Disaggregation

Special Access

- DS0
- DS1
- DS3
- OCn

Switched Access

Performance Standard

New Installation Trouble Report Rate - < 1.5 Trouble Reports per 100 circuits installed

ILEC Performance Measurements and Standards

MAINTENANCE & REPAIR

Measurement: Failure Rate

Description

Failure Rate measures the overall quality of the circuits being provided by the ILEC and is calculated by dividing the number of troubles resolved during the reporting period by the total number of "in service" circuits, at the end of the reporting period, and is then annualized by multiplying by 12 months.

Calculation Methodology

Failure Rate – Annualized:

$$\{[(\text{Count of Trouble Reports resolved during the Reporting Period}) / (\text{Number of Circuits In Service at the end of the Report Period})] \times 100\} \times 12$$

Business Rules

1. A trouble report/ticket is any record (whether paper or electronic) used by the ILEC for the purposes of tracking related action and disposition of a service repair or maintenance situation.
2. A trouble is resolved when the ILEC issues notice to WorldCom that the circuit has been restored to normal operating parameters.
3. Where more than one trouble is resolved on a specific circuit during the reporting period, each trouble is counted in the Trouble Report Rate.

Exclusions:

- Trouble tickets that are canceled at WorldCom's request
- WorldCom, IXC, CPE (Customer Premise Equipment), or other customer caused troubles
- ILEC trouble reports associated with administrative service
- WorldCom request for informational tickets
- Tickets used to track referrals of misdirected calls

Levels of Disaggregation

Special Access

- Below DS3 (i.e. DS0 + DS1)
- DS3 and Above

Switched Access

Performance Standard

Failure Rate Annualized

Special Access	- Below DS3	- 10%
	- DS3 and Above	- 10%
Switched Access		- 10%

ILEC Performance Measurements and Standards

MAINTENANCE & REPAIR

Measurement: Mean Time to Restore

Description

The Mean Time To Restore interval measures the promptness in restoring circuits to normal operating levels when a problem or trouble is referred to the ILEC. Calculation is the elapsed time from WorldCom submission of a trouble report to the ILEC to the time the ILEC closes the trouble, less any Customer Hold Time or Delayed Maintenance Time due to valid customer or WorldCom caused delays.

Calculation Methodology

Mean Time To Restore:

$$\frac{\sum [(Date and Time of Trouble Ticket Resolution Closed to WorldCom - Date and Time of Trouble Ticket Referred to the ILEC) - (Customer Hold Times)]}{(Count of Trouble Tickets Resolved in Reporting Period)}$$

Business Rules

1. A trouble report or trouble ticket is any record (whether paper or electronic) used by the ILEC for the purposes of tracking related action and disposition of a service repair or maintenance situation.
2. Elapsed time is measured on a 24-hour, seven-day per-week basis, without consideration of weekends or holidays.
3. Multiple reports in a given period are included, unless the multiple reports for the same customer is categorized as "subsequent" (an additional report on an already open ticket).
4. "Restore" means to return to the normally expected operating parameters for the service regardless of whether or not the service, at the time of trouble ticket creation, was operating in a degraded mode or was completely unusable.
5. A trouble is "resolved" when the ILEC issues notice to WorldCom that the customer's service is restored to normal operating parameters.
6. Customer Hold Time or Delayed Maintenance Time resulting from no access to the end user's premises, or other WorldCom caused delays, such as holding the ticket open for monitoring, is deducted from the total resolution interval.

Exclusions:

- Trouble tickets that are canceled at WorldCom's request
- WorldCom, IXC, CPE (Customer Premise Equipment), or other customer caused troubles
- ILEC trouble reports associated with administrative service
- WorldCom request for informational tickets
- Trouble tickets created for tracking and/or monitoring circuits
- Tickets used to track referrals of misdirected calls

Levels of Disaggregation

Special Access

- Below DS3 (i.e. DS0 + DS1)
- DS3 and above
- Found OK/Test OK

Switched Access

- Found OK/Test OK

Performance Standard

Mean Time to Restore

Special Access	- Below DS3	- 2 Hours
	- DS3 and Above	- 1 Hour
	- Found OK/Test OK	- Diagnostic
Switched Access	- TBD	
	- Found OK/Test OK	- Diagnostic

ILEC Performance Measurements and Standards

MAINTENANCE & REPAIR

Measurement: Repeat Trouble Report Rate

Description

The Repeat Trouble Report Rate measures the percent of maintenance troubles resolved during the current reporting period that had at least one prior trouble ticket any time in the preceding 30 calendar days from the creation date of the current trouble report.

Calculation Methodology

Repeat Trouble Report Rate:

$$\frac{[(\text{Count of Current Trouble Reports with a previous trouble, reported on the same circuit, in the preceding 30 calendar days})]}{(\text{Number of Reports in the Report Period})} \times 100$$

Business Rules

1. A trouble report or trouble ticket is any record (whether paper or electronic) used by the ILEC for the purposes of tracking related action and disposition of a service repair or maintenance situation.
2. A trouble is resolved when the ILEC issues notice to WorldCom that the circuit has been restored to normal operating parameters.
3. If a trouble ticket was closed out previously with the disposition code classifying it as FOK/TOK/CPE/IXC, then the second trouble must be counted as a repeat trouble report if it is resolved to ILEC reasons.
4. The trouble resolution need not be identical between the repeated reports for the incident to be counted as a repeated trouble.

Exclusions:

- Trouble tickets that are canceled at WorldCom's request
- WorldCom, IXC, CPE (Customer Premise Equipment), or other customer caused troubles
- ILEC trouble reports associated with administrative service
- Subsequent trouble reports – defined as those cases where a customer called to check on the status of an existing open trouble ticket

Levels of Disaggregation

Special Access

- Below DS3 (i.e. DS0 + DS1)
- DS3 and Above

Switched Access

Performance Standards

Repeat Trouble Report Rate

Special Access	- Below DS3	- 6%
	- DS3 and Above	- 6%
Switched Access		- 6%