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April 29, 2005

VIA HAND DELIVERY

Hon. Pat Miller, Chairman
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, TN 37238

Re: *BellSouth's Motion For The Establishment Of A New Performance Assurance Plan*
Docket 04-00150

Dear Chairman Miller:

Enclosed are the original and fourteen copies of the parties' *Joint Motion to Approve Settlement Agreement*. Mr. Henry Walker, counsel for CompSouth, has given me permission to sign on CompSouth's behalf.

Copies of the enclosed are being provided to counsel of record.

Very truly yours,

Guy M. Hicks

GMH:ch

583496

BEFORE THE TENNESSEE REGULATORY AUTHORITY
Nashville, Tennessee

In Re: *BellSouth's Motion For The Establishment Of A New Performance Assurance Plan*

Docket 04-00150

JOINT MOTION TO APPROVE SETTLEMENT AGREEMENT

CompSouth[1] and BellSouth Telecommunications, Inc. ("BellSouth") request that the Tennessee Regulatory Authority ("Authority") approve the Parties' Settlement Agreement. The Parties have agreed on a new Service Quality Measurement Plan ("SQM") and Self-Effectuating Enforcement Mechanism Plan ("SEEM") The Parties are proposing that the new SQM and SEEM Plans be adopted by state commissions throughout BellSouth's nine state region. Copies of the new SQM and SEEM Plans are attached hereto.

This Settlement Agreement is conditioned upon Authority approval of the new SQM and SEEM Plans without a contested hearing. Upon approval, the special access measures contained in the new SQM Plan will supersede and replace the existing special access measures in Tennessee. If any objection to Authority approval of the Plans results in undue delay and/or a contested hearing,

[1] The members of CompSouth include Access Integrated Networks, Inc , MCI, Birch Telecom, Business Telecom, Inc , Covad Communications Company, AT&T, NewSouth Communications Corp , Talk America, NuVox Communications, Inc , ITC^DeltaCom, Xspedius Communications, Momentum Business Solutions, Network Telephone Corp , KMC Telecom, Z-Tel Communications, Inc , and IDS Telcom LLC

the Parties reserve all rights they may have, including the right to propose further revisions to the SQM and SEEM Plans.

Respectfully submitted,

COMPSOUTH

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TENNESSEE SEEM ADMINISTRATIVE PLAN

Tennessee Plan
Version 3.0

Issue Date: June 1, 2005

Contents

Administrative Plan

1 Scope

1.1 This Administrative Plan (Plan) includes Service Quality Measurements with corresponding Self Effectuating Enforcement Mechanisms to be implemented by BellSouth pursuant to the Order issued by the Tennessee Regulatory Authority (the "Authority") on June 1, 2005 in Docket No. 04-00150.

1.2 Upon the Effective Date of this Plan, all appendices referred to in this Plan will be located on the BellSouth Performance Measurement Reports website at: https://pmap.bellsouth.com.

2 Reporting

2.1 In providing services pursuant to the Interconnection Agreements between BellSouth and each CLEC, BellSouth will report its performance to each CLEC in accordance with BellSouth's SQMs and pay remedies in accordance with the applicable SEEM, which are posted on the Performance Measurement Reports website

2.2 BellSouth will make performance reports available to each CLEC on a monthly basis. The reports will contain information collected in each performance category and will be available to each CLEC via the Performance Measurements Reports website BellSouth will also provide electronic access to the raw data underlying the SQMs.

2.3 Final validated SQM reports will be posted no later than the last day of the month following the data month in which the activity is incurred, or the first business day thereafter Final validated SQM reports not posted by this time will be considered late.

2.4 Final validated SEEM reports will be posted on the Performance Measurements Reports website on the 15th of the month, following the posting of final validated SQM reports for that data month or the first business day thereafter.

2.5 BellSouth shall pay penalties to the Authority, in the aggregate, for all late SQM and SEEM reports in the amount of $2000 per day. Such payment shall be made to the Authority for deposit into the state General Revenue Fund within fifteen (15) calendar days of the end of the reporting month in which the late publication of the report occurs.

2.6 BellSouth shall pay penalties to the Authority, in the aggregate, for all reposted SQM and SEEM reports in the amount of $400 per day. The circumstances which may necessitate a reposting of SQM reports are

detailed in Appendix F, Reposting of Performance Data and Recalculation of SEEM Payments Such payments shall be made to the Authority for deposit into the state General Revenue Fund within fifteen (15) calendar days of the final publication date of the report or the report revision date

2.7 Tier II SEEMS payments and Administrative fines and penalties for late and reposted reports will be sent to the Authority. Checks and the accompanying transmittal letter will be postmarked on or before the 15th of the month or the first business day thereafter, when the 15th falls on a non-business day.

2.8 BellSouth shall retain the performance measurement raw data files for a period of 18 months and further retain the monthly reports produced in PMAP for a period of three years

2.9 BellSouth will provide documentation of late and reposted SQM and SEEM Reports during the reporting month that the data is posted to the website These notations may be viewed on the Performance Measurements website from the PMAP home page on the Current Month Updates link.

3 Review of Measurements and Enforcement Mechanisms

3.1 BellSouth will participate in annual review cycles. A collaborative work group, which will include BellSouth, interested CLECs and the Authority will review the Performance Assessment Plan for additions, deletions or other modifications

3.2 In the event a dispute arises regarding the ordered modification or amendment to the SQMs or SEEMs, the parties will refer the dispute to the Tennessee Regulatory Authority.

4 Enforcement Mechanisms

4.1 Definitions

4.1.1 *Enforcement Measurement Elements* – performance measurements identified as SEEM measurements within the SEEM Plan.

4.1 2 *Enforcement Measurement Benchmark compliance* – level of performance established by the Authority used to evaluate the performance of BellSouth for CLECs where no analogous retail process, product or service is feasible.

4.1 3 *Enforcement Measurement Retail Analog compliance* – comparing performance levels provided to BellSouth retail

customers with performance levels provided by BellSouth to the CLEC customer for measures where retail analogs apply.

4.1.4 *Test Statistic and Balancing Critical Value* – means by which enforcement will be determined using statistically valid equations. The Test Statistic and Balancing Critical Value are set forth in Appendices C, D and E of this Plan.

4.1.5 *Cell* – grouping of transactions at which like-to-like comparisons are made. For example, all BellSouth retail (POTS) services, for residential customers, requiring a dispatch in a particular wire center, at a particular point in time will be compared directly to CLEC resold services for residential customers, requiring a dispatch, in the same wire center, at a similar point in time. When determining compliance, these cells can have a positive or negative Test Statistic. See Appendices C, D and E of this Plan.

4.1.6 *Delta, Psi and Epsilon* – measures of the meaningful difference between BellSouth performance and CLEC performance. For individual CLECs the Delta value shall be 0.5 and for the CLEC aggregate the Delta value shall be 0.35. The value for Psi shall be 3 for individual CLECs and 2 for the CLEC aggregate. The value for Epsilon will be 2 5 for both individual CLECs and the CLEC aggregate

4.1.7 *Tier-1 Enforcement Mechanisms* – self-executing fees paid directly to each CLEC when BellSouth delivers non-compliant performance of any one of the Tier-1 Enforcement Measurement Elements for any month as calculated by BellSouth

4.1.8 *Tier-2 Enforcement Mechanisms* – fees paid directly to the Tennessee Regulatory Authority or its designee. Tier 2 Enforcement Mechanisms are triggered by three consecutive monthly failures at the submetric level in which BellSouth performance is out of compliance or does not meet the benchmarks for the aggregate of all CLEC data.

4.1 9 *Affiliate* – person that (directly or indirectly) owns or controls, is owned or controlled by, or is under common ownership or control with, another person. For purposes of this paragraph, the term "own" means to own an equity interest (or the equivalent thereof) of more than 10 Percent

4.1 10 *Affected Volume* – that quantity of the total impacted CLEC volume or CLEC Aggregate volume for which remedies will

be paid.

4.1.11 *Cell Ranking* – placing cells in rank order from highest to lowest, where the cell with the most negative z-score is ranked highest and the cell with the least negative z-score is ranked lowest

4 1.12 *Cell Correction* – method for determining the quantity of transactions to be remedied, referred to as "affected volume," wherein the cell-level modified z-score for the highest ranked cell is first changed to zero ("corrected") and then the next highest, progressively, until the overall level truncated z-score is equal to the Balancing Critical Value or zero as required by the Fee Schedule. Either all of the transactions in corrected cells are remedied or a prorated share (determined through interpolation) are remedied.

4.2 Application

4.2 1 The application of the Tier-1 and Tier-2 Enforcement Mechanisms does not foreclose other legal and regulatory claims and remedies available to each CLEC.

4.2.2 Payment of any Tier-1 or Tier-2 Enforcement Mechanisms shall not be considered as an admission against interest or an admission of liability or culpability in any legal, regulatory or other proceeding relating to BellSouth's performance and the payment of any Tier-1 or Tier-2 Enforcement Mechanisms shall not be used as evidence that BellSouth has not complied with or has violated any state or federal law or regulation.

4.3 Methodology

4.3.1 Tier-1 Enforcement Mechanisms will be triggered by BellSouth's failure to achieve applicable Enforcement Measurement Compliance or Enforcement Measurement Benchmarks for each CLEC for the State of Tennessee for a given Enforcement Measurement Element in a given month Enforcement Measurement Compliance is based upon a Test Statistic and Balancing Critical Value calculated by BellSouth utilizing BellSouth generated data The method of calculation is set forth in Appendices C, D and E of this Plan.

4 3 1 1 All OCNs and ACNAs for individual CLECs will be consolidated for purposes of calculating transaction-based failures.

4.3.1.2 When a measurement has five or more transactions for the CLEC, calculations will be performed to determine remedies according to the methodology described in the remainder of this document.

4.3.1.3 Tier-1 Enforcement Mechanisms apply on a per transaction basis and will escalate based upon the number of consecutive months that fail for each Enforcement Mechanism Element for which BellSouth has reported non-compliance. Failures beyond Month 6 will be subject to Month 6 fees. All transactions for an individual CLEC will be consolidated for purposes of calculating Tier-1 Enforcement Mechanisms.

4.3.1.4 For submetrics that are assessed based on Enforcement Measurement Retail Analog compliance criteria, the fee paid for a particular submetric that failed at the Tier 1 level will be differentiated based on two criteria. First, the Tier 1 fee paid will be based on whether the same submetric that failed at the Tier 1 level (CLEC-specific) also failed at the CLEC aggregate level in the same month. Second, the Tier 1 fee paid will be based on whether the transactions in the cells to be remedied correct the overall truncated z-score from the region below the Balancing Critical Value ("BCV") to the BCV or from the BCV to zero. Depending on which of these criteria apply, a different multiplier will be applied to the Fee Schedule (shown in Appendix A, Table 1: Fee Schedule for Tier 1 Per Transaction Fee Determination) to determine the amount of the Tier 1 payments. The chart below shows the applicable multipliers:

CLEC Aggregate Performance	Per Transaction Fee Below BCV	Per Transaction Fee Between BCV and 0
Passes	(Fee)*(3/2)	(Fee)*(1/3)
Fails	(Fee)*(3)	(Fee)*(2/3)

No multiplier applies for the Billing Invoice Accuracy measure

4.3.1.5 For submetrics that are assessed based on Enforcement Measurement Benchmark compliance criteria the fee paid for a particular submetric that failed at the Tier 1 level will be differentiated based on whether the same submetric that failed at the Tier 1 level (CLEC-specific) also failed at the CLEC aggregate level in the same month. A different multiplier will be applied to the Fee Schedule (shown in Appendix A, Table 1: Fee Schedule for Tier 1 Per Transaction Fee Determination) to determine the amount of the Tier 1 payments The chart below shows the applicable multipliers:

CLEC Aggregate Performance	Per Transaction Fee
Passes	(Fee)*(3/2)
Fails	(Fee)*(5/2) for Ordering and Flow Through (Fee)*(3) for all other benchmark measures

4 3.2 Tier-2 Enforcement Mechanisms will be triggered by BellSouth's failure to achieve applicable Enforcement Measurement Compliance or Enforcement Measurement Benchmarks for the State of Tennessee for given Enforcement Measurement Elements for three consecutive months. The method of calculation is set forth in Appendices C and D of this Plan.

4.3 2.1 Tier- 2 Enforcement Mechanisms apply, for an aggregate of all CLEC data generated by BellSouth, on a per transaction basis for each Enforcement Mechanism Element for which BellSouth has reported non-compliance.

4 3.2.2 The fee paid for a particular submetric that failed at the Tier 2 level will be as shown in Appendix A, Table 2.

4 3.3 The Market Penetration Adjustments will be applied based on the following provisions to enhance competition for nascent products. In order to ensure parity and benchmark performance where CLECs order low volumes of advanced and nascent services, BellSouth will make additional Tier 1 and Tier 2 payments where performance standards for the following measures are not met, if the measurement applies

to the nascent service

- Percent Missed Installation Appointments
- Average Completion Interval
- Missed Repair Appointments
- Maintenance Average Duration
- Average Response Time for Loop Make-up Information

4.3.3 1 These additional payments will only apply when there are more than 10 and less than 100 average units in service statewide for the preceding three-month period. The additional payments in the form of a market penetration adjustment will be made if BellSouth fails to provide parity for the above measurements as determined by the use of the Truncated Z- test and the balancing critical value or fails to meet the established benchmark.

4 3.3.2 BellSouth shall calculate the new Tier 1 and Tier 2 payments, which include the market penetration adjustment by applying the normal method of calculating affected volumes as ordered by the Authority and trebling the normal Tier 1 and Tier 2 remedy

4.3.3.3 If, for the three months of data, there were 100 observations or more on average for the sub-metric, then no additional payments under this market penetration adjustment provision will be made Further, market penetration adjustments shall no longer apply if 24 months have elapsed since the first unit of the nascent service was installed.

4.3.3.4 CLECs may file a petition with the Authority in order to add a service to the list of services for which the market penetration adjustment may apply

4.3 3.5 Any payments made under this market penetration adjustment provision are subject to the Absolute Cap set by the Authority

4.3.4 For Tier 1 and Tier 2 evaluations, the retail analog or benchmark are the same as the SQM See the SQM for SEEM retail analogs and benchmarks.

4.4 Payment of Tier-1 and Tier 2 Amounts

4 4.1 If BellSouth performance triggers an obligation to pay Tier-1 Enforcement Mechanisms to a CLEC or an obligation to remit Tier-2 Enforcement Mechanisms to the Authority or its designee, BellSouth shall make payment in the required amount on the day upon which the final validated SEEM reports are posted on the Performance Measurements Reports website as set forth in Section 2.4 above.

4.4.2 For each day after the due date that BellSouth fails to pay a CLEC the required amount, BellSouth will pay the CLEC 6% simple interest per annum

4.4.3 For each day after the due date that BellSouth fails to pay the Tier-2 Enforcement Mechanisms, BellSouth will pay the Authority an additional $1,000 per day.

4 4.4 If a CLEC disputes the amount paid for Tier-1 Enforcement Mechanisms, the CLEC shall submit a written claim to BellSouth within sixty (60) days after the payment date. BellSouth shall investigate all claims and provide the CLEC written findings within thirty (30) days after receipt of the claim If BellSouth determines the CLEC is owed additional amounts, BellSouth shall pay the CLEC such additional amounts within thirty (30) days after its findings along with 6% simple interest per annum.

4.4 5 For Tier-2 Enforcement Mechanisms, if the Authority requests clarification of an amount paid, a written claim shall be submitted to BellSouth within sixty (60) days after the payment date BellSouth shall investigate all claims and provide the Authority written findings within thirty (30) days after receipt of the claim. If BellSouth determines the Authority is owed additional amounts, BellSouth shall pay such additional amounts within thirty (30) days after its findings along with 6% simple interest per annum.

4.4.6 Any adjustments for underpayment or overpayment of calculated Tier 1 and Tier 2 remedies will be made consistent with the terms of BellSouth's Policy On Reposting Of Performance Data and Recalculation of SEEM Payments, as set forth in Appendix F of this document. If any circumstance necessitating remedy adjustments should occur that is not specifically addressed in the Reposting Policy, such adjustments will be made consistent with the terms defined in Paragraph 6 of the Reposting Policy ("SEEM payments will

be subject to recalculations for a maximum of three months in arrears...") unless the Tennessee Regulatory Authority orders otherwise.

4.4.7 Any adjustments for underpayment or overpayment will be made in the next month's payment cycle after the recalculation is made The final current month PARIS reports will reflect the final paid dollars, including adjustments for prior months where applicable. Questions regarding the adjustments should be made in accordance with the normal process used to address CLEC questions related to SEEM payments.

4.4.8 Where there is a SEEM adjustment, in addition to the submetric, data month(s), and adjustment amount, BellSouth will include an adjustment code on the CLEC specific Tier 1 or Tier 2 PARIS reports on the PMAP website. Then, on a separate document under the Exhibits link on the BellSouth PMAP website, this code will be cross-referenced with a brief narrative description of the adjustment. These codes and descriptions will be applicable to all States where an adjustment was applied If there are multiple adjustment codes, the code explanation document under the Exhibits link will contain all of the codes and the narrative descriptions for each code An explanation of the cause of the adjustment and the data months impacted by the adjustment will be included in the narrative

4.5 Limitations of Liability

4.5.1 BellSouth will not be obligated to pay Tier-1 or Tier-2 Enforcement Mechanisms for non-compliance with a performance measure if such non-compliance results from a CLECs acts or omissions that cause failed or missed performance measures. These acts or omissions include but are not limited to, accumulation and submission of orders at unreasonable quantities or times, failure to follow publicly available procedures, or failure to submit accurate orders or inquiries. BellSouth shall provide each CLEC and the Authority with reasonable notice of, and supporting documentation for, such acts or omissions. Each CLEC shall have 10 business days from the filing of such Notice to advise BellSouth and the Authority in writing of its intent to challenge, through the dispute resolution provisions of this plan, the claims made by BellSouth. BellSouth shall not be obligated to pay any amounts subject to such disputes until

the dispute is resolved.

4.5.2 BellSouth shall not be obligated to pay Tier-1 or Tier-2 Enforcement Mechanisms for non-compliance with a performance measurement if such non-compliance was the result of any event that performance under this SQM/SEEM Plan is either directly or indirectly prevented, restricted, or interfered with by reason of fire, flood, earthquake or like acts of God, wars, revolution, civil commotion, explosion, acts of public enemy, embargo, acts of the government in its sovereign capacity, labor difficulties, including without limitation, strikes, slowdowns, picketing, or boycotts, or any other circumstances beyond the reasonable control and without the fault or negligence of BellSouth BellSouth, upon giving prompt notice to the Authority and CLECs, shall be excused from such performance on a day-to-day basis to the extent of such prevention, restriction, or interference; provided, however, that BellSouth shall use diligent efforts to avoid or remove such causes of non-performance.

4.5.2 1 To invoke the application of Section 4.5.2 (Force Majeure Event), BellSouth will provide written notice to the Authority wherein BellSouth will identify the Force Majeure Event, the affected measures, and the impacted areas including affected NPAs and NXXs.

4.5.2.2 No later than ten (10) business days after BellSouth provides written notice in accordance with Section 4.5 2 1 affected parties must file written comments with the Authority to the extent they have objections or concerns regarding the application of Section 4.5.2

4.5 2 3 BellSouth's written notice of the applicability of Section 4.5 2 would be presumptively valid and deemed approved by the Authority effective thirty (30) calendar days after BellSouth provides notice in accordance with Section 4 5 2.1 The Authority may require BellSouth to provide a true-up of SEEM fees to affected carriers if a Force Majeure declaration is found to be invalid by the Authority after it has taken effect.

4 5 2 4 During the pendency of a Force Majeure Event, BellSouth shall provide the Authority with periodic

updates of its restoration/recovery progress and efforts as agreed upon between the Authority Staff and BellSouth.

4.5.3 In addition to these specific limitations of liability, BellSouth may petition the Authority to consider a waiver based upon other circumstances.

4.6 Change of Law

4.6.1 Upon a particular Commission's issuance of an Order pertaining to Performance Measurements or Remedy Plans in a proceeding expressly applicable to all CLECs, BellSouth shall implement such performance measures and remedy plans covering its performance for the CLECs, as well as any changes to those plans ordered by the Authority, on the date specified by the Authority. If a change of law occurs which may relieve BellSouth's provisioning of a UNE or UNE combination, BellSouth shall Petition the Authority within 30 days if it seeks to cease reporting data or paying remedies in accordance with the change of law Performance Measurements and remedy plans that have been ordered by the Authority can currently be accessed via the Internet at http://pmap.bellsouth.com. Should there be any difference between the performance measure and remedy plans on BellSouth's website and the plans the Authority has approved as filed in compliance with its orders, the Authority-approved compliance plan will supersede as of its effective date.

4.7 Affiliate Reporting

4.7.1 BellSouth shall provide monthly results for each metric for each BellSouth CLEC affiliate. Upon request, the Tennessee Regulatory Authority shall be provided the number of transactions or observations for BellSouth CLEC affiliates. Further, BellSouth shall inform the Authority of any changes regarding non-CLEC affiliates' use of its OSS databases, systems, and interfaces.

4.8 Enforcement Mechanism Cap

4.8.1 BellSouth's total liability for the payment of Tier-1 and Tier-2 Enforcement Mechanisms shall be collectively and absolutely capped at 36% of net revenues in Tennessee, based upon the most recently reported ARMIS data.

4.8.2 If projected payments exceed the state cap, a proportional

payment will be made to the respective parties.

4.8 3 If BellSouth's payment of Tier-1 and Tier-2 Enforcement Mechanisms would have exceeded the cap referenced in this plan, a CLEC may commence a proceeding with the Authority to demonstrate why BellSouth should pay any amount in excess of the cap The CLEC shall have the burden of proof to demonstrate why, under the circumstances, BellSouth should have additional liability.

4.9 Audits

4 9.1 BellSouth currently provides CLECs with certain audit rights as a part of their individual interconnection agreements. If requested by a Public Service Commission, BellSouth will agree to undergo a SEEM audit. The audit should be conducted by an independent third party auditor. The results of audits will be made available to all the parties subject to proper safeguards to protect proprietary information Audits will be conducted under the following specifications·

4 9 1 1 The cost shall be borne by BellSouth

4.9 1 2 Should an independent third party auditor be required, it shall be selected by BellSouth and the PSC

4.9 1 3 BellSouth and the PSC shall jointly determine the scope of the audit

4 9.1 4 The PSC may request input regarding selection of the auditor from interested parties.

4.9 2 These audits are intended to provide the basis for the PSCs and CLECs to determine that SEEM produces accurate data that reflects each State's Order for performance measurements.

4.10 Dispute Resolution

4.10 1 Notwithstanding any other provision of the Interconnection Agreement between BellSouth and each CLEC, if a any dispute arises regarding BellSouth's performance or obligations pursuant to this Plan, BellSouth and the CLEC shall negotiate in good faith for a period of thirty (30) days to resolve the dispute If at the conclusion of the 30 day period, BellSouth and the CLEC are unable to reach a resolution,

then the dispute shall be resolved by the Authority.

4.11 Regional and State Coefficients

Some metrics are calculated for the entire BellSouth region, rather than by state Where these metrics are a Tier 1 SEEM submetric, a regional coefficient is calculated to determine the amount of the penalty for the CLEC in each state For example, the Acknowledgement Completeness Measurement can be measured for an individual CLEC, but only at the regional level In several states it is also a Tier 1 SEEM submetric. Thus, if there is a failure in this measurement for a CLEC, it is necessary to determine the amount of penalty for the CLEC in each state. A Regional Coefficient is used to do this (Appendix E, Section E 6 describes the method of calculating the Regional Coefficients) The amount of Tier 1 penalty for the CLEC in a state is determined by multiplying the regional affected volume by the Coefficient for the state and by the state fee

A state coefficient is calculated to split Tier 2 payments for regional metrics among states by submetric

Appendix A: Fee Schedule

Table 1: Fee Schedule for Tier 1 Per Transaction Fee Determination

Performance Measure	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
OSS/Pre-Ordering	$10	$15	$20	$25	$30	$35
Ordering	$20	$25	$30	$35	$40	$45
Service Order Accuracy	$20	$20	$20	$20	$20	$20
Flow Through	$40	$45	$50	$55	$60	$65
Provisioning – Resale	$40	$50	$70	$100	$130	$200
Provisioning – UNE	$115	$130	$145	$160	$190	$230
Provisioning – UNEP	$55	$60	$70	$75	$90	$110
Maintenance and Repair – Resale	$40	$50	$70	$100	$130	$200
Maintenance and Repair – UNE	$115	$130	$145	$160	$190	$230
Maintenance and Repair - UNEP	$55	$60	$70	$75	$90	$110
LNP	$115	$190	$385	$460	$535	$615
Billing – BIA (see Note 1)	2%	2%	2%	2%	2%	2%
Billing – BIT	$7	$7	$7	$7	$7	$7
Billing – BUDT (see Note 2)	$0 046	$0 046	$0 046	$0 046	$0 046	$0 046
Billing – BEC (see note 3)	$0 07	$0 07	$0 07	$0 07	$0.07	$0 07
IC Trunks	$25	$30	$45	$65	$80	$125
Collocation	$3,165	$3,165	$3,165	$3,165	$3,165	$3,165

Note 1 Reflects percent interest to be paid on adjusted amounts
Note 2 Amount paid per 1000 usage records
Note 3 Amount paid per dispute

Table 2: Tier 2 Per Transaction Fee Determination

Measure	Retail Analogs		Benchmarks
	Between BCV and 0	Below BCV	
OSS/Pre Ordering (note 1)	$6	-	$30
Ordering	-	-	$60
Service Order Accuracy	-	-	$60
Flow Through	-	-	$120
Provisioning – Resale	$26	$120	-
Provisioning – UNE	$76	$345	$345
Provisioning – UNEP	$36	$165	-
Maintenance and Repair – Resale	$26	$120	-
Maintenance and Repair – UNE	$76	$345	-
Maintenance and Repair –UNEP	$36	$165	-
LNP	$36	$165	-
Billing – BIA (note 1)	1 3%	-	-
Billing – BIT (note 1)	$4	-	-
Billing – BUDT (note 1)	$ 03	-	-
Billing – BEC (note 1)	$0 04	-	-
Change Management	-	-	$1,000
IC Trunks	$16	$75	$75
Collocation	-	-	$9,495

Note 1 The truncated Z does not apply to these measures.

Appendix B: SEEM Submetrics

B.1 Tier 1 Submetrics

Item No.	SQM Ref	Tier 1 Submetric
1	LMT	PO-2 Loop Makeup – Response Time – Electronic - Loop
2	AKC	O-2 Acknowledgement Message Completeness - Acknowledgments
3	FT	O-3 Percent Flow-Through Service Requests – Business
4	FT	O-3 Percent Flow-Through Service Requests – LNP
5	FT	O-3 Percent Flow-Through Service Requests – Residence
6	FT	O-3 Percent Flow-Through Service Requests – UNE-L (includes UNE-L with LNP)
7	FT	O-3 Percent Flow-Through Service Requests – UNE-P
8	RI	O-8 Reject Interval – Fully Mechanized
9	RI	O-8 Reject Interval – Partially Mechanized
10	RI	O-8 Reject Interval – Non Mechanized
11	FOCT	O-9 Firm Order Confirmation Timeliness - Fully Mechanized
12	FOCT	O-9 Firm Order Confirmation Timeliness - Partially Mechanized
13	FOCT	O-9 Firm Order Confirmation Timeliness - Non Mechanized
14	FOCT	O-9 Firm Order Confirmation Timeliness – Local Interconnection Trunks
15	FOCC	O-11 FOC & Reject Response Completeness – Fully Mechanized
16	FOCC	O-11 FOC & Reject Response Completeness – Partially Mechanized
17	FOCC	O-11 FOC & Reject Response Completeness – Non Mechanized
18	MIA	P-3 Percent Missed Installation Appointments – Resale POTS
19	MIA	P-3 Percent Missed Installation Appointments – Resale Design
20	MIA	P-3 Percent Missed Installation Appointments – UNE Loop and Port Combinations
21	MIA	P-3 Percent Missed Installation Appointments – UNE Loops – Design
22	MIA	P-3 Percent Missed Installation Appointments – UNE Loops – Non-Design

Item No.	SQM Ref	Tier 1 Submetric
23	MIA	P-3 Percent Missed Installation Appointments – UNE xDSL
24	MIA	P-3 Percent Missed Installation Appointments – UNE Line Splitting/Sharing
25	MIA	P-3 Percent Missed Installation Appointments – LNP Standalone
26	MIA	P-3 Percent Missed Installation Appointments – Local Interconnection Trunks
27	OCI	P-4 Order Completion Interval (OCI) – Resale POTS
28	OCI	P-4 Order Completion Interval (OCI) – Resale Design
29	OCI	P-4 Order Completion Interval (OCI) – UNE Loop and Port Combinations
30	OCI	P-4 Order Completion Interval (OCI) – UNE Loop Design
31	OCI	P-4 Order Completion Interval (OCI) – UNE Loop Non-Design
32	OCI	P-4 Order Completion Interval (OCI) – UNE xDSL – without conditioning
33	OCI	P-4 Order Completion Interval (OCI) – UNE xDSL – with conditioning
34	OCI	P-4 Order Completion Interval (OCI) – UNE Line Splitting/Sharing Dispatch
35	OCI	P-4 Order Completion Interval (OCI) – UNE Line Splitting/Sharing – Non-Dispatch
36	OCI	P-4 Order Completion Interval (OCI) – Local interconnection Trunks
37	OCI	P-4 Order Completion Interval (OCI) – UNE EELS
38	CCI	P-7 Coordinated Customer Conversions – Hot Cut Durations
39	CCT	P-7A Coordinated Customer Conversions – Hot Cut Timeliness Percent within Interval
40	NCDD	P-7D Non-Coordinated Customer Conversions – Percent Completed and Notified on Due Date
41	PPT	P-9 Percent Provisioning Troubles within X days of Service Order Completion – Resale POTS
42	PPT	P-9 Percent Provisioning Troubles within X days of Service Order Completion – Resale Design
43	PPT	P-9 Percent Provisioning Troubles within X days of Service Order Completion – UNE Loop and Port Combinations
44	PPT	P-9 Percent Provisioning Troubles within X days of Service Order Completion – UNE Loops - Design
45	PPT	P-9 Percent Provisioning Troubles within X days of Service Order Completion – UNE Loops – Non-Design

Item No.	SQM Ref	Tier 1 Submetric
46	PPT	P-9 Percent Provisioning Troubles within X days of Service Order Completion – UNE xDSL
47	PPT	P-9 Percent Provisioning Troubles within X days of Service Order Completion – UNE Line Splitting/Sharing - Dispatch
48	PPT	P-9 Percent Provisioning Troubles within X days of Service Order Completion – UNE Line Splitting/Sharing – Non-Dispatch
49	PPT	P-9 Percent Provisioning Troubles within X days of Service Order Completion – Local Interconnection Trunks
50	SOA	P-11 Service Order Accuracy - Resale
51	SOA	P-11 Service Order Accuracy - UNE
52	SOA	P-11 Service Order Accuracy – UNE-P
53	LOOS	P-13B LNP – Percent Out of Service < 60 Minutes - LNP
54	LAT	P-13C LNP Percent of Time BellSouth Applies the 10-Digit Trigger Prior to the LNP Order Due Date – LNP – (Standalone)
55	LDT	P-13D LNP – Disconnect Timeliness (Non-Trigger)
56	MRA	MR-1 Percent Missed Repair Appointment – Resale POTS
57	MRA	MR-1 Percent Missed Repair Appointment – Resale Design
58	MRA	MR-1 Percent Missed Repair Appointment – UNE Loop and Port Combinations
59	MRA	MR-1 Percent Missed Repair Appointment – UNE Loops Design
60	MRA	MR-1 Percent Missed Repair Appointment – UNE Loops Non-Design
61	MRA	MR-1 Percent Missed Repair Appointment – UNE xDSL
62	MRA	MR-1 Percent Missed Repair Appointment – UNE Line Splitting/Sharing
63	MRA	MR-1 Percent Missed Repair Appointment – Local Interconnection Trunks
64	CTRR	MR-2 Customer Trouble Report Rate – Resale POTS
65	CTRR	MR-2 Customer Trouble Report Rate – Resale Design
66	CTRR	MR-2 Customer Trouble Report Rate – UNE Loop and Port Combinations
67	CTRR	MR-2 Customer Trouble Report Rate – UNE Loops Design
68	CTRR	MR-2 Customer Trouble Report Rate – UNE Loops Non-Design
69	CTRR	MR-2 Customer Trouble Report Rate – UNE xDSL
70	CTRR	MR-2 Customer Trouble Report Rate – UNE Line Splitting/Sharing

Item No.	SQM Ref	Tier 1 Submetric
71	CTRR	MR-2 Customer Trouble Report Rate – Local Interconnection Trunks
72	MAD	MR-3 Maintenance Average Duration – Resale POTS
73	MAD	MR-3 Maintenance Average Duration – Resale Design
74	MAD	MR-3 Maintenance Average Duration – UNE Loop and Port Combinations
75	MAD	MR-3 Maintenance Average Duration – UNE Loops Design
76	MAD	MR-3 Maintenance Average Duration – UNE Loops Non-Design
77	MAD	MR-3 Maintenance Average Duration – UNE xDSL
78	MAD	MR-3 Maintenance Average Duration – UNE Line Splitting/Sharing
79	MAD	MR-3 Maintenance Average Duration – Local Interconnection Trunks
80	PRT	MR-4 Percent Repeat Customer Troubles within 30 Days – Resale POTS
81	PRT	MR-4 Percent Repeat Customer Troubles within 30 Days – Resale Design
82	PRT	MR-4 Percent Repeat Customer Troubles within 30 Days – UNE Loop and Port Combinations
83	PRT	MR-4 Percent Repeat Customer Troubles within 30 Days – UNE Loops Design
84	PRT	MR-4 Percent Repeat Customer Troubles within 30 Days – UNE Loops Non-Design
85	PRT	MR-4 Percent Repeat Customer Troubles within 30 Days – UNE xDSL
86	PRT	MR-4 Percent Repeat Customer Troubles within 30 Days – UNE Line Splitting/Sharing
87	PRT	MR-4 Percent Repeat Customer Troubles within 30 Days – Local Interconnection Trunks
88	OOS	MR-5 Out of Service (OOS) > 24 hours – Resale POTS
89	OOS	MR-5 Out of Service (OOS) > 24 hours – Resale Design
90	OOS	MR-5 Out of Service (OOS) > 24 hours – UNE Loop and Port Combinations
91	OOS	MR-5 Out of Service (OOS) > 24 hours – UNE Loops Design
92	OOS	MR-5 Out of Service (OOS) > 24 hours – UNE Loops Non-Design
93	OOS	MR-5 Out of Service (OOS) > 24 hours – UNE xDSL
94	OOS	MR-5 Out of Service (OOS) > 24 hours – UNE Line Splitting/Sharing
95	OOS	MR-5 Out of Service (OOS) > 24 hours – Local Interconnection Trunks
96	BIA	B-1 Invoice Accuracy

Item No.	SQM Ref	Tier 1 Submetric
97	BIT	B-2 Mean Time to Deliver Invoices - CRIS
98	BIT	B-2 Mean Time to Deliver Invoices - CABS
99	BUDT	B-5 Usage Data Delivery Timeliness
100	BEC	B-10 Percent Billing Adjustment Requests (BAR) Responded to within 45 Business Days - State
101	TGP	TGP Trunk Group Performance
102	MDD	C-3 Collocation Percent of Due Dates Missed

B.2 Tier 2 Submetrics

Item No.	SQM Ref	Tier 2 Submetric
1	ARI	OSS-1 OSS Response Interval (Pre-Ordering/Ordering) – LENS
2	ARI	OSS-1 OSS Response Interval (Pre-Ordering/Ordering) – TAG/XML
3	ARI	OSS-1 OSS Response Interval (Maintenance & Repair)
4	IA	OSS-2 OSS Interface Availability – (Pre-Ordering/Ordering) – Regional per OSS Interface
5	IA	OSS-2 OSS Interface Availability – (Maintenance & Repair) – Regional per OSS Interface
6	LMT	PO-2 Loop Makeup – Response Time – Electronic - Loop
7	AKC	O-2 Acknowledgement Message Completeness - Acknowledgments
8	FT	O-3 Percent Flow-Through Service Requests – Business
9	FT	O-3 Percent Flow-Through Service Requests – LNP
10	FT	O-3 Percent Flow-Through Service Requests – Residence
11	FT	O-3 Percent Flow-Through Service Requests – UNE-L (includes UNE-L with LNP)
12	FT	O-3 Percent Flow-Through Service Requests – UNE-P
13	RI	O-8 Reject Interval – Fully Mechanized
14	RI	O-8 Reject Interval – Partially Mechanized
15	RI	O-8 Reject Interval – Non Mechanized
16	FOCT	O-9 Firm Order Confirmation Timeliness - Fully Mechanized
17	FOCT	O-9 Firm Order Confirmation Timeliness - Partially Mechanized
18	FOCT	O-9 Firm Order Confirmation Timeliness - Non Mechanized
19	FOCT	O-9 Firm Order Confirmation Timeliness – Local Interconnection Trunks
20	FOCC	O-11 FOC & Reject Response Completeness – Fully Mechanized
21	FOCC	O-11 FOC & Reject Response Completeness – Partially Mechanized
22	FOCC	O-11 FOC & Reject Response Completeness – Non Mechanized
23	OAAT	O-12 Average Answer Time – Ordering Centers – CLEC Local Carrier Service Center
24	MIA	P-3 Percent Missed Installation Appointments – Resale POTS

Item No.	SQM Ref	Tier 2 Submetric
25	MIA	P-3 Percent Missed Installation Appointments – Resale Design
26	MIA	P-3 Percent Missed Installation Appointments – UNE Loop and Port Combinations
27	MIA	P-3 Percent Missed Installation Appointments – UNE Loops – Design
28	MIA	P-3 Percent Missed Installation Appointments – UNE Loops – Non-Design
29	MIA	P-3 Percent Missed Installation Appointments – UNE xDSL
30	MIA	P-3 Percent Missed Installation Appointments – UNE Line Splitting/Sharing
31	MIA	P-3 Percent Missed Installation Appointments – LNP Standalone
32	MIA	P-3 Percent Missed Installation Appointments – Local Interconnection Trunks
33	OCI	P-4 Order Completion Interval (OCI) – Resale POTS
34	OCI	P-4 Order Completion Interval (OCI) – Resale Design
35	OCI	P-4 Order Completion Interval (OCI) – UNE Loop and Port Combinations
36	OCI	P-4 Order Completion Interval (OCI) – UNE Loop Design
37	OCI	P-4 Order Completion Interval (OCI) – UNE Loop Non-Design
38	OCI	P-4 Order Completion Interval (OCI) – UNE xDSL – without conditioning
39	OCI	P-4 Order Completion Interval (OCI) – UNE xDSL – with conditioning
40	OCI	P-4 Order Completion Interval (OCI) – UNE Line Splitting/Sharing Dispatch
41	OCI	P-4 Order Completion Interval (OCI) – UNE Line Splitting/Sharing – Non-Dispatch
42	OCI	P-4 Order Completion Interval (OCI) – Local Interconnection Trunks
43	OCI	P-4 Order Completion Interval (OCI) – UNE EELS
44	CCI	P-7 Coordinated Customer Conversions – Hot Cut Durations
45	CCT	P-7A Coordinated Customer Conversions – Hot Cut Timeliness Percent within Interval
46	NCDD	P-7D Non-Coordinated Customer Conversions – Percent Completed and Notified on Due Date
47	PPT	P-9 Percent Provisioning Troubles within X days of Service Order Completion – Resale POTS
48	PPT	P-9 Percent Provisioning Troubles within X days of Service Order Completion – Resale Design
49	PPT	P-9 Percent Provisioning Troubles within X days of Service Order Completion –

Item No.	SQM Ref	Tier 2 Submetric
		UNE Loop and Port Combinations
50	PPT	P-9 Percent Provisioning Troubles within X days of Service Order Completion – UNE Loops - Design
51	PPT	P-9 Percent Provisioning Troubles within X days of Service Order Completion – UNE Loops – Non-Design
52	PPT	P-9 Percent Provisioning Troubles within X days of Service Order Completion – UNE xDSL
53	PPT	P-9 Percent Provisioning Troubles within X days of Service Order Completion – UNE Line Splitting/Sharing - Dispatch
54	PPT	P-9 Percent Provisioning Troubles within X days of Service Order Completion – UNE Line Splitting/Sharing – Non-Dispatch
55	PPT	P-9 Percent Provisioning Troubles within X days of Service Order Completion – Local Interconnection Trunks
56	SOA	P-11 Service Order Accuracy - Resale
57	SOA	P-11 Service Order Accuracy - UNE
58	SOA	P-11 Service Order Accuracy – UNE-P
59	LOOS	P-13B LNP – Percent Out of Service < 60 Minutes - LNP
60	LAT	P-13C LNP Percent of Time BellSouth Applies the 10-Digit Trigger Prior to the LNP Order Due Date – LNP – (Standalone)
61	LDT	P-13D LNP – Disconnect Timeliness (Non-Trigger)
62	MRA	MR-1 Percent Missed Repair Appointment – Resale POTS
63	MRA	MR-1 Percent Missed Repair Appointment – Resale Design
64	MRA	MR-1 Percent Missed Repair Appointment – UNE Loop and Port Combinations
65	MRA	MR-1 Percent Missed Repair Appointment – UNE Loops Design
66	MRA	MR-1 Percent Missed Repair Appointment – UNE Loops Non-Design
67	MRA	MR-1 Percent Missed Repair Appointment – UNE xDSL
68	MRA	MR-1 Percent Missed Repair Appointment – UNE Line Splitting/Sharing
69	MRA	MR-1 Percent Missed Repair Appointment – Local Interconnection Trunks
70	CTRR	MR-2 Customer Trouble Report Rate – Resale POTS
71	CTRR	MR-2 Customer Trouble Report Rate – Resale Design
72	CTRR	MR-2 Customer Trouble Report Rate – UNE Loop and Port Combinations

Item No.	SQM Ref	Tier 2 Submetric
73	CTRR	MR-2 Customer Trouble Report Rate – UNE Loops Design
74	CTRR	MR-2 Customer Trouble Report Rate – UNE Loops Non-Design
75	CTRR	MR-2 Customer Trouble Report Rate – UNE xDSL
76	CTRR	MR-2 Customer Trouble Report Rate – UNE Line Splitting/Sharing
77	CTRR	MR-2 Customer Trouble Report Rate – Local Interconnection Trunks
78	MAD	MR-3 Maintenance Average Duration – Resale POTS
79	MAD	MR-3 Maintenance Average Duration – Resale Design
80	MAD	MR-3 Maintenance Average Duration – UNE Loop and Port Combinations
81	MAD	MR-3 Maintenance Average Duration – UNE Loops Design
82	MAD	MR-3 Maintenance Average Duration – UNE Loops Non-Design
83	MAD	MR-3 Maintenance Average Duration – UNE xDSL
84	MAD	MR-3 Maintenance Average Duration – UNE Line Splitting/Sharing
85	MAD	MR-3 Maintenance Average Duration – Local Interconnection Trunks
86	PRT	MR-4 Percent Repeat Customer Troubles within 30 Days – Resale POTS
87	PRT	MR-4 Percent Repeat Customer Troubles within 30 Days – Resale Design
88	PRT	MR-4 Percent Repeat Customer Troubles within 30 Days – UNE Loop and Port Combinations
89	PRT	MR-4 Percent Repeat Customer Troubles within 30 Days – UNE Loops Design
90	PRT	MR-4 Percent Repeat Customer Troubles within 30 Days – UNE Loops Non-Design
91	PRT	MR-4 Percent Repeat Customer Troubles within 30 Days – UNE xDSL
92	PRT	MR-4 Percent Repeat Customer Troubles within 30 Days – UNE Line Splitting/Sharing
93	PRT	MR-4 Percent Repeat Customer Troubles within 30 Days – Local Interconnection Trunks
94	OOS	MR-5 Out of Service (OOS) > 24 hours – Resale POTS
95	OOS	MR-5 Out of Service (OOS) > 24 hours – Resale Design
96	OOS	MR-5 Out of Service (OOS) > 24 hours – UNE Loop and Port Combinations
97	OOS	MR-5 Out of Service (OOS) > 24 hours – UNE Loops Design
98	OOS	MR-5 Out of Service (OOS) > 24 hours – UNE Loops Non-Design

Item No.	SQM Ref	Tier 2 Submetric
99	OOS	MR-5 Out of Service (OOS) > 24 hours – UNE xDSL
100	OOS	MR-5 Out of Service (OOS) > 24 hours – UNE Line Splitting/Sharing
101	OOS	MR-5 Out of Service (OOS) > 24 hours – Local Interconnection Trunks
102	BIA	B-1 Invoice Accuracy
103	BIT	B-2 Mean Time to Deliver Invoices – CRIS
104	BIT	B-2 Mean Time to Deliver Invoices – CABS
105	BUDT	B-5 Usage Data Delivery Timeliness
106	BEC	B-10 Percent Billing Adjustment Requests (BAR) Responded to within 45 Business Days – State
107	TGP	TGP Trunk Group Performance
108	MDD	C-3 Collocation Percent of Due Dates Missed
109	NT	CM-1 Timelines of Change Management Notices – Region
110	DT	CM-3 Timeliness of Documentation Associated with Change – Region
111	SEC	CM-6 Percentage of Software Errors Corrected in "X" Business Days - Region
112	CRA	CM-7 Percentage of Change Requests Accepted or Rejected Within 10 Days – Region
113	SCRI	CM-11 Percentage of Software Change Requests Implemented Within 60 Weeks of Prioritization – Region

Appendix C: Statistical Properties and Definitions

The statistical process for testing whether BellSouth's (BST) wholesale customers (alternative local exchange carriers or CLEC) are being treated equally with BST's retail customers involves more than a simple mathematical formula Three key elements need to be considered before an appropriate decision process can be developed These are the type of:

- data
- comparison
- performance

This section describes the properties of a test methodology and the truncated Z statistic for three types of measures.

C.1 Necessary Properties for a Test Methodology

Once the key elements are determined, a test methodology should be developed that complies with the following properties

- Like-to-Like Comparisons
- Overall Level Test Statistic
- Production Mode Process
- Balancing

C.1.1 Like-to-Like Comparisons

When possible, data should be compared at appropriate levels, e.g. wire center, time of month, dispatched residential, new orders. The testing process should:

- Identify variables that may affect the performance measure
- Record these important confounding covariates
- Adjust for the observed covariates in order to remove potential biases and to make the CLEC and the ILEC units as comparable as possible

C.1.2 Overall Level Test Statistic

Each performance measure of interest should be summarized by one overall test statistic giving the decision maker a rule that determines whether a statistically significant difference exists. The test statistic should have the following properties:

- The method should provide a single overall index on a standard scale.
- If entries in comparison cells are exactly proportional over a covariate, the aggregated index should be very nearly the same as if comparisons on

the covariate had not been done.
- The contribution of each comparison cell should depend on the number of observations in the cell.
- Cancellation between comparison cells should be limited
- The index should be a continuous function of the observations

C.1.3 Production Mode Process

The decision system must be developed so that it does not require intermediate manual intervention, i.e , the process must be mechanized to the extent possible.

- Calculations are well defined for possible eventualities.
- The decision process is an algorithm that needs no manual intervention.
- Results should be arrived at in a timely manner
- The system must recognize that resources are needed for other performance measure-related processes that also must be run in a timely manner
- The system should be auditable, and adjustable over time.

C.1.4 Balancing

The testing methodology should balance Type I and Type II Error probabilities.

- P (Type I Error) = P (Type II Error) for well-defined null and alternative hypotheses
- The formula for a test's balancing critical value should be simple enough to calculate using standard mathematical functions, i.e., one should avoid methods that require computationally intensive techniques.
- Little to no information beyond the null hypothesis, the alternative hypothesis, and the number of observations should be required for calculating the balancing critical value.

C.1.5 Measurement Types

The performance measurements that will undergo testing are of three types: mean, proportion, and rate All three have similar characteristics. Different types of data are used to calculate them Table C-1 shows the type of data that is used to derive each measurement type.

Table C-1: Measurement Types and Data

Measurement Type	Data Used to Derive Measure
Mean	Interval Measurements
Proportion	Counts
Rate	

C.2 Testing Methodology – The Truncated Z

In summary, many covariates are chosen in order to provide meaningful comparison levels below the submetric level chosen for the parity comparison. This includes such factors as wire center and time of month, as well as order type for provisioning measures. In each comparison cell, a Z statistic is calculated. The form of the Z statistic may vary depending on the performance measure, but it should be distributed approximately as a standard normal, with mean zero and variance equal to one Assuming that the test statistic is derived so that it is negative when the performance for the CLEC is worse than for the ILEC, a positive truncation is done – i.e if the result is negative it is left alone, if the result is positive it is changed to zero. A weighted average of the truncated statistics is calculated where a cell's weight depends on the volume of BST and CLEC orders in the cell. The weighted average is standardized by subtracting the theoretical mean of the truncated distribution, and this is divided by the standard error of the weighted average. Summaries based on measurement type are given for the calculation of the cell Z statistic

Additionally, there are measures that are compared to a retail analog at least in part where cell definitions do not exist that permit assignment of data for these measures to cells so the truncated Z statistic cannot be calculated. There measures are:

- Average Response Interval (M&R)
- Billing Invoice Accuracy
- Billing Invoice Timeliness
- Speed of Answer in the Ordering Center

In addition, there are two measurements that use retail results 'plus' (2 seconds for OSS Response Time, 0 5% for Trunk Blocking) resulting in a benchmark standard. These measurements are: OSS Average Response Time & Response Interval (Pre-Ordering) and Trunk Group Performance.

As an example of one approach taken for a parity measure that does not use the truncated Z methodology, consider the measure Billing Invoice Accuracy. In Tennessee, BellSouth calculates results for this measure by subtracting the Absolute Value of Total Related Adjustments during the current month from the Absolute Value of Total Billed Revenues during the current month then dividing these results by the Absolute Value of Total Billed Revenues during the current month and multiplying these results by 100. The formula is as follows:

*Invoice Accuracy = [(**a** – **b**)/**a**] x 100*

a = *Absolute Value of Total Billed Revenues during current month*

b = *Absolute Value of Total Billing Related Adjustments during current month*

A numerical example of the penalty calculation is given below.

Example:

CLEC DATA

Bill Adjustments	$14,660.00
Total Billed Revenue	$336,529 00

BellSouth DATA

Bill Adjustments	$6,018,969,26
Total Billed Revenue	$484,691,922 40

CLEC Invoice Accuracy Ratio = [(366,529 00-14,660 00)/366,529.00] x 100 = 96.00

BST Invoice Accuracy Ratio = [(484,691,922.40-6,018,969.26)/ 484,691,922.40] x 100 = 98.75

Thus, the calculated values are:

CLEC Result = 96%

BellSouth Result = 98.75%

In Tennessee once it is determined that the BST percent is higher, BellSouth pays the CLEC according to the Tennessee Fee Schedule.

The calculation would be 2% of the adjustment = $14,660 x 02 = $293.20.

C.2.1 Mean Measures

For mean measures, an adjusted, asymmetric t statistic is calculated for each like-to-like cell that has at least seven BST and seven CLEC transactions. A permutation test is used when one or both of the BST and CLEC sample sizes is less than seven. The adjusted, asymmetric t statistic and the permutation calculation are described in Appendix D, Statistical Formulas and Technical Description

C.2.2 Proportion Measures

For performance measures that are calculated as a proportion, in each adjustment cell, the cell Z and the moments for the truncated cell Z can be calculated in a direct manner. In adjustment cells where proportions are not close to zero or one, and where the sample sizes are reasonably large ($n_{ij}p_{ij}(1-p_{ij}) > 9$), a normal approximation can be used In this case, the

moments for the truncated Z come directly from properties of the standard normal distribution. If the normal approximation is not appropriate, then the Z statistic is calculated from the hypergeometric distribution. In this case, the moments of the truncated Z are calculated exactly using the hypergeometric probabilities.

C.2.3 Rate Measures

The truncated Z methodology for rate measures has the same general structure for calculating the Z in each cell as proportion measures. For the rate measure customer trouble report rate there are a fixed number of access lines in service for the CLEC, b_{2j}, and a fixed number for BST, b_{1j}. The modeling assumption is that the occurrence of a trouble is independent between access lines, and the number of troubles in b access lines follows a Poisson distribution with mean λ_b where λ is the probability of a trouble per 1 access line and b (= b_{1j} + b_{2j}) is the total number of access lines in service. The exact permutation distribution for this situation is the binomial distribution (the limit for the hypergeometric distribution) that is based on the total number of BST and CLEC troubles, n, and the proportion of BST access lines in service, $q_j = b_{1j}/b$.

In an adjustment cell, if the number of CLEC troubles is greater than 15 and the number of BST troubles is greater than 15, and $n_{ij}q_{ij}(1-q_{ij}) > 9$, then a normal approximation can be used In this case, the moments of the truncated Z come directly from properties of the standard normal distribution. Otherwise, if there are very few troubles, the number of CLEC troubles can be modeled using a binomial distribution with n equal to the total number of troubles (CLEC plus BST troubles.) In this case, the moments for the truncated Z are calculated explicitly using the binomial distribution

Appendix D: Statistical Formulas and Technical Descriptions

We start by assuming that the data are disaggregated so that comparisons are made within appropriate classes or adjustment cells that define "like" observations.

D.1 Notation and Exact Testing Distributions

Below, we have detailed the basic notation for the construction of the truncated Z statistic. In what follows the word "cell" should be taken to mean a like-to-like comparison cell that has both one (or more) ILEC observation and one (or more) CLEC observation.

L = the total number of occupied cells

j = 1, ,L, an index for the cells

n_{1j} = the number of ILEC transactions in cell j

n_{2j} = the number of CLEC transactions in cell j

n_j = the total number transactions in cell j, $n_{1j} + n_{2j}$

X_{1jk} = Individual ILEC transactions in cell j, $k = 1, , n_{1j}$

X_{2jk} = Individual CLEC transactions in cell j, $k = 1, , n_{2j}$

Y_{jk} = individual transaction (both ILEC and CLEC) in cell j

$$= \begin{cases} X_{1jk} & k = 1,\ldots,n_{1j} \\ X_{2jk} & k = n_{1j}+1,\ldots,n_j \end{cases}$$

$\Phi^{-1}(\,)$ = the inverse of the cumulative standard normal distribution function

For Mean Performance Measures the following additional notation is needed.

$\bar{X}_{1j}$ = The ILEC sample mean of cell j

$\bar{X}_{2j}$ = The CLEC sample mean of cell j

s_{1j}^2 = The ILEC sample variance in cell j

s_{2j}^2 = The CLEC sample variance in cell j

$\{y_{jk}\}$ = a random sample of size n_{2j} from the set of $Y_{j1},\ldots,Y_{jn_j}$, k = 1, ,n_{2j}

M_j = The total number of distinct pairs of samples of size n_{1j} and n_{2j}, $=\binom{n_j}{n_{1j}}$

The exact parity test is the permutation test based on the "modified Z" statistic. For large samples, we can avoid permutation calculations since this statistic will be normal (or Student's t) to a good approximation For small samples, where we cannot avoid permutation calculations, we have found that the difference between "modified Z" and the textbook "pooled Z" is negligible We therefore propose to use the permutation test based on pooled Z for small samples. This decision speeds up the permutation computations considerably, because for each permutation we need only compute the sum of the CLEC sample values, and not the pooled statistic itself.

A permutation probability mass function distribution for cell j, based on the "pooled Z" can be written as

$$PM(t) = P(\sum_k y_{jk} = t) = \frac{\textit{the number of samples that sum to } t}{M_j}$$

and the corresponding cumulative permutation distribution is

$$CPM(t) = P(\sum_k y_{jk} \le t) = \frac{\textit{the number of samples with sum } \le t}{M_j}$$

For Proportion Performance Measures the following notation is defined:

a_{1j} = The number of ILEC cases possessing an attribute of interest in cell j

a_{2j} = The number of CLEC cases possessing an attribute of interest in cell j

a_j = The number of cases possessing an attribute of interest in cell j, $a_{1j} + a_{2j}$

The exact distribution for a parity test is the hypergeometric distribution. The hypergeometric probability mass function distribution for cell j is

$$HG(h) = P(H = h) = \begin{cases} \dfrac{\binom{n_{1j}}{h}\binom{n_{2j}}{a_j - h}}{\binom{n_j}{a_j}}, & \max(0, a_j - n_{2j}) \le h \le \min(a_j, n_{1j}) \\ 0 & \text{otherwise} \end{cases}$$

and the cumulative hypergeometric distribution is

$$CHG(x) = P(H \le x) = \begin{cases} 0 & x < \max(0, a_j - n_{2j}) \\ \sum_{h=\max(0,a_j-n_{1j})}^{x} HG(h), & \max(0, a_j - n_{2j}) \le x \le \min(a_j, n_{1j}) \\ 1 & x > \min(a_j, n_{1j}) \end{cases}$$

For Rate Performance Measures, the notation needed is defined as:

b_{1j} =the number of ILEC base elements in cell j

b_{2j} =the number of CLEC base elements in cell j

b_j =the total number of base elements in cell j; $b_{1j} + b_{2j}$

r_{1j} =the ILEC sample rate of cell j; n_{1j} / b_{1j}

r_{2j} =the ILEC sample rate of cell j; n_{2j} / b_{2j}

q_j =the relative proportion of ILEC elements for cell j; b_{1j} / b_j

The exact distribution for a parity test is the binomial distribution The binomial probability mass function distribution for cell j is

$$BN(k) = P(B = k) = \begin{cases} \binom{n_j}{k} q_j^k (1 - q_j)^{n_j - k}, & 0 \le k \le n_j \\ 0 & \text{otherwise} \end{cases}$$

and the cumulative binomial distribution is

$$CBN(x) = P(B \le x) = \begin{cases} 0 & x < 0 \\ \sum_{k=0}^{x} BN(k), & 0 \le x \le n_j \\ 1 & x > n_j \end{cases}$$

D.2 Calculating the Truncated Z

The general methodology for calculating an overall level test statistic is outlined below

D.2.1 Calculate Cell Weights (W_j)

A weight based on the number of transactions is used so that a cell, which has a larger number of transactions, has a larger weight. The actual weight formula will depend on the type of measure.

Mean Measure

$$W_j = \sqrt{\frac{n_{1j} n_{2j}}{n_j}}$$

Proportion Measure

$$W_j = \sqrt{\frac{n_{2j} n_{1j}}{n_j} \cdot \frac{a_j}{n_j} \cdot \left(1 - \frac{a_j}{n_j}\right)}$$

Rate Measures

$$W_j = \sqrt{\frac{b_{1j} b_{2j}}{b_j} \cdot \frac{n_j}{b_j}}$$

D.2.2 Calculate a Z Value (Z_j) for each Cell

A Z statistic with mean 0 and variance 1 is needed for each cell

- If $W_j = 0$, set $Z_j = 0$.
- Otherwise, the actual Z statistic calculation depends on the type of performance measure.

Mean Measure

$$Z_j = \Phi^{-1}(\alpha)$$

where α is determined by the following algorithm.

If the two means are equal and the two variances are zero, set the cell Z score to zero.

If $\min(n_{1j}, n_{2j}) > 6$, then determine α as

$$\alpha = P(t_{n_{1j}-1} \le T_j)$$

that is, α is the probability that a t random variable with $n_{1j} - 1$ degrees of freedom, is less than

$$T_j = \begin{cases} t_j + \frac{g}{6}\left(\frac{n_{1j} + 2n_{2j}}{\sqrt{n_{1j}\, n_{2j}(n_{1j} + n_{2j})}}\right)\left(t_j^2 + \frac{n_{2j} - n_{1j}}{n_{1j} + 2n_{2j}}\right) & t_j \ge t_{\min j} \\ t_j + \frac{g}{6}\left(\frac{n_{1j} + 2n_{2j}}{\sqrt{n_{1j}\, n_{2j}(n_{1j} + n_{2j})}}\right)\left(t_{\min j}^2 + \frac{n_{2j} - n_{1j}}{n_{1j} + 2n_{2j}}\right) & \text{otherwise} \end{cases}$$

where

$$t_j = \frac{\bar{X}_{1j} - \bar{X}_{2j}}{s_{1j}\sqrt{\frac{1}{n_{1j}} + \frac{1}{n_{2j}}}}$$

$$t_{\min j} = \frac{-3\sqrt{n_{1j} n_{2j} n_j}}{g(n_{1j} + 2n_{2j})}$$

and g is the median value of all values of

$$\gamma_{1j} = \frac{n_{1j}}{(n_{1j} - 1)(n_{1j} - 2)} \sum_k \left(\frac{X_{1jk} - \bar{X}_{1j}}{s_{1j}}\right)^3$$

over all cells within the submeasure being tested such that all three conditions stated below are true. If no submeasure cells exist that satisfy these conditions, then g = 0.

$\gamma_{1j} > 0$

$n_{1j} > 6$

$n_{1j} \ge n_{3q}$ for all values of j. n_{3q} is the 3rd quartile of all values of n_{1j} in cells where the first two conditions are true.

Note, that t_j is the "modified Z" statistic The statistic T_j is a "modified Z" corrected for the skewness of the ILEC data.

If $\min(n_{1j}, n_{2j}) \leq 6$, and

- $M_j \leq 1{,}000$ (the total number of distinct pairs of samples of size n_{1j} and n_{2j} is 1,000 or less)
  - Calculate the sample sum for all possible samples of size n_{2j}.
  - Rank the sample sums from smallest to largest. Ties are dealt by using average ranks.
  - Let R_0 be the rank of the observed sample sum with respect to all the sample sums.

$$\alpha = 1 - \frac{R_0 - 0.5}{M_j}$$

- $M_j > 1{,}000$
  - Draw a random sample of 1,000 sample sums from the permutation distribution.
  - Add the observed sample sum to the list. There are a total of 1001 sample sums. Rank the sample sums from smallest to largest. Ties are dealt by using average ranks.
  - Let R_0 be the rank of the observed sample sum with respect all the sample sums.

$$\alpha = 1 - \frac{R_0 - 0.5}{1001}$$

Proportion Measure

$$Z_j = \frac{n_j a_{1j} - n_{1j} a_j}{\sqrt{\frac{n_{1j} n_{2j} a_j (n_j - a_j)}{n_j - 1}}}$$

Rate Measure

$$Z_j = \frac{n_{1j} - n_j q_j}{\sqrt{n_j q_j (1 - q_j)}}$$

D.2.3 Obtain a Truncated Z Value for each Cell ($\hat{Z}_j$)

To limit the amount of cancellation that takes place between cell results during aggregation, cells whose results suggest possible favoritism are left alone. Otherwise the cell statistic is set to zero. This means that positive

equivalent Z values are set to 0, and negative values are left alone. Mathematically, this is written as

$$Z_j^* = \min(0, Z_j)$$

D.2.4 Calculate the Theoretical Mean and Variance

Calculate the theoretical mean and variance of the truncated statistic under the null hypothesis of parity, $E(Z_j^* | H_0)$ and $Var(Z_j^* | H_0)$. To compensate for the truncation in step 3, an overall, weighted sum of the Z_j^* will need to be centered and scaled properly so that the final overall statistic follows a standard normal distribution.

- If $W_j = 0$, then no evidence of favoritism is contained in the cell. The formulae for calculating $E(Z_j^* | H_0)$ and $Var(Z_j^* | H_0)$ cannot be used. Set both equal to 0.
- If $\min(n_{1j}, n_{2j}) > 6$ for a mean measure, or $\min\left\{a_{1j}\left(1-\frac{a_{1j}}{n_{1j}}\right), a_{2j}\left(1-\frac{a_{2j}}{n_{2j}}\right)\right\} > 9$ for a proportion measure, then

$$E(Z_j^* | H_0) = -\frac{1}{\sqrt{2\pi}}$$

and

$$Var(Z_j^* | H_0) = \frac{1}{2} - \frac{1}{2\pi}$$

- Otherwise, determine the total number of values for Z_j^*. Let z_{ji} and θ_{ji}, denote the values of Z_j^* and the probabilities of observing each value, respectively.

$$E(Z_j^* | H_0) = \sum_i \theta_{ji} z_{ji}$$

and

$$Var(Z_j^* | H_0) = \sum_i \theta_{ji} z_{ji}^2 - \left[E(Z_j^* | H_0)\right]^2$$

The actual values of the z's and θ's depends on the type of measure

Mean Measure

$N_j = \min(M_j, 1,000),\ i = 1,\ldots,N_j$

$z_{ji} = \min\left\{0, \Phi^{-1}\left(1-\frac{R_i-0.5}{N_j}\right)\right\}$ where R_i is the rank of sample sum i

$\theta_j = \frac{1}{N_j}$

Proportion Measure

$$z_{j} = \min\left\{0, \frac{n_j\, i - n_{1j}\, a_j}{\sqrt{\frac{n_{1j}\, n_{2j}\, a_j\, (n_j - a_j)}{n_j - 1}}}\right\}, \quad i = \max(0, a_j - n_{2j}), \ldots, \min(a_j, n_{1j})$$

$$\theta_{ji} = \mathrm{HG}(i)$$

Rate Measure

$$z_{ji} = \min\left\{0, \frac{i - n_j\, q_j}{\sqrt{n_j\, q_j (1 - q_j)}}\right\}, \quad i = 0, \ldots, n_j$$

$$\theta_{ji} = \mathrm{BN}(i)$$

D.2.5 Calculate the Overall Test Statistic (Z^T)

$$Z^T = \frac{\sum_j W_j Z_j^* - \sum_j W_j E(Z_j^* \mid H_0)}{\sqrt{\sum_j W_j^2 \mathrm{Var}(Z_j^* \mid H_0)}}$$

The Balancing Critical Value

There are four key elements of the statistical testing process:

- the null hypothesis, H_0, that parity exists between ILEC and CLEC services
- the alternative hypothesis, H_a, that the ILEC is giving better service to its own customers
- the Truncated Z test statistic, Z^T, and
- a critical value, *c*

The decision rule[1] is

- If $Z^T < c$ then accept H_a.
- If $Z^T > c$ then accept H_0.

There are two types of errors possible when using such a decision rule:

- **Type I Error** Deciding favoritism exists when there is, in fact, no favoritism.
- **Type II Error**: Deciding parity exists when there is, in fact, favoritism.

[1] This decision rule assumes that a negative test statistic indicates poor service for the CLEC customer If the opposite is true, then reverse the decision rule

The probabilities of each type of error are:

- **Type I Error**: $\alpha = P(Z^T < c \mid H_0)$
- **Type II Error**: $\beta = P(Z^T \geq c \mid H_a)$

We want a balancing critical value, c_B, so that $\alpha = \beta$.

It can be shown that.

$$c_B = \frac{\sum_j W_j M(m_j, se_j) - \sum_j W_j \frac{-1}{\sqrt{2\pi}}}{\sqrt{\sum_j W_j^2 V(m_j, se_j)} + \sqrt{\sum_j W_j^2 \left(\frac{1}{2} - \frac{1}{2\pi}\right)}}$$

where

$$M(\mu, \sigma) = \mu \Phi(\tfrac{-\mu}{\sigma}) - \sigma \phi(\tfrac{-\mu}{\sigma})$$

$$V(\mu, \sigma) = (\mu^2 + \sigma^2)\Phi(\tfrac{-\mu}{\sigma}) - \mu\sigma\phi(\tfrac{-\mu}{\sigma}) - M(\mu, \sigma)^2$$

$\Phi(\cdot)$ is the cumulative standard normal distribution function, and $\phi(\cdot)$ is the standard normal density function

This formula assumes that Z_j is approximately normally distributed within cell j. When the cell sample sizes, n_{1j} and n_{2j}, are small this may not be true. It is possible to determine the cell mean and variance under the null hypothesis when the cell sample sizes are small. It is much more difficult to determine these values under the alternative hypothesis. Since the cell weight, W_j will also be small (see calculate weights section above) for a cell with small volume, the cell mean and variance will not contribute much to the weighted sum. Therefore, the above formula provides a reasonable approximation to the balancing critical value

The values of m_j and se_j will depend on the type of performance measure.

Mean Measure

For mean measures, one is concerned with two parameters in each cell, namely, the mean and variance A possible lack of parity may be due to a difference in cell means, and/or a difference in cell variances. One possible set of hypotheses that capture this notion, and take into account the assumption that transaction are identically distributed within cells is:

H_0: $\mu_{1j} = \mu_{2j}$, $\sigma_{1j}^2 = \sigma_{2j}^2$

H_a: $\mu_{2j} = \mu_{1j} + \delta_j \sigma_{1j}$, $\sigma_{2j}^2 = \lambda_j \sigma_{1j}^2$ $\delta_j > 0$, λ_j 1 and j = 1,…,L. (where δ_j corresponds to the delta values defined in section 4.1.6 of the Administrative Plan)

Under this form of alternative hypothesis, the cell test statistic Z_j has mean and standard error given by

$$m_j = \frac{-\delta_j}{\sqrt{\frac{1}{n_{1j}} + \frac{1}{n_{2j}}}}$$

and

$$se_j = \sqrt{\frac{\lambda_j n_{1j} + n_{2j}}{n_{1j} + n_{2j}}}$$

Proportion Measure

For a proportion measure there is only one parameter of interest in each cell, the proportion of transaction possessing an attribute of interest. A possible lack of parity may be due to a difference in cell proportions. A set of hypotheses that take into account the assumption that transaction are identically distributed within cells while allowing for an analytically tractable solution is:

H_0: $$\frac{p_{2j}(1-p_{1j})}{(1-p_{2j})p_{1j}} = 1$$

H_a $$\frac{p_{2j}(1-p_{1j})}{(1-p_{2j})p_{1j}} = \psi_j \qquad \psi_j > 1 \text{ and } j = 1, .,L.$$

(where ψ_j corresponds to the psi values defined in section 4.1 6 of the Administrative Plan)

These hypotheses are based on the "odds ratio." If the transaction attribute of interest is a missed trouble repair, then an interpretation of the alternative hypothesis is that a CLEC trouble repair appointment is ψ_j times more likely to be missed than an ILEC trouble

Under this form of alternative hypothesis, the within cell asymptotic mean and variance of a_{1j} are given by[1]

$$E(a_{1j}) = n_j \pi_j^{(1)}$$

$$var(a_{1j}) = \frac{n_j}{\frac{1}{\pi_j^{(1)}} + \frac{1}{\pi_j^{(2)}} + \frac{1}{\pi_j^{(3)}} + \frac{1}{\pi_j^{(4)}}}$$

where

1 Stevens, W L (1951) Mean and Variance of an entry in a Contingency Table *Biometrica*, 38, 468-470

$$\pi_j^{(1)} = f_j^{(1)}\left(n_j^2 + f_j^{(2)} + f_j^{(3)} - f_j^{(4)}\right)$$

$$\pi_j^{(2)} = f_j^{(1)}\left(-n_j^2 - f_j^{(2)} + f_j^{(3)} + f_j^{(4)}\right)$$

$$\pi_1^{(3)} = f_j^{(1)}\left(-n_1^2 + f_j^{(2)} - f_j^{(3)} + f_j^{(4)}\right)$$

$$\pi_j^{(4)} = f_j^{(1)}\left(n_j^2\left(\tfrac{2}{\psi_j} - 1\right) - f_j^{(2)} - f_j^{(3)} - f_j^{(4)}\right)$$

$$f_j^{(1)} = \frac{1}{2n_j^2\left(\frac{1}{\psi_j} - 1\right)}$$

$$f_j^{(2)} = n_j n_{1j}\left(\tfrac{1}{\psi_j} - 1\right)$$

$$f_j^{(3)} = n_j a_j\left(\tfrac{1}{\psi_j} - 1\right)$$

$$f_j^{(4)} = \sqrt{n_j^2\left[4n_{1j}\left(n_j - a_j\right)\left(\tfrac{1}{\psi_j} - 1\right) + \left(n_j + \left(a_j - n_{1j}\right)\left(\tfrac{1}{\psi_j} - 1\right)\right)^2\right]}$$

Recall that the cell test statistic is given by

$$Z_j = \frac{n_j a_{1j} - n_{1j} a_j}{\sqrt{\frac{n_{1j} n_{2j} a_j (n_j - a_j)}{n_j - 1}}}$$

Using the equations above, we see that Z_j has mean and standard error given by

$$m_j = \frac{n_j^2 \pi_j^{(1)} - n_{1j} a_j}{\sqrt{\frac{n_{1j} n_{2j} a_j (n_j - a_j)}{n_j - 1}}}$$

and

$$se_j = \sqrt{\frac{n_j^3 (n_j - 1)}{n_{1j} n_{2j} a_j (n_j - a_j)\left(\frac{1}{\pi_j^{(1)}} + \frac{1}{\pi_j^{(2)}} + \frac{1}{\pi_j^{(3)}} + \frac{1}{\pi_j^{(4)}}\right)}}$$

Rate Measure

A rate measure also has only one parameter of interest in each cell, the rate at which a phenomenon is observed relative to a base unit, e.g the number of troubles per available line. A possible lack of parity may be due to a difference in cell rates. A set of hypotheses that take into account the assumption that transaction are identically distributed within cells is.

$H_0: r_{1j} = r_{2j}$

$H_a: r_{2j} = \varepsilon_j r_{1j} \quad \varepsilon_j > 1$ and $j = 1,\ldots,L.$

(where ε_j corresponds to the epsilon values defined in section 4.1.6 of the Administrative Plan)

Given the total number of ILEC and CLEC transactions in a cell, n_j, and the number of base elements, b_{1j} and b_{2j}, the number of ILEC transaction, n_{1j}, has a binomial distribution from n_j trials and a probability of

$$q_j^* = \frac{r_{1j} b_{1j}}{r_{1j} b_{1j} + r_{2j} b_{2j}}$$

Therefore, the mean and variance of n_{1j}, are given by

$$E(n_{1j}) = n_j q_j^*$$

$$\text{var}(n_{1j}) = n_j q_1^* (1 - q_j^*)$$

Under the null hypothesis

$$q_j^* = q_j = \frac{b_{1j}}{b_j}$$

but under the alternative hypothesis

$$q_j^* = q_j^a = \frac{b_{1j}}{b_{1j} + \varepsilon_j b_{2j}}$$

Recall that the cell test statistic is given by

$$Z_j = \frac{n_{1j} - n_j q_j}{\sqrt{n_j q_j (1 - q_j)}}$$

Using the relationships above, we see that Z_j has mean and standard error given by

$$m_j = \frac{n_j (q_j^a - q_j)}{\sqrt{n_j q_j (1 - q_j)}} = (1 - \varepsilon_j) \frac{\sqrt{n_j b_{1j} b_{2j}}}{b_{1j} + \varepsilon_j b_{2j}}$$

and

$$se_j = \sqrt{\frac{q_j^a (1 - q_j^a)}{q_j (1 - q_j)}} = \sqrt{\varepsilon_j} \frac{b_j}{b_{1j} + \varepsilon_j b_{2j}}$$

D.2.6 Determining the Parameters of the Alternative Hypothesis

In this section we have indexed the alternative hypothesis of mean measures by two sets of parameters, λ_j and δ_j (where δ_j corresponds to the delta values defined in section 4.1.6 of the Administrative Plan section). Proportion measures are indexed by parameter ψ_j and rate measures by ε_j (these parameters correspond to the Psi and Epsilon of section 4.1.6). A major difficulty with this approach is that more than one alternative will be of interest, for example we may consider one alternative in which all the δ_j are set to a common non-zero value, and another set of alternatives in each of which just one δ_j is non-zero, while all the rest are zero. There are very many other possibilities. Each possibility leads to a single value for the balancing critical value, and each possible critical value corresponds to many sets of alternative hypotheses, for each of which it constitutes the correct balancing value

The formulas we have presented can be used to evaluate the impact of different choices of the overall critical value. For each putative choice, we can evaluate the set of alternatives for which this is the correct balancing value While statistical science can be used to evaluate the impact of different choices of these parameters, there is not much that an appeal to statistical principles can offer in directing specific choices. Specific choices are best left to telephony experts. Still, it is possible to comment on some aspects of these choices.

Parameter Choices for λ_j – The set of parameters λ_j index alternatives to the null hypothesis that arise because there might be greater unpredictability or variability in the delivery of service to a CLEC customer over that which would be achieved for an otherwise comparable ILEC customer. While concerns about differences in the variability of service are important, it turns out that the truncated Z testing which is being recommended here is relatively insensitive to all but very large values of the λ_j Put another way, reasonable differences in the values chosen here could make very little difference in the balancing points chosen.

Parameter Choices for δ_j – The set of parameters δ_j are much more important in the choice of the balancing point than was true for the λ_j. The reason for this is that they directly index differences in average service The truncated Z test is very sensitive to any such differences; hence, even small disagreements among experts in the choice of the δ_j could be very important. Sample size matters here too. For example, setting all the δ_j to a single value – $\delta_j = \delta$ might be fine for tests across individual CLECs where the CLEC customer bases are not too different Using the same value of δ for the overall state testing does not seem sensible. At the state level we are aggregating over CLECs, so using the same δ as for an individual CLEC would be saying that a "meaningful" degree of disparity is one where the

violation is the same (δ) for each CLEC. But the detection of disparity for any component CLEC is important, so the relevant "overall" δ should be smaller.

Parameter Choices for ψ_j *or* ε_j – The set of parameters ψ_j or ε_j are also important in the choice of the balancing point for tests of their respective measures. The reason for this is that they directly index increases in the proportion of service performance. The truncated Z test is sensitive to such increases, but not as sensitive as the case of δ for mean measures. Sample size matters here too. As with mean measures, using the same value of ψ or ε for the overall state testing does not seem sensible.

The bottom line here is that beyond a few general considerations, like those given above, a principled approach to the choice of the alternative hypotheses to guard against must come from elsewhere.

D.2.7 Decision Process

Once Z^T has been calculated, it is compared to the balancing critical value to determine if the ILEC is favoring its own customers over a CLEC's customers.

Appendix E: BST SEEM Remedy Calculation Procedures

E.1 BST SEEM Remedy Procedure

E.1.1 Tier-1 Calculation For Retail Analogs

DETERMINE IF AN INDIVIDUAL CLEC FAILS A TIER 1 SUBMETRIC

1. Tier 1 is triggered by a monthly failure of any Tier 1 Remedy Plan submetric.
2. Calculate the overall test statistic for a CLEC (CLEC1); Example, z^{T}_{CLEC1} (Per Statistical Methodology).
3. Calculate the balancing critical value (Example, ${}^{c}B_{CLEC1}$) that is associated with the alternative hypothesis (for fixed parameters δ, Ψ, or ε) for that CLEC.
4. If the overall test statistic is equal to or above the balancing critical value, stop here. That is, if ${}^{c}B_{CLEC1} <= z^{T}_{CLEC1}$, stop here. Otherwise, go to step 5.

CALCULATE REMEDY PAYMENT FOR CORRECTION OF TEST STATISTIC TO THE BCV

5. Select the cell with the most negative z-value (let i=1,…,I with i=1 having the most negative z-value, i=2 having next most negative z-value, etc. and with i=I when the criterion in step 7 is fulfilled.) and set its z-value to zero ($z_{CLEC1,I} = 0$).
6. Recalculate the overall test statistic for that CLEC with the adjusted data; Example, $z^{T}_{CLEC1}{}^{*}$ (Per Statistical Methodology).
7. If the new overall test statistic is equal to or above the balancing critical value, that is, if ${}^{c}B_{CLEC1} <= z^{T}_{CLEC1}{}^{*}$, go to step 8. Otherwise, repeat steps 5 – 6 letting i = i + 1.
8. Calculate the Total Affected Volume (TAV) by summing the Total Impacted Volumes (TIV) of each cell whose z-value was reset to zero except the last cell changed. The affected volume for the last cell changed should be interpolated by $TIV_{CLEC1,I,INT} = ({}^{c}B_{CLEC1} - z^{T}_{CLEC1,I-1}{}^{*}) / (z^{T}_{CLEC1,I}{}^{*} - z^{T}_{CLEC1,I-1}{}^{*}) * TIV_{CLEC1,I}$. The result should be rounded up to the next positive integer and added to TAV_{CLEC1} That is, $TAV_{CLEC1} = TIV_{CLEC1,1} + TIV_{CLEC1,2} + \ldots + TIV_{CLEC1,I-1} + TIV_{CLEC1,I,INT}$. Note that if $TIV_{CLEC1,I} = 1$ then $TIV_{CLEC1,I,INT} = 1$ and the interpolation step can be omitted. Any transactions that cause the overall test statistic to be between the BCV and zero will be included in the TIV for transactions between the BCV and zero.
9. Calculate the below BCV portion of the payment to CLEC1 by multiplying the result of step 8 (TAV_{CLEC1}) by the appropriate dollar amount from the fee schedule. Thus, $CLEC1_{BCV}$ payment = $1AV_{CLEC1}$ * $$from Fee Schedule. Here the fee should be derived from Table 1: Fee Schedule for Tier 1 Per Transaction Fee Determination (Appendix A) multiplied by the appropriate factor from section 4.3.1.4. This factor is 3/2 if the CLEC aggregate performance passes and 3 if the CLEC aggregate performance fails.

CALCULATE REMEDY PAYMENT FOR CORRECTION OF TEST STATISTIC TO ZERO

10. If the current overall adjusted test statistic (calculated in step 6) is equal to or above zero, that is, if $0 <= z^{T}_{CLEC1}{}^{*}$ for i = I, then go to step 14. Otherwise, go to step 11.
11. Select the cell with the most negative remaining z-value (let i=I+1,..., J with i=1+1 having the most negative z-value, i=I+2 having next most negative z-value, etc. and with i=J when the criterion in step 13 is fulfilled.) and set its z-value to zero ($z_{CLEC1,I} = 0$).
12. Recalculate the overall test statistic for that CLEC with the adjusted data; Example, $z^{T}_{CLEC1}{}^{*}$ (Per Statistical Methodology).
13. If the new overall test statistic is equal to or above zero, that is, if ${}^{c}B_{CLEC1} <= z^{T}_{CLEC1}{}^{*}$, go to step 14. Otherwise, repeat steps 11 – 12 letting i= i+1.
14. Calculate the Total Affected Volume (TAV0) by summing the Total Impacted Volumes (TIV0) of each cell whose z-value was reset to zero except the last cell changed. The affected volume for the last cell changed should be interpolated by $TIV0_{CLEC1,J,INT} = (0 - z^{T}_{CLEC1,J-1}{}^{*}) / (z^{T}_{CLEC1,J}{}^{*} - z^{T}_{CLEC1,J-1}{}^{*}) * TIV0_{CLEC1,J} - TIV_{CLEC1,I,INT}$. The result should be rounded up to the next positive integer and added to $TAV0_{CLEC1}$. That is, $TAV0_{CLEC1} = (TIV_{CLEC1,I} - TIV_{CLEC1,I,INT}) + TIV0_{CLEC1,I+1} + TIV0_{CLEC1,I+2} + \ldots + TIV0_{CLEC1,J-1} + TIV0_{CLEC1,J,INT})$. Note that if $TIV0_{CLEC1,J} = 1$ then $TIV_{CLEC1,J,INT} = 1$ and the interpolation step can be omitted. Also, $TIV_{CLEC1,I} - TIV_{CLEC1,I,INT}$ is the remaining transactions from $TIV_{CLEC1,I}$ that were not used in step 8 and if $TIV_{CLEC1,I} = TIV_{CLEC1,I,INT}$ then $TAV0_{CLEC1} = 0$.
15. Calculate the 0 to BCV portion of the payment to CLEC1 by multiplying the result of step 14 ($TAV0_{CLEC1}$) by the appropriate dollar amount from the fee schedule. Thus, $CLEC1_0$ payment = $TAV0_{CLEC1}$ * $$from Fee Schedule. Here the fee should be derived from Table 1: Fee Schedule for Tier 1 Per Transaction Fee Determination (Appendix A) multiplied by the appropriate factor from section 4.3.1.4. This factor is 1/3 if the CLEC aggregate performance passes and 2/3 if the CLEC aggregate performance fails.

CALCULATE TOTAL REMEDY PAYMENT FOR CLEC1

16. The total remedy payment for CLEC1 is found by adding the results from step 9 to the results from step 15. That is $CLEC1_{TOTAL}$ payment = $CLEC1_{BCV}$ payment + $CLEC1_0$ payment.

E.1.2 Example: CLEC1 Percent Repeat Customer Troubles Within 30 Days (PRT) for Resale (DSGN).

Submeasure Category = Provisioning - Resale
Failure Month = Month 1
CLEC Aggregate Result = Failed

	n_I	n_C	I_c	z^T_{CLEC1}	${}^cB_{CLEC1}$		Order Zeroed Out (I/J)	TAV (< BCV)	TAV0 (0 to BCV)
State	312	27	18	-4 10	-1 22				
Cell				$z_{CLEC1,I}$	RANK	$z^T_{CLEC1}{}^*$			
1		1	0	0 75					
2		4	2	-0 69	8				
3		3	3	-1 76	3	-0.65$^{\Delta}$	3	2°	1
4		1	0	0 67					
5		4	3	-1 45	5	0 80$^{\Delta\Delta}$	5		1$^{\circ\circ}$
6		3	3	-3 45	1	-2 46	1	3	
7		2	2	-1 81	2	-1 60	2	2	
8		3	2	-1 09	6				
9		1	1	-1 65	4	-0 13	4		1
10		2	1	-0 84	7				
11		1	0	0 62					
12		2	1	-0 40	9				
Total			**18**					**7**	**3**

$^{\Delta}$Note that after making $z_{CLEC1,I} = 0$, the overall $z^T_{CLEC1}{}^* = -0\ 65$ is greater than the balancing critical value ${}^cB_{CLEC1} = -1.22$.

$^{\Delta\Delta}$Note that after making $z_{CLEC1,J} = 0$, the overall $z^T_{CLEC1}{}^* = 0\ 80$ is greater than zero.

$^{\circ}$For cell#3 the TAV would be calculated with ((-1.22) - (-1.60))/((-0 65) - (-1.60)) × 3 = 1 2 which is rounded up to 2 transactions.

$^{\circ\circ}$For cell#5 the TAV0 would be calculated with ((0) - (-0.13))/((0.80) - (-0.13)) × 4 = 0 56 which is rounded up to 1 transaction.

Remedy payment for $CLEC1_{BCV}$ payment is (7 units) * ($40/unit) * (3 factor) = **$840** when the CLEC aggregate performance fails. Remedy payment for $CLEC1_0$ payment is (3 units) * ($40/unit) * (2/3 factor) = **$80** when the CLEC aggregate performance fails. The total remedy payment is $CLEC_{TOTAL}$ payment = $840 + $80 = **$920**.

E.2 Tier-2 Calculation For Retail Analogs

1. Tier 2 is triggered by three consecutive monthly failures of any Tier 2 Remedy Plan sub-metric. Determine failure by performing steps 2 – 4 in section E.1.1 for each of the three consecutive months for the aggregate of all CLEC data. If any month passes, no remedies are required.
2. If remedies are required, calculate monthly statistical results and affected volumes for the CLEC aggregate performance for each of the three consecutive months as outlined in steps 5 - 8 and 10 - 14 of section E.1.1. Determine average monthly affected volumes for the rolling 3-month period for both the TAV (remedies required for correcting the test statistic back to the BCV) and the TAV0 (remedies required for correcting the test statistic back to zero).
3. Calculate the payment to State Designated Agency by multiplying average monthly volumes by the appropriate dollar amount from the Tier-2 fee schedule (Appendix A, Table 2: Tier 2 Per Transaction Fee Determination).
4. Therefore, State Designated Agency payment = (average monthly volume TAV * $$ from Fee Schedule) + (average monthly volume TAV0 * $$ from Fee Schedule).

E.2.1 Example:STATE-A Percent Provisioning Troubles within X Days - UNE Loops Design

Submeasure Category = Provisioning – UNE
Failure Month = Month 1
CLEC Aggregate Result = Failed all three months

Month 1	n_I	n_C	I_c	z^T_{CLEC1}	$^cB_{CLEC1}$		Order Zeroed Out (I/J)	TAV (< BCV)	TAV0 (0–BCV)
State	155	37	8	-5 11	-0 35				
Cell				$z_{CLEC1,i}$	RANK	z^r_{CLEC1}			
1		3	1	-1 53	5	0 91$^{\Delta\Delta}$	5		1^{00}
2		1	0	0 31					
3		2	1	-2 18	3	-1 21	3	1	
4		1	1	-4 52	2	-2 39	2	1	
5		1	0	0 28					
6		18	1	-0 24	8				
7		5	1	-0 45	7				
8		1	1	-5 39	1	-3 74	1	1	
9		4	1	-0 50	6				

Month 1	n_I	n_C	I_c	z^T_{CLEC1}	$^cB_{CLEC1}$		Order Zeroed Out (I/J)	TAV (< BCV)	TAV0 (0–BCV)
10		1	1	-2 14	4	-0 04$^{\Delta}$	4	1^{o}	0
Total			8					4	1

$^{\Delta}$Note that after making $z_{CLEC1,I} = 0$, the overall $z^T_{CLEC1}{}^* = -0.04$ is greater than the balancing critical value $^cB_{CLEC1} = -0.35$

$^{\Delta\Delta}$Note that after making $z_{CLEC1,J} = 0$, the overall $z^T_{CLEC1}{}^* = 0.80$ is greater than zero.

^{o}For cell#10 the TAV_4 would not be interpolated given that the impacted volume for that cell is only 1.

^{oo}For cell#1 the TAV_5 would not be interpolated given that the impacted volume for that cell is only 1

TAV for month 1 is 4 units, TAV0 for month 1 is 1 unit.

Submeasure Category = Provisioning – UNE
Failure Month = Month 2
CLEC Aggregate Result = Failed all three months

Month 2	n_I	n_C	I_c	z^T_{CLEC1}	$^cB_{CLEC1}$		Order Zeroed Out (I/J)	TAV (< BCV)	TAV0 (0–BCV)
State	175	13	3	-0 94	-0 39				
Cell				$z_{CLEC1,I}$	RANK	$z^T_{CLEC1}{}^*$			
1		2	1	-1 58	2				
2		1	0	1 00					
3		1	0	0 25					
4		1	0	0 26					
5		2	0	0 46					
6		1	0	0 20					
7		2	1	-0 71	3				
8		1	1	-4 12	1	0 28$^{\Delta}$	1	1^{o}	
9		1	0	0 35					
10		1	0	0 50					
Total			**3**					**1**	**0**

[Δ]Note that after making $z_{CLEC1,I} = 0$, the overall $z^{T}_{CLEC1}{}^{*} = 0\ 28$ is greater than the balancing critical value $^{C}B_{CLEC1} = -0\ 39$. Note that it is also greater than zero. Therefore the total affected volume has been identified.

[o]For cell#8 the TAV_1 would not be interpolated given that the impacted volume for that cell is only 1

TAV for month 2 is 1 unit, TAV0 for month 2 is 0 units.

Submeasure Category = Provisioning – UNE
Failure Month = Month 3
CLEC Aggregate Result = Failed all three months

Month 3	n_I	n_C	I_c	z^{T}_{CLEC1}	$^{C}B_{CLEC1}$		Order Zeroed Out (I/J)	TAV (< BCV)	TAV0 (0–BCV)
State	196	33	8	-4 76	-0 49				
Cell				$z_{CLEC1,I}$	RANK	$z^{T}_{CLEC1}{}^{*}$			
1		2	0	0 48					
2		4	1	-2 55	**6**				
3		2	0	0 57					
4		1	1	-3 00	**4**	-0 81	4	1	
5		1	1	-3 16	**2**	-2 78	2	1	
6		1	0	0 20					
7		1	1	-3 32	**1**	-3 76	1	1	
8		2	1	-3 00	**3**	-1 78	3	1	
9		1	1	-2 92	**5**	0 18[Δ]	5	1[o]	
10		6	1	-0 41	**7**				
11		10	1	-0 32	**8**				
12		1	0	0 24					
13		1	0	0 28					
Total			**8**					**5**	**0**

[Δ]Note that after making $z_{CLEC1,I} = 0$, the overall $z^{T}_{CLEC1}{}^{*} = 0\ 18$ is greater than the balancing critical value $^{C}B_{CLEC1} = -0.49$. Note that it is also greater than zero. Therefore the total affected volume has been identified.

oFor cell#9 the TAV_5 would not be interpoiated given that the impacted volume for that cell is only 1

TAV for month 3 is 5 units, TAV0 for month 3 is 0 units.

If the above examples represent performance for each of months 1 through 3, then

E.2.2 Example: STATE-A Percent Provisioning Troubles within 30 Days - UNE Loops Design

State	TAV	TAV0
Month 1	4	1
Month 2	1	0
Month 3	5	0
Average TAV(0) for rolling 3 month period	3 33	0 33
Remedy amount per unit (Appendix A Table 2	$345	$76
Remedy Dollars	$1148 85	$25 08

The total remedy paid for this Tier 2 submetric is $1148 85 + $25.08 = $1,173 93 which rounds up to **$1174**

E.3 Tier-1 Calculation For Benchmarks

1. For each CLEC with five or more observations, calculate monthly performance results for the State.
2. CLECs having observations (sample sizes) between 5 and 30 will use Table I below. The only exception will be for Collocation Percent Missed Due Dates.

Small Sample Size Table (95% Confidence)

Sample Size	Equivalent 90% Benchmark	Equivalent 95% Benchmark
5	60 00%	80 00%
6	66 67%	83 33%
7	71 43%	85 71%
8	75 00%	75 00%
9	66 67%	77 78%
10	70 00%	80 00%
11	72 73%	81 82%
12	75 00%	83 33%
13	76 92%	84 62%

Sample Size	Equivalent 90% Benchmark	Equivalent 95% Benchmark
18	77 78%	83 33%
19	78 95%	84 21%
20	80 00%	85 00%
21	76 19%	85 71%
22	77 27%	86 36%
23	78 26%	86 96%
24	79 17%	87 50%
25	80 00%	88 00%
26	80 77%	88 46%

Sample Size	Equivalent 90% Benchmark	Equivalent 95% Benchmark
14	78 57%	85 71%
15	73 33%	86 67%
16	75 00%	87 50%
17	76 47%	82 35%

Sample Size	Equivalent 90% Benchmark	Equivalent 95% Benchmark
27	81 48%	88 89%
28	78 57%	89 29%
29	79 31%	86 21%
30	80 00%	86 67%

3. If the percentage (or equivalent percentage for small samples) meets the benchmark standard, no remedies are required. Otherwise, go to step 4.
4. Determine the Volume Proportion by taking the difference between the benchmark and the actual performance result.
5. Calculate the Total Affected Volume (TAV) by multiplying the Volume Proportion from step 4 by the Total Impacted CLEC1 Volume.
6. Calculate the payment to CLEC1 by multiplying the result of step 5 by the appropriate dollar amount from the fee schedule (Appendix A, Table 1) times the appropriate multiplier (section 4.3.1.5). That is, CLEC1 payment = (Affected $\text{Volume}_{\text{CLEC1}}$* $$from Fee Schedule * multiplier). For the example that follows, fee amounts are based on an aggregate failure.

E.3.1 Example: CLEC1 Percent Missed Due Dates for Collocations

Submeasure Category = Collocation
Failure Month = Month 1
CLEC Aggregate Result = Failed

	n_C	Benchmark	$PMDD_C$	Volume Proportion	Affected Volume
State	600	>= 95% On Time	92%	03	18

Payout for CLEC1 is (18 units) * ($3165/unit) * (3 factor) = $170,910

E.4 Tier 1 Calculation For Benchmarks (In The Form Of A Target)

1. For each CLEC with five or more observations calculate monthly performance results for the State.
2. CLECs having observations (sample sizes) between 5 and 30 will use small sample size table above.
3. Calculate the interval distribution based on the same data set used in step 1.
4. If the 'percent within' (or equivalent percentage for small samples) meets the benchmark standard, no remedies are required. Otherwise, go to step 5.
5. Determine the Volume Proportion by taking the difference between benchmark

and the actual performance result.

6. Calculate the Total Affected Volume by multiplying the Volume Proportion from step 5 by the Total CLEC1 Volume.
7. Calculate the payment to CLEC1 by multiplying the result of step 6 by the appropriate dollar amount from the fee schedule: CLEC1 payment = Affected $\text{Volume}_{\text{CLEC1}}$ * $$ from Fee Schedule * multiplier. For the example that follows assume CLEC aggregate failure.

E.4.1 Example: CLEC-1 Reject Interval – Fully Mechanized

Submeasure Category = Ordering
Failure Month = Month 1
CLEC Aggregate Result = Failed

	n_C	Benchmark	Reject Interval	Volume Proportion	Affected Volume
State	600	97% <= 1 hour	95% <= 1 hour	.02	12

Payout for CLEC1 is (12 units) * ($20/unit) * (2.5 factor) = $600

E.5 Tier 2 Calculations For Benchmarks

Tier 2 calculations for benchmark measures are the same as the Tier 1 benchmark calculations, except they are based on the CLEC aggregate performance and the CLEC aggregate data will have failed for three (3) consecutive months.

E.6 Regional and State Coefficients

This section describes the method of calculating regional and state coefficients.

E.6.1 AKC

- Acknowledgement Completeness (AKC_EDI & AKC-TAG)

Regional Coefficient Formula (Tier 1)

Coefficient = (A+B) / (C+D) where.

- A= number of valid FOC transactions of the CLEC in the state (fully & partially mechanized)
- B = number of valid RI transactions of the CLEC in the state (fully & partially mechanized)

- C = total valid FOC transactions of the CLEC in the region (fully & partially mechanized)
- D = total valid RI transactions of the CLEC in the region (fully & partially mechanized)

State Coefficient Formula (Tier 2)

State Coefficient = (A+B) / (C+D) where:

- A= number of valid FOC transactions for all CLECs in the state (fully & partially mechanized)
- B = number of valid RI transactions for all CLECs in the state (fully & partially mechanized)
- C = total valid FOC transactions in the region (fully & partially mechanized)
- D = total valid RI transactions in the region (fully & partially mechanized)

E.6.2 PFT

- Percent Flow Through CLEC Aggregate - Residence (PFT-RES)
- Percent Flow Through CLEC Aggregate - Business (PFT- BUS)
- Percent Flow Through CLEC Aggregate - UNE Other (PFT-UOTH)
- Percent Flow Through CLEC Aggregate - UNE Loop & Port Combo (PFT-UNEPC)
- Percent Flow Through CLEC Aggregate - LNP (PFT-LNP)

Regional Coefficient Formula (Tier 1)

Coefficient = A / B where:

- A= number of valid FOC transactions of the CLEC in the state (fully mechanized)
- B = total valid FOC transactions of the CLEC in the region (fully mechanized)

State Coefficient Formula (Tier 2)

State Coefficient = A / B where:

- A= number of valid FOC transactions for all CLECs in the state (fully-mechanized)
- B = total valid FOC transactions in the region (fully-mechanized)

E.6.3 CMN, PSEC, PCRAR, PCRIP

- Timeliness of Change Management (CMN)
- Percent of Software Errors Corrected in X (10, 30, 45) Business Days - Region (PSEC)
- Percent Change Requests Accepted or Rejected in 10 Days - Region (PCRAR)
- Percent of Change Request Implemented Within 60 Weeks of Prioritization - Region (PCRIP)

State Coefficient Formula (Tier 2)

Coefficient = (A+B) / (C+D) where:

- A= number of valid FOC transactions for all CLECs in the state (fully & partially mechanized)
- B = number of valid RI transactions for all CLECs in the state (fully & partially mechanized)
- C = total valid FOC transactions in the region (fully & partially mechanized)
- D = total valid RI transactions in the region (fully & partially mechanized)

E.6.4 IA

- Interface Availability (IA)

State Coefficient Formula (Tier 2)

Coefficient = (A+B) / (C+D) where:

- A= number of valid FOC transactions for all CLECs in the state (fully & partially mechanized)
- B = number of valid RI transactions for all CLECs in the state (fully & partially mechanized)
- C = total valid FOC transactions in the region (fully & partially mechanized)
- D = total valid RI transactions in the region (fully & partially mechanized)

Appendix F: BellSouth's Policy on Reposting of Performance Data and Recalculation of SEEM Payments

BellSouth will make available reposted performance data as reflected in the Service Quality Measurement (SQM) reports and recalculate Self-Effectuating Enforcement Mechanism (SEEM) payments using the Parity Analysis and Remedy Information System (PARIS), to the extent technically feasible, under the following circumstances:

1. Those SQM measures included in a state's specific SQM plan with corresponding sub-metrics are subject to reposting. A notice will be placed on the PMAP website advising CLECs when reposted data is available.

2. SQM Performance sub-metric calculations that result in a shift in the statewide aggregate performance from an "in parity" condition to an "out of parity" condition will be available for reposting.

3 SQM Performance sub-metric calculations with benchmarks where statewide aggregate performance is in an "out of parity" condition will be available for reposting whenever there is a >= 2% decline in BellSouth's performance at the sub-metric level.

4 SQM Performance sub-metric calculations with retail analogues that are in an "out of parity" condition will be available for reposting whenever there is a degradation in performance as shown by an adverse change of <= .5 in the z-score at the sub-metric level

5. Any data recalculations that reflect an improvement in BellSouth's performance will be reposted at BellSouth's discretion. However, statewide performance must improve by at least 2% for benchmark measures and the z-score must improve by at least 0.5 for retail analogs at the sub-metric level to qualify for reposting

6 SQM Performance data will be reposted for a maximum of three months in arrears from date of detection. As an example, should an error be discovered during the analysis of the May data month, and this error triggers a reposting, BellSouth will correct the data beginning with the month of detection (May) and the three months preceding – April, March and February.

7 When updated SQM performance data has been reposted or when a payment error in PARIS has been discovered, BellSouth will recalculate applicable SEEM payments where technically feasible, for a maximum of three months

in arrears from date of detection. Recalculated SEEM payments due to reposted SQM data will be made for the same months that the applicable data was reposted. The three month period for recalculating SEEM payments due to an error in PARIS will be determined in the same manner previously described for the SQM For example, should an error in PARIS be discovered for the data month of May, BellSouth will correct data for May and the three preceding months – April, March and February.

8. Any adjustments for underpayment of Tier 1 and Tier 2 calculated remedies resulting from the application of this policy will be made consistent with the terms of the state-specific SEEM plan, including the payment of interest. Any adjustments for overpayment of Tier 1 and Tier 2 remedies will be made at BellSouth's discretion.

9. Any adjustments for underpayments resulting from application of this policy will be made in the next month's payment cycle after the recalculation is made The final current month PARIS reports will reflect the transmitted dollars, including adjustments for prior months where applicable Questions regarding the adjustments should be made in accordance with the normal process used to address CLEC questions related to SEEM payments.

When a CLEC believes that an error in its specific data requires reposting where the above statewide thresholds have not been met, the CLEC is responsible for identifying such issues and requesting BellSouth to repost the data. Any failure to repost inaccurate data should be brought to the attention of the Authority for resolution if it is estimated that the thresholds described in items 3, 4, or 5 have been met at the CLEC-specific level.

Determination of when Reposting Policy Applies

As part of the Change Notification Process, BellSouth performs an analysis of impacts that are proposed to be made to Performance Measurement Application Platform (PMAP) code These impacts are used to identify changes to its reported SQM results.

To determine this impact, BellSouth performs a query of the data warehouse to identify those records that would be impacted by the proposed change. Once the number of records are identified, the measurement is recalculated to determine the impact This is the general framework for analysis - the specific steps used to evaluate the impact will vary with the issue being analyzed. However, the following example may assist in understanding:

Assume that service orders with an activity code of T were erroneously being included in a UNE-P disaggregation for Percent Missed Installation Appointments. They should have been in another product disaggregation. Further, assume that the number of records erroneously included as UNEP is 110 records out of a total of 86,000. In this example, the numerator and

denominator would both be reduced by 110 records and the z-score would be recalculated If the amount of the change was sufficient to meet criteria 2, 4 or 5 above, the Reposting policy will be invoked.

BellSouth Service Quality Measurement Plan (SQM)

Tennessee Performance Metrics

Measurement Descriptions
Version 3.00

Issue Date: June 1, 2005

Introduction

BellSouth Service Quality Measurement Plan (SQM) describes in detail the measurements produced to evaluate the quality of service delivered to BellSouth's wholesale customers. The SQM was developed to respond to the requirements of the Communications Act of 1996 Section 251 (96 Act) which required BellSouth to provide non-discriminatory access to Competitive Local Exchange Carriers (CLEC)[1]. The reports produced by the SQM provide regulators, CLECs and BellSouth the information necessary to monitor the delivery of non-discriminatory access.

This plan results from the many divergent forces evolving from the 96 Act. This specific SQM is based on Order No. (to be determined) in TRA Docket No. 04-00150 dated (to be determined).

The SQM and the reports flowing from it must change to reflect the dynamic requirements of the industry. New measurements are added as new products, systems, and processes are developed and fielded. New products and services are added as the markets develop and the processes stabilize. The measurements will be changed to reflect the dynamic changes described above and to correct errors, respond to 3rd Party audits, Orders of the TRA, FCC and the appropriate Courts of Law.

This document is intended for use by someone with knowledge of the telecommunications industry, information technologies and a functional knowledge of the subject areas covered by BellSouth Performance Measurements and the reports that flow from them.

Report Publication Dates

Each month, preliminary SQM reports will be posted to BellSouth's PMAP website (http://pmap.bellsouth.com) by 8:00 AM EST on the 21st day of each month or the first business day after the 21st. The validated SQM reports will be posted by 8:00 AM on the last day of the month or the first business day after the last day of the month.

For details on SEEM, please refer to the SEEM Administrative Plan.

BellSouth shall retain the performance measurement Supporting Data Files (SDF) for a period of 18 months and further retain the monthly reports produced in PMAP for a period of three years. Instructions for replicating the reports in the SQM are contained in the Supporting Data User Manual (SDUM). The SDUM is available on the PMAP website and is automatically provided with each SDF download.

Report Delivery Methods

CLEC SQM and SEEM reports will be considered delivered when posted to the website. The State/Federal Commissions have been given access to the website.

[1] *Alternative Local Exchange Companies (ALEC) and Competing Local Providers (CLP) are referred to as Competitive Local Exchange Carriers (CLEC) in this document*

Contents

Section 7: Collocation

Section 8: Change Management

Section 1: Operations Support Systems (OSS)

OSS-1 [ARI]: OSS Response Interval (Pre-Ordering/Ordering/Maintenance & Repair)

Definition

The response interval is the average/percentage of time to retrieve pre-order/order/maintenance and repair information from a given legacy system

Exclusions

- Syntactically Incorrect queries
- Scheduled OSS Maintenance
- Test Transactions/Records

Business Rules

OSS Response Interval is designed to monitor the time required for the CLEC and BellSouth interface systems to obtain, from BellSouth's legacy systems, the information required to handle Pre-Ordering/Ordering/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 appropriate response has been transmitted through same point to the requester

The average response interval 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 following systems are observed in the Pre-Ordering/Ordering OSS Response Interval measurement RSAG-Address, RSAG-TN, ATLAS, COFFI, DSAP, and CRIS

The percent response interval for retrieving Maintenance and Repair information from a given legacy system is determined by dividing the number of responses returned within 10 seconds by the total number of queries submitted in the reporting period and multiplying by 100

The following systems are observed in the Maintenance and Repair OSS Response Interval measurement CRIS, DLETH, DLR, LMOS, LMOSupd, LNP Gateway, MARCH, OSPCM, Predictor, SOCS, and NIW

Calculation

Pre-Ordering/Ordering OSS Response Interval = (a - b)

- a = Date and time of legacy response
- b = Date and time of legacy request

Pre-Ordering/Ordering Average Response Interval = (c / d)

- c = Sum of response intervals
- d = Number of legacy requests during the reporting period

Maintenance & Repair OSS Response Interval = (a - b)

- a = Query Response date and time
- b = Query Request date and time

Maintenance & Repair Percent Response Interval (per category) = (c / d) X 100

- c = Number of responses returned within 10 seconds
- d = Number of queries submitted in the reporting period

Report Structure

- Pre-Ordering/Ordering OSS Average Response Interval
- Maintenance & Repair OSS Percent Response Interval
- Legacy System/Interface Specific
- Geographic Scope
  - Region

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM/SEEM Analog/Benchmark
Legacy System/Interface	
• Pre-Ordering/Ordering OSS Response Average Interval	
- Regional Level	Parity + 2 seconds
• Maintenance & Repair OSS Response Percent within 10 Seconds	
- Regional Level, Per OSS Interface	Parity with Retail

(See Appendix C: OSS Interface Tables)

SEEM Measure

SEEM	Tier I	Tier II
Yes	..	X

OSS-2 [IA]: OSS Interface Availability (Pre-Ordering/Ordering/Maintenance & Repair)

Definition

Percent of time OSS interface is functionally available compared to scheduled availability Availability percentages for CLEC interface and for all Legacy systems accessed by them are captured ("Functional Availability" is the amount of time in hours during the reporting period that the legacy systems are available to users The planned System Scheduled Availability is the time in hours per day that the legacy system is scheduled to be available)

Scheduled availability is posted on the Interconnection website– (http //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 outages which are defined as a critical function that is normally performed by the CLEC or is normally provided by an application or system available to the CLEC, but with significantly reduced response or processing time
- Scheduled OSS Maintenance

Business Rules

This measurement captures the functional availability of applications/interfaces as a percentage of scheduled availability for the same systems Only full and Loss of Functionality outages are included in the calculation for this measure

- Full outages are defined as occurrences of either of the following
  - Application/Interface 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)
- Loss of Functionality outages are defined as A critical function that is normally performed by the CLEC or is normally provided by an application or system is temporarily unavailable to the CLEC

Calculation

OSS Interface Availability (Pre-Ordering/Ordering/Maintenance & Repair) = (a - b) / a X 100

- a = Functional Availability
- b = Scheduled Availability

Report Structure

- Legacy System/Interface Specific
- Geographic Scope
  - Region

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM/SEEM Analog/Benchmark
• Regional Level, Per OSS Interface	>= 99 5%

(See Appendix C: OSS Interface Availability Tables for SQM)

SEEM Measure

SEEM	Tier I	Tier II
Yes		X

PO-2 [LMT]: Loop Makeup - Response Time - Electronic

Definition

This report measures 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
- Canceled Requests
- Scheduled OSS Maintenance
- Test Transactions/Records

Business Rules

The response interval starts when the CLEC's Mechanized Loop Makeup Service Inquiry (LMUSI) is submitted electronically through the ordering interface gateways It ends when BellSouth's Loop Facility Assignment and Control System (LFACS) responds electronically to the CLEC with the requested Loop Makeup data via the ordering interface gateways

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 and qualifies the loop If a CLEC concludes that the loop makeup will support the service, and wants to order it, an LSR must be submitted by the CLEC

Calculation

Response Interval = (a - b)

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

Percent within Interval = (c / d) X 100

- c = Total LMUSIs received within the interval
- d = Total number of LMUSIs processed within the reporting period

Report Structure

- CLEC Aggregate
- CLEC Specific
- Geographic Scope
  - State
- Interval for electronic LMUSIs
  0 – <= 1 minute

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM/SEEM Analog/Benchmark
• Loops	Benchmark 95% <= 1 Minute

SEEM Measure

SEEM	Tier I	Tier II
Yes	X	X

PO-3 [BMA]: UNE Bulk Migration Batch Scheduler Availability (Pre-Ordering)

Definition

This measure captures the functional availability of the UNE Bulk Migration Batch Scheduler application as a percentage of scheduled availability for the same system Scheduled availability is posted on the PMAP website (http //pmap bellsouth com/content/documentation aspx)

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
- Scheduled Downtime for Maintenance

Business Rules

The Interface Availability calculations are based upon availability of UNE Bulk Migration Batch Scheduler application utilized by CLECs for pre-ordering "Functional Availability" is defined as the number of hours in the reporting period the UNE Bulk Migration Batch Scheduler is available to users "Scheduled Availability" is defined as the number of hours in the reporting period the UNE Bulk Migration Batch Scheduler is scheduled to be available Outages occur when The 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)

Calculation

Interface Availability = (a - b) / a X 100

- a = Scheduled Availability Minutes
- b = Full Outage Minutes

Report Structure

- Geographic Scope
  - State

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• UNE Bulk Migration Batch Scheduler Availability	Diagnostic

SEEM Measure

SEEM	Tier I	Tier II
No		

Section 2: Ordering

O-2 [AKC]: Acknowledgement Message Completeness

Definition

This measure provides the percent of transmissions/LSRs received via ordering interface gateways, which are acknowledged electronically

Exclusions

- Manually Submitted LSRs
- Test Transactions/Records

Business Rules

Ordering interface gateways 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

Calculation

Acknowledgement Completeness = (a / b) X 100

- a = Total number of Functional Acknowledgements returned in the reporting period for transmissions/LSRs electronically submitted by ordering interface gateways respectively
- b = Total number of electronically submitted transmissions/LSRs received in the reporting period by ordering interface gateways respectively

Report Structure

- CLEC Aggregate
- CLEC Specific
- Geographic Scope
  - Region

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation

- Acknowledgments

SQM/SEEM Analog/Benchmark

Benchmark 99 75%

SEEM Measure

SEEM	Tier I	Tier II
Yes	X	X

O-3 [FT]: Percent Flow-Through Service Requests

Definition

The percentage of Local Service Requests (LSRs) and Local Number Portability 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
- Planned Manual Fallout
- CLEC System Fallout
- Test Transactions/Records
- LSRs that received a Z Status

Business Rules

The CLEC mechanized ordering process includes all LSRs, including supplements (subsequent versions) submitted through one of the mechanized ordering interface gateways, 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 Planned Manual Fallout)

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

Auto-Clarification: Clarifications that are mechanically returned to the CLEC due to invalid data entry within the LSR Edits contained within the source systems will perform data validity checks to ensure the data within the LSR is complete and accurate 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

Planned Manual Fallout*: Fallout that occurs 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, the source systems will determine if the LSR should be forwarded to LCSC for manual handling

*See LSR Flow-Through Matrix on BellSouth's PMAP website (http //pmap bellsouth com) in the Documentation/Exhibits folder 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 due to BellSouth system functionality, 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 / [b - (c + d + e + f)] X 100

- a = The total number of LSRs that flow through the source systems and reach a status for a FOC to be issued
- b = The number of LSRs that passed the basic system edits and are accepted for further service order processing
- c = The number of LSRs that fallout for planned manual processing
- d = The number of LSRs that are returned to the CLEC for auto clarification
- e = The number of LSRs that are returned to the CLEC from the LCSC due to CLEC data entry error
- f = The number of LSRs that receive a Z status

Percent Achieved Flow Through = a / [b - (c + d + e)] X 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 auto clarification
- d = The number of LSRs that are returned to the CLEC from the LCSC due to CLEC clarification
- e = The number of LSRs that receive Z status

Report Structure

- CLEC Specific
- CLEC Aggregate
- Geographic Scope
  - Region

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM/SEEM Analog/Benchmark
• Residence	Benchmark 95%
• Business	Benchmark 90%
• UNE-L (includes UNE-L with LNP)	Benchmark 85%
• UNE-P	Benchmark 95%
• LNP	Benchmark 95%

SEEM Measure

SEEM	Tier I	Tier II
Yes	X	X

Notes

- The Flow-Through Error Analysis will be posted with the Flow-Through report The Flow-Through Error Analysis provides 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
- The CLEC LSR Information, (a k a LSR Detail Report) is available by subscription A CLEC wishing to receive a copy of their report should submit a feedback form (see link located in the "Resources" section on left side of PMAP website) Enter the name of the report in the Comments section

O-8 [RI]: Reject Interval

Definition

The interval for the return of a reject is the response time from the receipt of a service request [Local Service Request (LSR) or Access Service Request (ASR)] to the distribution of a reject

Exclusions

- Service requests canceled by CLEC prior to being rejected/clarified
- Fatal Rejects
- LSRs identified as "Projects" with the exception of valid "Project IDs" for Bulk Migration
- Scheduled OSS Maintenance
- Test Transaction/Records

Business Rules

Service Requests are considered valid when submitted by the CLEC and pass edit checks to ensure the data received is correctly formatted and complete When there are multiple rejects on a single LSR, the first reject issued is used for the calculation of the interval duration

For Partially Mechanized and Non-Mechanized LSR/ASRs, only normal business hours will be included in the interval calculation for this measure The interval will be the amount of time accrued from receipt of the LSR/ASR until normal closing of the center, if an LSR/ASR is worked using overtime hours In the case of a partially mechanized LSR/ASR received and worked outside normal business hours, the interval will be set at one (1) minute The hours of operation can be found on the Interconnection website (http //www interconnection bellsouth com/centers)

Fully Mechanized: The elapsed time from receipt of a valid electronically submitted LSR (date and time stamp in ordering interface gateways) until the LSR is rejected (date and time stamp of reject in ordering interface gateways) Auto Clarifications are considered in the Fully Mechanized category

Partially Mechanized: The elapsed time from receipt of a valid electronically submitted LSR (date and time stamp in ordering interface gateways) which falls out for manual handling until the LCSC Service Representative clarifies the LSR back to the CLEC via ordering interface gateways

Non-Mechanized: The elapsed time from receipt of a valid LSR not submitted via electronic ordering systems (date and time stamp of FAX or date and time paper LSRs are received in the LCSC) until notice of the reject (clarification) is returned to the CLEC via FAX Server

Local Interconnection Trunks: Interconnection Trunks are ordered on Access Service Requests (ASRs) ASRs are submitted to and processed by the Carrier Interconnection Switching Center (CISC)

Bulk Migrations: Requests for Bulk Migrations will come into BellSouth via a Global Request The Global Request will be broken down into individual LSRs These individual LSRs will be used for the measurements and will be reported within the correct product disaggregation for each measure For the interval calculations, the original versions of the individual LSRs will be assigned the "start time-stamp" from the receipt of the original Global Request

Calculation

Reject Interval = (a - b)

- a = Date and time of service request rejection
- b = Date and time of service request receipt

Percent within Interval = (c / d) X 100

- c = Service requests rejected in reported interval
- d = Total service requests rejected in report period

Report Structure

One report with the following four Disaggregation Levels and their associated interval buckets

- Fully Mechanized
  0 - <= 1 hour
- Partially Mechanized
  0 - <= 10 hours
- Non-Mechanized
  0 - <= 24 hours
- Local Interconnection Trunks
  0 - <= 4 days
- CLEC Specific
- CLEC Aggregate
- Geographic Scope
  - State

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM/SEEM Analog/Benchmark
• Fully Mechanized	97% <= 1 Hour
• Partially Mechanized	95% <= 10 Hours
• Non-Mechanized	95% <= 24 Hours
• Local Interconnection Trunks	90% <= 4 Days

SEEM Measure

SEEM	Tier I	Tier II
Yes	X	X

O-9 [FOCT]: Firm Order Confirmation Timeliness

Definition

The interval for return of a Firm Order Confirmation (FOC) is the response time from the receipt of a valid Access Service Request (ASR)/Local Service Request (LSR) to distribution of a FOC The interval will include an electronic facilities check

Exclusions

- Service Requests canceled by CLEC prior to a FOC being returned
- Designated Holidays are excluded from the interval calculation for partially mechanized and non-mechanized LSRs/ASRs only
- LSRs identified as "Projects" with the exception of valid "Projects IDs" for Bulk Migrations
- Test Transactions/Records
- Scheduled OSS Maintenance

Business Rules

When multiple FOCs occur on a single LSR/ASR, the first FOC is used to measure the interval

For Partially Mechanized and Non-Mechanized LSR/ASRs, only normal business hours will be included in the interval calculation for this measure The interval will be the amount of time accrued from receipt of the LSR/ASR until normal closing of the center, if an LSR/ASR is worked using overtime hours In the case of a partially mechanized LSR/ASR received and worked outside normal business hours, the interval will be set at one (1) minute The hours of operation can be found on the Interconnection website (http //www interconnection bellsouth com/centers)

Fully Mechanized: The elapsed time from receipt of a valid electronically submitted LSR (date and time stamp in ordering interface gateways) until the LSR is processed, appropriate service orders are generated and a Firm Order Confirmation is returned to the CLEC via ordering interface gateways

Partially Mechanized: The elapsed time from receipt of a valid electronically submitted LSR (date and time stamp in ordering interface gateways) 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 ordering interface gateways

Non-Mechanized: The elapsed time from receipt of a valid paper LSR not submitted via electronic systems (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 FAX Server

Local Interconnection Trunks: Interconnection Trunks are ordered on Access Service Requests (ASRs) ASRs are submitted to and processed by the Carrier Interconnection Switching Center (CISC)

Bulk Migrations: Requests for Bulk Migrations will come into BellSouth via a Global Request The Global Request will be broken down into individual LSRs These individual LSRs will be used for the measurements and will be reported within the correct product disaggregation for each measure For the interval calculations, the original versions of the individual LSRs will be assigned the "start time-stamp" from the receipt of the original Global Request

Calculation

Firm Order Confirmation Interval = (a - b)

- a = Date and time of Firm Order Confirmation
- b = Date and time of service request receipt

Percent within Interval = (c / d) X 100

- c = Service requests confirmed in reported interval
- d = Total service requests confirmed in the report period

Report Structure

One report with the following four Disaggregation Levels and their associated interval buckets

- Fully Mechanized
  0 - <= 3 hours
- Partially Mechanized
  0 - <= 10 hours
- Non-mechanized
  0 - <= 24 hours
- Local Interconnection Trunks
  0 - <= 5 business days
- CLEC Specific
- CLEC Aggregate
- Geographic Scope
  - State

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM/SEEM Analog/Benchmark
• Resale – Residence (Non-Design)	Fully Mechanized 95% <= 3 Hours
• Resale – Business (Non-Design)	Partially Mechanized 95% <= 10 Hours
• Resale – Design (Special)	Non-Mechanized 95% <= 24 Hours
• LNP (Standalone)	
• UNE Analog Loop	
• UNE Analog Loop with LNP	
• UNE Digital Loop >= DS1	
• UNE Loop + Port Combinations	
• UNE ISDN/UDC/IDSL	
• UNE Other	
• UNE Line Splitting	
• UNE EELs	
• UNE xDSL (ADSL, HDSL, UCL)	
• Local Interconnection Trunks	95% <= 5 business days

SEEM Measure

SEEM	Tier I	Tier II
Yes	X	X

O-11 [FOCC]: Firm Order Confirmation and Reject Response Completeness

Definition

This measurement provides the percent of Local Service Requests (LSRs)/Access Service Requests (ASRs) received during the reporting period that are responded to with either a reject or firm order confirmation

Exclusions

- Service requests canceled by the CLEC prior to FOC or Reject being sent
- Fatal Rejects
- LSRs identified as "Projects" with the exception of valid "Projects IDs" for Bulk Migrations
- Test Transactions/Records

Business Rules

Fully Mechanized: The number of FOCs or Rejects sent to the CLEC from ordering interface gateways in response to electronically submitted LSRs (date and time stamp in ordering interface gateways)

Partially Mechanized: The number of FOCs or Rejects sent to the CLEC from ordering interface gateways in response to electronically submitted LSRs (date and time stamp in ordering interface gateways), which fallout for manual handling by the LCSC personnel

Non-Mechanized: The number of FOCs or Rejects sent to the CLECs via FAX server in response to manually submitted LSRs/ASRs (date and time stamp in FAX Server)

Local Interconnection Trunks: Interconnection Trunks are ordered on Access Service Requests (ASRs) ASRs are submitted to and processed by the Carrier Interconnection Switching Center (CISC)

Bulk Migrations: Requests for Bulk Migrations will come into BellSouth via Global Requests The Global Request will be broken down into individual LSRs These individual LSRs will be used for the measurements and will be reported within the correct product disaggregation for each measure

Calculation

Firm Order Confirmation / Reject Response Completeness = (a / b) X 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

Report Structure

- One report with the following four Disaggregation Levels
  - Fully Mechanized
  - Partially Mechanized
  - Non-Mechanized
  - Local Interconnection Trunks
- CLEC Specific
- CLEC Aggregate
- Geographic Scope
  - State

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM/SEEM Analog/Benchmark
• Fully Mechanized	95% Returned
• Partially Mechanized	95% Returned
• Non-Mechanized	95% Returned
• Local Interconnection Trunks	95% Returned

SEEM Measure

SEEM	Tier I	Tier II
Yes	X	X

O-12 [OAAT]: Average Answer Time - Ordering Centers

Definition

This report measures the average time a customer is in queue when calling a BellSouth Ordering Center

Exclusions

- Volume of abandoned calls

Business Rules

The duration starts when a CLEC representative or BellSouth customer makes a choice on the ordering center's menu and is put in queue for the next service representative and stops when a BellSouth service representative answers the call. Abandoned calls are not included in the volume of calls handled but are included in total seconds -Small Business has a universal call center where the same service representatives handle both ordering and maintenance calls Twenty percent of these calls stem from ordering related activity and are reported in this measurement

Calculation

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

- a = Time BellSouth service representative answers call
- b = Time of entry into queue

Average Answer Time for BellSouth Ordering Centers = (c / d)

- c = Sum of all answer times
- d = Total number of calls answered in the reporting period

Report Structure

- CLEC Aggregate
- BellSouth Aggregate
  - Business Service Center
- Geographic Scope
  - Region

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation

- CLEC Local Carrier Service Center

SQM/SEEM Analog/Benchmark

Parity with Retail (Business Service Center)

SEEM Measure

SEEM	Tier I	Tier II
Yes		X

Section 3: Provisioning

P-1 [HOI]: Held Order Interval

Definition

This report measures delays in completing CLEC orders due to BellSouth reasons This report is based on orders still pending, held and past their committed due date at the end of the reporting period

Exclusions

- Order Activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc , which may be order types C, N, R, or T)
- Disconnect Orders
- Orders with Appointment Code of 'A', i e , orders for locations requiring special construction including locations where no address exists and a technician must make a field visit to determine how to get facilities to the location
- Listing Orders

Business Rules

This metric is computed at the close of each reporting 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 held order, the interval is determined from 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 The total number of held order days are accumulated and then divided by the number of held orders to produce the mean held order interval The interval is expressed in calendar days with no exclusions for Holidays or Sundays

Calculation

Mean Held Order Interval = a / b

- a = Sum of held-over-days for all held orders
- b = Total number of held orders

Report Structure

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

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• Resale Residence (Non-Design)	Retail Residence (Non-Design)
• Resale Business (Non-Design)	Retail Business (Non-Design)
• Resale Design	Retail Design
• UNE Analog Loop (Design)	Retail Residence, Business, and Design (Dispatch) (Excluding Digital Loops)
• UNE Analog Loop (Non-Design)	Retail Residence and Business – (POTS (Excluding Switch Based Orders)
• UNE Digital Loop >= DS1	Retail Digital Loop >= DS1
• UNE Loop + Port Combinations	Retail Residence and Business
• UNE EELs	Retail DS1/DS3
• UNE xDSL (HDSL, ADSL and UCL)	ADSL Provided to Retail

• UNE ISDN/UDC/IDSL	Retail ISDN – BRI
• UNE Line Splitting/Sharing	ADSL Provided to Retail
• UNE Other Design	Diagnostic
• UNE Other Non-Design	Diagnostic
• Local Interconnection Trunks	Parity with Retail Trunks

SEEM Measure

SEEM	Tier I	Tier II
No		

P-2A [PJ48]: Percentage of Orders Given Jeopardy Notices >= 48 Hours

Definition

This report measures the percentage of jeopardy notices that BellSouth provides in advance to the CLECs indicating a committed due date is in jeopardy due to a facility delay

Exclusions

- Order activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc , which may be order types C, N, R, or T)
- Disconnect Orders
- Orders jeopardized on the due date This exclusion only applies when the technician on premises has attempted to provide service but must refer to Engineer or Cable Repair for facility jeopardy
- Orders issued with a due date of less than 48 hours
- Listing Orders

Business Rules

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 Orders that have a due date in the reporting period are included in the calculation The interval is calculated using the date/time the notice is released to the CLEC/BellSouth systems/FAX Server until 5 PM on the due date of the order This report measures dispatched orders only

Calculation

Percentage of Orders Given Jeopardy Notice >= 48 Hours = (a / b) X 100

- a = Number of orders given jeopardy notice >= 48 hours in the reporting period
- b = Number of orders given jeopardy notices in the reporting period

Report Structure

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

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• Resale Residence (Non-Design)	95% >= 48 hours
• Resale Business (Non-Design)	95% >= 48 hours
• Resale Design	95% >= 48 hours
• UNE Analog Loop (Design)	95% >= 48 hours
• UNE Analog Loop (Non-Design)	95% >= 48 hours
• UNE Digital Loop >= DS1	95% >= 48 hours
• UNE Loop + Port Combinations	95% >= 48 hours
• UNE EELs	95% >= 48 hours
• UNE xDSL (HDSL, ADSL and UCL)	95% >= 48 hours
• UNE ISDN/UDC/IDSL	95% >= 48 hours
• UNE Line Splitting/Sharing	95% >= 48 hours
• UNE Other Design	95% >= 48 hours
• UNE Other Non-Design	95% >= 48 hours
• Local Interconnection Trunks	95% >= 48 hours

SEEM Measure

SEEM	Tier I	Tier II
No		

P-2B [PJ]: Percentage of Orders Given Jeopardy Notices

Definition

This report measures the percentage of orders given jeopardy notices, due to facility delay, out of the total orders due in the reporting period

Exclusions

- Order activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc , which may be order types C, N, R, or T)
- Disconnect Orders
- Listing Orders
- Orders jeopardized on the due date
- Orders issued with a due date of less than or equal to 48 hours

Business Rules

Orders that have a due date in the reporting period are included in the calculation

Calculation

Percent of Orders Given Jeopardy Notice = (a / b) X 100

- a = Number of orders given jeopardy notices in the reporting period
- b = Number of orders confirmed (due) in the reporting period

Report Structure

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

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
Resale Residence (Non-Design)	Retail Residence (Non-Design)
Resale Business (Non-Design)	Retail Business (Non-Design)
Resale Design	Retail Design
UNE Analog Loop (Design)	Retail Residence, Business, and Design (Dispatch) (Excluding Digital Loops)
UNE Analog Loop (Non-Design)	Retail Residence and Business – (POTS (Excluding Switch Based Orders)
UNE Digital Loop >= DS1	Retail Digital Loop >= DS1
UNE Loop + Port Combinations	Retail Residence and Business
UNE EELs	Retail DS1/DS3
UNE xDSL (HDSL, ADSL and UCL)	ADSL Provided to Retail
UNE ISDN/UDC/IDSL	Retail ISDN - BRI
UNE Line Splitting/Sharing	ADSL Provided to Retail
UNE Other Design	Diagnostic
UNE Other Non-Design	Diagnostic
Local Interconnection Trunks	Parity with Retail Trunks

SEEM Measure

SEEM	Tier I	Tier II
No		

P-2B [PJ]: Percentage of Orders Given Jeopardy Notices

P-3 [MIA]: Percent Missed Installation Appointments

Definition

This report measures the percentage of total orders for which BellSouth is unable to complete the service orders on the committed due date

Exclusions

- Orders canceled prior to the due date including orders that are to be provisioned on the same day they are placed ("Zero Due Date Orders")
- Order activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc , which may be order types C, N, R or T)
- Disconnect Orders
- Listing Orders

Business Rules

All Service orders are considered as met, unless the first missed appointment code is due to BellSouth company reasons If an attempt is made to provision service prior to the commitment time, but there is no access, a miss will not be counted unless BellSouth fails to meet the original commitment time If no access occurs after the commitment time, the report is flagged a missed appointment

Calculation

Percent Missed Installation Appointments = (a / b) X 100

- a = Number of orders where the installation appointment is not met
- b = Total number of orders completed during the reporting period

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Dispatch/Non-Dispatch (except Trunks)
- Geographic Scope
  - State

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM/SEEM Analog/Benchmark
• Resale Residence (Non-Design)	Retail Residence (Non-Design)
• Resale Business (Non-Design)	Retail Business (Non-Design)
• Resale Design	Retail Design
• LNP (Standalone)	Retail Residence and Business (POTS)
• UNE Analog Loop (Design)	Retail Residence, Business and Design (Dispatch) (Excluding Digital Loops)
• UNE Analog Loop (Non-Design)	Retail Residence and Business – (POTS (Excluding Switch Based Orders)
• UNE Analog Loop with LNP-Design	Retail Residence, Business and Design (Dispatch) (Excluding Digital Loops)
• UNE Analog Loop with LNP-Non-Design	Retail Residence and Business – (POTS (Excluding Switch Based Orders)
• UNE Digital Loop >= DS1	Retail Digital Loop >= DS1
• UNE Loop + Port Combinations	Retail Residence and Business
• UNE EELs	Retail DS1/DS3
• UNE xDSL (HDSL, ADSL and UCL)	ADSL Provided to Retail

• UNE ISDN/UDC/IDSL	Retail ISDN - BRI
• UNE Line Splitting/Sharing	ADSL Provided to Retail
• UNE Other Design	Diagnostic
• UNE Other Non-Design	Diagnostic
• Local Interconnection Trunks	Parity with Retail Trunks

SEEM Measure

SEEM	Tier I	Tier II
Yes	X	X

P-4 [OCI]: Order Completion Interval (OCI)

Definition

This report measures the interval of time it takes BellSouth to provide service for the CLEC or its own customers

Exclusions

- Canceled Service Orders
- Order activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc , which may be order types C, N, R or T)
- Disconnect orders "L" Appointment coded orders (where the customer has requested a later than offered interval)
- CLEC/End user-caused misses
- Listing Orders

Business Rules

The completion interval is determined for each order processed during the reporting period The completion interval is the elapsed time from when BellSouth issues a FOC/SOCS date time-stamp indicating receipt of an order (application date) from the CLEC to BellSouth's order completion date Orders worked on zero due dates are calculated with a 33-day interval (8 hours) Orders can be either dispatch or non-dispatch

Only valid business days will be included in the calculation of this interval Valid business days may be found at the following website (http //www interconnection bellsouth com/#localorderinghandbook/intervalguide)

Calculation

Order Completion Interval = (a - b)

- a = Completion Date
- b = FOC or SOCS date time-stamp (application date)

Average Order Completion Interval = (c / d)

- c = Sum of all completion intervals
- d = Count of orders completed in the reporting period

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Dispatch/Non-Dispatch categories applicable to all levels except trunks
- All Levels are reported < 6 lines/circuits, >= 6 lines/circuits (except trunks)
- Geographic Scope
  - State

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation

- Resale Residence (Non-Design)
- Resale Business (Non-Design)
- Resale Design
- LNP (Standalone)
- UNE Analog Loop (Design)

SQM/SEEM Analog/Benchmark

Retail Residence (Non-Design)
Retail Business (Non-Design)
Retail Design
Retail Residence and Business (POTS)
Retail Residence, Business and Design (Dispatch) (Excluding Digital Loops)

• UNE Analog Loop (Non-Design)	Retail Residence and Business (Dispatch)
• UNE Analog Loop with LNP-Design	Retail Residence, Business and Design (Dispatch) (Excluding Digital Loops)
• UNE Analog Loop with LNP-Non-Design	Retail Residence and Business (Dispatch)
• UNE Digital Loop >= DS1	Retail Digital Loop >= DS1
• UNE Loop + Port Combinations	Retail Residence and Business
- Dispatch In	- Dispatch In
- Switch Based	- Switch Based
• UNE EELs	Retail DS1/DS3
• UNE xDSL (HDSL, ADSL and UCL)	
- without conditioning	<= 5 Days
- with conditioning	<= 12 Days
• UNE ISDN/UDC/IDSL	Retail ISDN - BRI
• UNE Line Splitting/Sharing without Conditioning	ADSL Provided to Retail
with Conditioning	<= 12 Days
• UNE Other Design	Diagnostic
• UNE Other Non-Design	Diagnostic
• Local Interconnection Trunks	Parity with Retail Trunks

SEEM Measure

SEEM	Tier I	Tier II
Yes	X	X

P-4 [OCI]: Order Completion Interval (OCI)

P-5 [CNI]: Average Completion Notice Interval

Definition

This report measures the elapsed time between the BellSouth reported completion of work and the issuance of a valid completion notice to the CLEC

Exclusions

- Canceled Service Orders
- Order activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc , which may be order types C, N, R, or T)
- Disconnect Orders
- Listing Orders

Business Rules

The interval begins with the completion date and time and the interval ends with release of the notice of completion status to the CLEC 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 to the Work Management Center (WMC), either completing or rejecting the order If the completion is rejected, it is manually corrected and then completed by the WMC The notice is returned on each individual order

The end time for mechanized orders is the time stamp when the notice was delivered to the CLEC interface For non-mechanized orders the end time will be date and timestamp of order update from the C-SOTS system For the retail analog, the start time begins when the technician completes the order and ends when the order status is changed to complete in SOCS

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 / d

- c = Sum of all completion notice intervals
- d = Number of orders with notice of completion in the reporting period

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Mechanized Orders
- Non-Mechanized Orders
- Reporting intervals in hours
- Geographic Scope
  - State

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• Resale Residence (Non-Design)	Retail Residence (Non-Design)
• Resale Business (Non-Design)	Retail Business (Non-Design)
• Resale Design	Retail Design

• LNP (Standalone)	Retail Residence and Business (POTS)
• UNE Analog Loop (Design)	Retail Residence, Business and Design (Dispatch) (Excluding Digital Loops)
• UNE Analog Loop (Non-Design)	Retail Residence and Business – (POTS Excluding Switch Based Orders)
• UNE Analog Loop with LNP - Design	Retail Residence, Business and Design (Dispatch) (Excluding Digital Loops)
• UNE Analog Loop with LNP- Non-Design	Retail Residence and Business –POTS (Excluding Switch Based Orders)
• UNE Digital Loop >= DS1	Retail Digital Loop >= DS1
• UNE Loop + Port Combinations	Retail Residence and Business
• UNE EELs	Retail DS1/DS3
• UNE xDSL (HDSL, ADSL and UCL)	ADSL Provided to Retail
• UNE ISDN/UDC/IDSL	Retail ISDN - BRI
• UNE Line Splitting/Sharing	ADSL Provided to Retail
• UNE Other Design	Diagnostic
• UNE Other Non-Design	Diagnostic
• Local Interconnection Trunks	Parity with Retail Trunks

SEEM Measure

SEEM	Tier I	Tier II
No		

P-7 [CCI]: Coordinated Customer Conversions – Hot Cut Duration

Definition

This report measures the average time it takes BellSouth to disconnect loops from the BellSouth switch, connect the loops to the CLEC, and notify the CLEC after the conversion is complete This measurement applies to service orders where the CLEC has requested BellSouth to provide a coordinated conversion

Exclusions

- Canceled Service Orders
- Delays caused by the CLEC
- Non-Coordinated Conversions
- Order activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc , which may be order types C, N, R or T)
- Listing Orders

Business Rules

Coordinated conversions are scheduled between the CLEC and BellSouth The start time will be captured when the physical conversion begins and the stop time will be when the CLEC is notified after the conversion is complete The conversion interval for the entire service order is calculated and then divided by the number of loops converted to determine the average duration per loop

Calculation

Coordinated Customer Conversions Interval = (a - b) / c

- a = Completion date and time of CLEC notification
- b = Start date and time of conversion
- c = Number of loops per order

Percent Coordinated Customer Conversions = (d / e) X 100

- d = Total number of Coordinated Customer Conversions (loops) within <= 15 minutes
- e = Total number of Coordinated Customer Conversions (loops) for the reporting period

Report Structure

- CLEC Specific
- CLEC Aggregate
- Geographic Scope
  - State

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM/SEEM Analog/Benchmark
• Coordinated Customer Conversions (Loops)	95% <= 15 Minutes

SEEM Measure

SEEM	Tier I	Tier II
Yes	X	X

P-7A [CCT]: Coordinated Customer Conversions – Hot Cut Timeliness Percent within Interval

Definition

This report measures the percentage of orders where BellSouth begins the conversion of a loop on a coordinated and/or a time specific order within a timely manner of the CLEC requested start time

Exclusions

- Any order canceled by the CLEC
- Delays caused by the CLEC
- Loops where there is no existing subscriber loop and loops where coordination is not requested
- Subsequent loops on multiple loop orders after the first loop
- Order activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc , which may be order types C, N, R or T)
- Listing Orders

Business Rules

The cut is considered "on time" if it starts <= 15 minutes before or after the requested start time If a cut involves multiple lines, the cut will be considered "on time" if the first line is cut within the "on time" interval If Integrated Digital Loop Carrier (IDLC) is involved, BellSouth must notify the CLEC by 10 30 AM on the day before the due date and then the "on time" interval is <= 2 hours before or after the requested start time

Calculation

Percent within Interval = (a / b) X 100

- a = Total number of coordinated unbundled loop orders converted "on time"
- b = Total number of coordinated unbundled loop orders for the reporting period

Report Structure

- CLEC Specific
- CLEC Aggregate
- Geographic Scope
  - State

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM/SEEM Analog/Benchmark
• Product Reporting Level	
- Non-IDLC	95% within + or – 15 minutes of scheduled start time
- IDLC	95% within + or – 2 hours of scheduled start time

SEEM Measure

SEEM	Tier I	Tier II
Yes	X	X

P-7A [CCT]: Coordinated Customer Conversions – Hot Cut Timeliness Percent within Interval

P-7B [CCRT]: Coordinated Customer Conversions – Average Recovery Time

Definition

This report measures outages associated with Coordinated Customer Conversions prior to service order completion, which can be isolated to BellSouth's side of the network

Exclusions

- Conversions where service outages are due to CLEC caused reasons
- Conversions where service outages are due to end-user caused reasons
- Order activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc , which may be order types C, N, R or T)
- Listing Orders

Business Rules

Measures the outage duration time related to Coordinated Customer Conversions from the initial trouble notification until the service 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 This measure also displays the overall percentage of orders which did not experience a trouble during a coordinated conversion

Calculation

Recovery Time = (a - b)

- a = Date and time the initial trouble is cleared and the CLEC is notified
- b = Date and time the 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

Percentage of Items with No Troubles = (e /f) X 100

- e = Total items in the reporting period that did not have a trouble during a coordinated conversion
- f = Total items for the reporting period

Report Structure

- CLEC Specific
- CLEC Aggregate
- Geographic Scope
  - State

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• Coordinated Customer Conversions (Loops)	<= 5 Hours

SEEM Measure

SEEM	Tier I	Tier II
No		

P-7C [CPT]: Hot Cut Conversions - Percent Provisioning Troubles Received within 5 Days of a Completed Service Order

Definition

This report measures the percentage of provisioning troubles received within 5 days of a completed service order associated with a Coordinated and Non-Coordinated Customer Conversion and ensures the quality and accuracy of Hot Cut Conversion activities

Exclusions

- CLEC Canceled Orders
- Troubles caused by Customer Provided Equipment (CPE) or CLEC Equipment
- Listing Orders
- Order activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc , which may be order types C, N, R, or T)
- Troubles outside of BellSouth's control
- A cut or damaged cable, caused by other than BellSouth employees or contractors
- Troubles caused by vandalism/theft, motor accidents or petroleum/chemical accidents caused by parties other than BellSouth
- Disconnect Orders

Business Rules

The first trouble report received on a circuit ID within 5 days following a service order completion is counted in this measure Subsequent trouble reports are measured in Repeat Report Rate

Calculation

Percentage of Provisioning Troubles within 5 Days of Service Order Completion = (a / b) X 100

- a = The sum of all Hot Cut Circuits with a trouble within 5 days following service order(s) completion
- b = The total number of Hot Cut Circuits completed in the previous reporting period

Report Structure

- CLEC Specific
- CLEC Aggregate
- Dispatch/Non-Dispatch
- Geographic Scope
  - State

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• UNE Loops	<= 3%

SEEM Measure

SEEM	Tier I	Tier II
No		

P-7C [CPT]: Hot Cut Conversions - Percent Provisioning Troubles Received within 5 Days of a Completed Service Order

P-7D [NCDD]: Non-Coordinated Customer Conversions - Percent Completed and Notified on Due Date

Definition

This report measures the percentage of non-coordinated conversions that BellSouth completed and provided notification to the CLEC on the due date during the reporting period

Exclusions

- CLEC Canceled Service Orders
- Delays Caused by the CLEC
- Order activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc , which may be order types C, N, R, or T)

Business Rules

The order is considered successfully completed if the order is completed on the due date and the CLEC is notified on the due date.

Calculation

Percent Completed and Notified on Due Date = (a / b) X 100

- a = Total number of non-coordinated conversions completed on the due date with CLEC notification
- b = Total number of non-coordinated conversions for the reporting period

Report Structure

- CLEC Specific
- CLEC Aggregate
- Geographic Scope
  - State

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation

- Non-Coordinated Conversions

SQM/SEEM Analog/Benchmark

95% Completed on Due Date with CLEC Notification

SEEM Measure

SEEM	Tier I	Tier II
Yes	X	X

P-9 [PPT]: Percent Provisioning Troubles within "X" Days of Service Order Completion

Definition

This report measures the quality and accuracy of the provisioning process by calculating the percentage of troubles received within "X" days of service order completion

Exclusions

- Canceled Service Orders
- Order activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc , which may be order types C, N, R, or T)
- Disconnect Orders
- Trouble reports caused and closed out to Customer Provided Equipment (CPE) or CLEC Equipment
- Listing Orders
- Troubles outside of BellSouth's control
  - A cut or damaged cable, caused by other than BellSouth employees or contractors
  - Troubles caused by vandalism/theft, motor accidents or petroleum/chemical accidents caused by parties other than BellSouth

Business Rules

The first trouble report received after the completion of a service order is counted in this measure When the completed service order is matched to a trouble report, it is uniquely counted one time in the numerator Candidates are identified by searching the prior report period for all completed service orders and then searching for all trouble reports received within 5 days (POTS Non-Designed services) or 14 days (Designed services) of the service order completion date

Calculation

Percent Provisioning Troubles within "X" Days of Service Order Completion = (a / b) X 100

- a = Total completed orders receiving a trouble report within "X" days of the service order(s) completion
- b = All service orders completed in the previous reporting period

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Dispatch /Non-Dispatch (except trunks)
- Geographic Scope
  - State

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM/SEEM Analog/Benchmark
• Resale Residence (Non-Design)	Retail Residence (Non-Design)
• Resale Business (Non-Design)	Retail Business (Non-Design)
• Resale Design	Retail Design
• LNP (Standalone)	Retail Residence and Business (POTS)
• UNE Analog Loop (Design)	Retail Residence, Business and Design (Dispatch) (Excluding Digital Loops)
• UNE Analog Loop (Non-Design)	Retail Residence and Business - POTS (Excluding Switch Based Orders)
• UNE Analog Loop with LNP Design	Retail Residence, Business and Design (Dispatch) (Excluding

P-9 [PPT]: Percent Provisioning Troubles within "X" Days of Service Order Completion

• UNE Analog Loop with LNP Non-Design	Digital Loops) Retail Residence and Business - (POTS (Excluding Switch Based Orders)
• UNE Digital Loop >= DS1	Retail Digital Loop >= DS1
• UNE Loop + Port Combinations - Dispatch In - Switch Based	Retail Residence and Business - Dispatch In - Switch Based
• UNE EELs	Retail DS1/DS3
• UNE xDSL (HDSL, ADSL and UCL)	ADSL Provided to Retail
• UNE ISDN/UDC/IDSL	Retail ISDN-BRI
• UNE Line Splitting/Sharing	ADSL Provided to Retail
• UNE Other Design	Diagnostic
• UNE Other Non-Design	Diagnostic
• Local Interconnection Trunks .	Parity with Retail Trunks

SEEM Measure

SEEM	Tier I	Tier II
Yes	X	X

P-9 [PPT]: Percent Provisioning Troubles within "X" Days of Service Order Completion

P-11 [SOA]: Service Order Accuracy

Definition

This report measures the accuracy and completeness of CLEC requests for service by comparing the CLEC Local Service Request (LSR) to the completed service order after provisioning has been completed Only electronically submitted LSRs that require manual handling (Partially Mechanized) by a BellSouth service representative in the LCSC are measured

Exclusions

- Canceled Service Orders
- Order activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc., which may be order types C, N, R or T)
- Disconnect Orders
- CLEC LSRs submitted electronically that are not manually handled by BellSouth (Flow-Through)
- "Projects" with no LSR

Business Rules

The CLEC requested services on the LSR are mechanically compared to the completed service order using the CLEC affecting service attributes shown below

Selected CLEC Affecting Service Attributes

The BellSouth Local Service Request (LSR) fields identified below will be used, as applicable, for this Service Order Accuracy review process

A service affecting comparison of the fields listed below will determine the accuracy of the provisioning process If any of the fields listed below are populated on the LSR and do not match the corresponding field on the Service Order, and are service affecting, the order will be scored as a miss

BellSouth will maintain a list of LCSC/System workarounds which will not be considered service affecting This list will be identified in a document posted on the Interconnection website CLECs may discuss any of the posted LCSC/System workarounds during the regular PMAP notification calls

- Company Code
- PON
- Billed Telephone Number
- Telephone Number
- Ported Telephone Number
- Circuit ID
- PIC
- LPIC
- Directory Listing
  - Directory Delivery Address
  - Listing Activity
  - Alphanumeric Listing Identifier Code
  - Record Type
  - Listing Type
  - Listed Telephone Number
  - Listed Name, Last Name
  - Listed Name, First Name
  - Address Indicator
  - Listed Address House Number
  - Listed Address House Number Suffix
  - Listed Address Street Directional
  - Listed Address Street Name

  - Listed Address Thoroughfare
  - Listed Address Street Suffix
  - Listed Address Locality
  - Yellow Pages Heading
- Features
  - Feature Activity
  - Feature Codes
  - Feature Detail*
- Hunting
  - Hunt Group Activity
  - Hunt Group Identifier
  - Telephone Number Identifier
  - Hunt Type Code
  - Hunt Line Activity
  - Hunting Sequence
  - Number Type
  - Hunting Telephone Number
- E911 Listing
  - Service Address House Number
  - Service Address House Number Suffix
  - Service Address Street Directional
  - Service Address Street Name
  - Service Address Thoroughfare
  - Service Address Street Suffix
  - Service Address Descriptive Location
- EATN
- ATN
- APOT
- CFA
- NC
- NCI

* Feature Detail will only be checked for the following USOCs GCE, GCJ, CREX4, GCJRC, GCZ, DRS, VMSAX, S98VM, S98AF, SMBBX, MBBRX USOCs and FIDs for Feature Detail will be posted on the Interconnection Website Any changes to the USOCs and FIDs required to continue checking the identical service will be updated on this Website

Calculation

Percent Service Order Accuracy = (a / b) X 100

- a = Orders completed without error
- b = Orders completed in reporting period

Report Structure

- CLEC Specific
- CLEC Aggregate
- Geographic Scope
  - Region

SQM Disaggregation – Analog/Benchmark

SQM Level of Disaggregation	SQM/SEEM Analog/Benchmark
• Resale	95% Accurate
• UNE	95% Accurate
• UNE-P	95% Accurate

SEEM Measure

SEEM	Tier I	Tier II
Yes	X	X

P-13B [LOOS]: LNP-Percent Out of Service < 60 Minutes

Definition

This report measures the percentage of time that BellSouth performs electronic system updates within 60 minutes of receiving LNP activations

Exclusions

- CLEC Caused Errors
- NPAC errors unless caused by BellSouth
- Standalone LNP orders with more than 500 number activations
- Order activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc , which may be order types C, N, R or T)
- Listing Orders
- Scheduled OSS Maintenance

Business Rules

The interval starts when the ESI Number Manager broadcast message is sent to BellSouth's gateway The end time is the confirmation receipt time in the Local Service Management Systems (LSMS), which advises that BellSouth's electronic systems have successfully been updated A disconnect time for all telephone numbers contained within an order will be calculated and averaged to present a disconnect time for the order as a whole

Calculation

Percent Out of Service < 60 Minutes = (a / b) X 100

- a = Number of orders containing activations provisioned in less than 60 minutes
- b = Total orders containing LNP Activations

Report Structure

- CLEC Specific
- CLEC Aggregate
- Geographic Scope
  - State

SQM Disaggregation – Analog/Benchmark

SQM Level of Disaggregation	SQM/SEEM Analog/Benchmark
• LNP	>= 96 5%

SEEM Measure

SEEM	Tier I	Tier II
Yes	X	X

P-13C [LAT]: LNP-Percentage of Time BellSouth Applies the 10-Digit Trigger Prior to the LNP Order Due Date

Definition

This report measures the percentage of time BellSouth applies a 10-digit trigger for orders containing ported telephone numbers prior to the due date

Exclusions

- Remote Call Forwarding, DIDs, and ISDN Data TNs
- CLEC or customer caused misses or delays
- Order activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc), which may be order types C, N, R or T;
- Zero due dated expedited orders requested by the CLEC
- Listing Orders

Business Rules

The number of LNP orders where the 10-digit trigger was applied prior to the due date, divided by the total number of LNP orders where the 10-digit trigger was applicable

Calculation

Percentage of 10-Digit Trigger Applications = (a / b) X 100

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

Report Structure

- CLEC Specific
- CLEC Aggregate
- Geographic Scope
  - State

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM/SEEM Analog/Benchmark
• LNP	>= 95%

SEEM Measure

SEEM	Tier I	Tier II
Yes	X	X

P-13C [LAT]: LNP-Percentage of Time BellSouth Applies the 10-Digit Trigger Prior to the LNP Order Due Date

P-13D [LDT]: LNP - Disconnect Timeliness (Non-Trigger)

Definition

This report measures the percentage of time translations are removed from BellSouth's switch within 4 hours of the receipt of a non-triggerable port activation message When multiple numbers are ported on a single order, translations for each number must be removed within the interval

Exclusions

- Canceled Service Orders
- Order activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc , which may be order types C, N, R, or T)
- Listing Orders
- CLEC Caused Errors
- NPAC Errors, unless caused by BellSouth
- Incomplete ports where only a subset of the total requested lines on the LSR are submitted via Activate Messages
- LSRs where the CLEC did not contact BellSouth within 30 minutes after Activate Message

Business Rules

Disconnect Timeliness is the elapsed time from when BellSouth receives a valid 'Number Ported' message in ESI Number Manager (signifying the CLEC 'activate') for each telephone number ported until each number is disconnected in the BellSouth switch Non-business hours will be excluded from the duration calculation for unscheduled LNP ports

Calculation

Disconnect Timeliness = (a / b) X 100

- a = Number of non-triggerable orders with translations removed in less than 4 hours
- b = Total number of non-triggerable orders during report period

Report Structure

- CLEC Specific
- CLEC Aggregate
- Geographic Scope
  - State

SQM Disaggregation – Analog/Benchmark

SQM Level of Disaggregation	SQM/SEEM Analog/Benchmark
• LNP (Normal Working Hours and Approved After Hours)	95% <= 4 Hours
• LNP (Unscheduled After Hours Ports)	95% <= 4 Hours (excluding non-business hours)

SEEM Measure

SEEM	Tier I	Tier II
Yes	X	X

Section 4: Maintenance & Repair

M&R-1 [MRA]: Percent Missed Repair Appointments

Definition

This report measures the percentage of customer trouble reports not cleared by the committed date and time

Exclusions

- Trouble tickets canceled at the CLEC request
- BellSouth trouble reports associated with internal or administrative service
- Customer Provided Equipment (CPE) or CLEC Equipment Troubles
- Informational Tickets
- Troubles outside of BellSouth's control
  - A cut or damaged cable, caused by other than BellSouth employees or contractors
  - Troubles caused by vandalism/theft, motor accidents or petroleum/chemical accidents caused by parties other than BellSouth

Business Rules

The negotiated commitment date and time is established when the repair report is received The cleared time is the date and time BellSouth personnel clear the trouble and close the customer trouble report in their workstation If this is after the commitment time, the report is flagged as a 'missed commitment' or a 'missed repair appointment' If no access occurs after the commitment time, the report is flagged a missed appointment

Calculation

Percentage of Missed Repair Appointments = (a / b) X 100

- a = Count of customer troubles not cleared by the quoted commitment date and time
- b = Total customer trouble reports closed in the reporting period

Report Structure

- Dispatch/Non-Dispatch
- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Geographic Scope
  - State

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM/SEEM Analog/Benchmark
• Resale Residence (Non-Design)	Retail Residence (Non-Design)
• Resale Business (Non-Design)	Retail Business (Non-Design)
• Resale Design	Retail Design
• UNE Analog Loop (Design)	Retail Residence, Business and Design (Dispatch) (Excluding Digital Loops)
• UNE Analog Loop (Non-Design)	Retail Residence and Business - POTS (Excluding Switch Based Feature Troubles)
• UNE Digital Loop >= DS1	Retail Digital Loop >= DS1
• UNE Loop + Port Combinations	Retail Residence and Business
• UNE EELs	Retail DS1/DS3

• UNE xDSL (HDSL, ADSL and UCL)	ADSL Provided to Retail
• UNE ISDN/UDC/IDSL	Retail ISDN – BRI
• UNE Line Splitting/Sharing	ADSL Provided to Retail
• UNE Other Design	Diagnostic
• UNE Other Non-Design	Diagnostic
• Local Interconnection Trunks	Parity with Retail Trunks

SEEM Measure

SEEM	Tier I	Tier II
Yes	X	X

M&R-2 [CTRR]: Customer Trouble Report Rate

Definition

This report measures the percentage of customer troubles closed within a calendar month

Exclusions

- Trouble tickets canceled at the CLEC request
- BellSouth trouble reports/lines associated with internal or administrative service
- Customer Provided Equipment (CPE) or CLEC Equipment Troubles
- Informational Tickets
- Troubles outside of BellSouth's control
  - A cut or damaged cable, caused by other than BellSouth employees or contractors
  - Troubles caused by vandalism/theft, motor accidents or petroleum/chemical accidents caused by parties other than BellSouth

Business Rules

Customer Trouble Report Rate contains all closed customer direct reports, including repeat reports, divided by the total "number of service" lines

Calculation

Customer Trouble Report Rate = (a / b) X 100

- a = Count of initial and repeated customer trouble reports closed in the current reporting period
- b = Number of lines in service at end of the reporting period

Report Structure

- Dispatch/Non-Dispatch
- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Geographic Scope.
  - State

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM/SEEM Analog/Benchmark
• Resale Residence (Non-Design)	Retail Residence (Non-Design)
• Resale Business (Non-Design)	Retail Business (Non-Design)
• Resale Design	Retail Design
• UNE Analog Loop (Design)	Retail Residence, Business and Design (Dispatch) (Excluding Digital Loops)
• UNE Analog Loop (Non-Design)	Retail Residence and Business - POTS (Excluding Switch Based Feature Troubles)
• UNE Digital Loop >= DS1	Retail Digital Loop >= DS1
• UNE Loop + Port Combinations	Retail Residence and Business
• UNE EELs	Retail DS1/DS3
• UNE xDSL (HDSL, ADSL and UCL)	ADSL Provided to Retail
• UNE ISDN/UDC/IDSL	Retail ISDN – BRI
• UNE Line Splitting/Sharing	ADSL Provided to Retail
• UNE Other Design	Diagnostic
• UNE Other Non-Design	Diagnostic
• Local Interconnection Trunks	Parity with Retail Trunks

SEEM Measure

SEEM	Tier I	Tier II
Yes	X	X

M&R-3 [MAD]: Maintenance Average Duration

Definition

This report measures the average duration of customer troubles

Exclusions

- Trouble tickets canceled at the CLEC request
- BellSouth trouble reports associated with internal or administrative service
- Customer Provided Equipment (CPE) or CLEC Equipment Troubles
- Informational Tickets
- Troubles outside of BellSouth's control
  - A cut or damaged cable, caused by other than BellSouth employees or contractors
  - Troubles caused by vandalism/theft, motor accidents or petroleum/chemical accidents caused by parties other than BellSouth

Business Rules

The duration starts on the date and time of receipt of a repair request and stops on the date and time the service is restored (when the technician completes the trouble ticket on his/her CAT or work systems)

For tickets administered through WFA, (CLECs and BellSouth), durations do not include No Access, Delayed Maintenance and Referred Time

Calculation

Maintenance Duration = (a - b)

- a = Date and time of service restoration
- b = Date and time customer trouble ticket was opened

Average Maintenance Duration = (c / d)

- c = Total of all maintenance durations in the reporting period
- d = Total closed customer troubles in the reporting period

Report Structure

- Dispatch/Non-Dispatch
- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Geographic Scope
  - State

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM/SEEM Analog/Benchmark
• Resale Residence (Non-Design)	Retail Residence (Non-Design)
• Resale Business (Non-Design)	Retail Business (Non-Design)
• Resale Design	Retail Design
• UNE Analog Loop (Design)	Retail Residence, Business and Design (Dispatch) (Excluding Digital Loops)
• UNE Analog Loop (Non-Design)	Retail Residence and Business - POTS (Excluding Switch Based Feature Troubles)
• UNE Digital Loop >= DS1	Retail Digital Loop >= DS1
• UNE Loop + Port Combinations	Retail Residence and Business

• UNE EELs	Retail DS1/DS3
• UNE xDSL (HDSL, ADSL and UCL)	ADSL Provided to Retail
• UNE ISDN/UDC/IDSL	Retail ISDN – BRI
• UNE Line Splitting/Sharing	ADSL Provided to Retail
• UNE Other Design	Diagnostic
• UNE Other Non-Design	Diagnostic
• Local Interconnection Trunks	Parity with Retail Trunks

SEEM Measure

SEEM	Tier I	Tier II
Yes	X	X

M&R-4 [PRT]: Percent Repeat Customer Troubles within 30 Days

Definition

This report measures the percentage of customer trouble reports received within 30 days of a previous trouble report

Exclusions

- Trouble tickets canceled at the CLEC request
- BellSouth trouble reports associated with internal or administrative service
- Customer Provided Equipment (CPE) or CLEC Equipment Troubles
- Informational Tickets
- Troubles outside of BellSouth's control
  - A cut or damaged cable, caused by other than BellSouth employees or contractors
  - Troubles caused by vandalism/theft, motor accidents or petroleum/chemical accidents caused by parties other than BellSouth.

Business Rules

Customer trouble reports considered for this measure are those on the same line/circuit, received within 30 days of an original customer trouble report Candidates for this measure are determined by using either the 'cleared date' from LMOS or the 'closed date' from WFA of the first trouble, and the 'received date' of the next trouble

Calculation

Percent Repeat Customer Troubles within 30 Days = (a / b) X 100

- a = Count of repeat customer trouble reports, within a continuous 30 day period
- b = Total customer trouble reports cleared or closed in the reporting period

Report Structure

- Dispatch/Non-Dispatch
- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Geographic Scope
  - State

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM/SEEM Analog/Benchmark
Resale Residence (Non-Design)	Retail Residence (Non-Design)
Resale Business (Non-Design)	Retail Business (Non-Design)
Resale Design	Retail Design
UNE Analog Loop (Design)	Retail Residence, Business and Design (Dispatch) (Excluding Digital Loops)
UNE Analog Loop (Non-Design)	Retail Residence and Business - POTS (Excluding Switch Based Feature Troubles)
UNE Digital Loop >= DS1	Retail Digital Loop >= DS1
UNE Loop + Port Combinations	Retail Residence and Business
UNE EELs	Retail DS1/DS3
UNE xDSL (HDSL, ADSL and UCL)	ADSL Provided to Retail
UNE ISDN/UDC/IDSL	Retail ISDN – BRI
UNE Line Splitting/Sharing	ADSL Provided to Retail
UNE Other Design	Diagnostic
UNE Other Non-Design	Diagnostic
Local Interconnection Trunks	Parity with Retail Trunks

SEEM Measure

SEEM	Tier I	Tier II
Yes	X	X

M&R-5 [OOS]: Out of Service (OOS) > 24 Hours

Definition

This report measures the amount of Out of Service Customer Troubles (no dial tone, cannot be called, or cannot call out) and is represented as a percentage of Total OOS Customer Troubles cleared in excess of 24 hours (All design service troubles are considered to be out of service)

Exclusions

- Trouble reports canceled at the CLEC request
- BellSouth trouble reports associated with administrative service
- Customer Provided Equipment (CPE) Troubles or CLEC Equipment Troubles
- Informational Tickets
- Troubles outside of BellSouth's control
  - A cut or damaged cable, caused by other than BellSouth employees or contractors
  - Troubles caused by vandalism/theft, motor accidents or petroleum/chemical accidents caused by parties other than BellSouth

Business Rules

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

Calculation

Out of Service (OOS) > 24 hours = (a / b) X 100

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

Report Structure

- Dispatch/Non-Dispatch
- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Geographic Scope
  - State

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation

- Resale Residence (Non-Design)
- Resale Business (Non-Design)
- Resale Design
- UNE Analog Loop (Design)
- UNE Analog Loop (Non–Design)
- UNE Digital Loop >= DS1
- UNE Loop + Port Combinations
- UNE EELS
- UNE xDSL (HDSL, ADSL and UCL)
- UNE ISDN/UDC/IDSL
- UNE Line Splitting/Sharing
- UNE Other Design

SQM/SEEM Analog/Benchmark

Retail Residence (Non-Design)
Retail Business (Non-Design)
Retail Design
Retail Residence, Business and Design (Dispatch) (Excluding Digital Loops)
Retail Residence and Business - POTS (Excluding Switch Based Feature Troubles)
Retail Digital Loop >= DS1
Retail Residence and Business
Retail DS1/DS3
ADSL provided to Retail
Retail ISDN – BRI
ADSL Provided to Retail
Diagnostic

- UNE Other Non-Design
- Local Interconnection Trunks

Diagnostic
Parity with Retail Trunks

SEEM Measure

SEEM	Tier I	Tier II
Yes	X	X

M&R-6 [MAAT]: Average Answer Time – Repair Centers

Definition

This report measures the average time a customer is in queue when calling a BellSouth repair center

Exclusions

Volume of abandoned calls

Business Rules

The duration starts when a CLEC representative or BellSouth customer makes a choice on the repair center menu and is put in queue for the next repair attendant and stops when the repair attendant answers the call Abandoned calls are not included in the volume of calls handled but are included in total seconds Small Business has a universal call center where the same service representatives handle both ordering and maintenance calls Eighty percent of these calls stem from maintenance related activity and are reported in this measurement

Calculation

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

- a = Time BellSouth repair attendant answers call
- b = Time of entry into queue

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

- c = Sum of all answer times
- d = Total number of calls in the reporting period

Report Structure

- CLEC Aggregate
- BellSouth Aggregate
- Geographic Scope
  - Region

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• CLEC Average Answer Time	BellSouth Average Answer Time

SEEM Measure

SEEM	Tier I	Tier II
No		

Section 5: Billing

B-1 [BIA]: Invoice Accuracy

Definition

This measure reports the accuracy of billing invoices rendered by BellSouth to wholesale and retail customers

Exclusions

- Adjustments not related to billing errors (e g , credits for service outage, special promotion credits, adjustments to satisfy the customer, adjustments as per agreements and/or settlements with CLEC, adjustments related to the implementation of regulatory mandated or contract negotiated rate changes)
- Test Accounts

Business Rules

Absolute value of total billed revenue and absolute value of adjustment amounts related to billing errors and manual OC &C's (Other Charges and Credits) indicative of back-billing errors or manual back-billing greater than 3 bill periods appearing on the bill during the report month are used to compute invoice accuracy All bill periods are included in a report month

Calculation

Invoice Accuracy = [(a - b) / a] X 100

- a = Absolute value of total billed revenues during data month
- b = Absolute value of total billing error related adjustments during data month

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Geographic Scope
  - State
- Number of Adjustments

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM/SEEM Analog/Benchmark
CLEC Invoice Accuracy	
• Resale	Retail Invoice Accuracy
• UNE	Retail Invoice Accuracy
• Interconnection	Retail Invoice Accuracy

SEEM Measure

SEEM	Tier I	Tier II
Yes	X	X

B-2 [BIT]: Mean Time to Deliver Invoices

Definition

This report measures the mean interval for timeliness of billing invoices delivered to USPS (US Postal Service) or transmitted to the customer in an agreed upon format

Exclusions

None

Business Rules

Invoice timeliness is determined by calculating the interval between the bill period date and actual transmission or distribution of the invoice

To determine the number of workdays, begin counting the bill period date as the first workday (or the next workday if the bill period date is a weekend or holiday) The invoice transmission date is counted as the last workday Invoice transmission date is the workday the invoice is delivered to the Post Office or transmitted to the customer CLEC bills and BellSouth bills transmitted in less than or equal to one day difference will be considered parity

Calculation

Invoice Timeliness = (a - b)

- a = Invoice Transmission Date
- b = Bill Cycle Period Date

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
  - State

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM/SEEM Analog/Benchmark
The average delivery intervals are compared as follows	
• Resale CRIS	Retail CRIS
• UNE CRIS	Retail CRIS
• Interconnection UNE CABS	Retail CABS

SEEM Measure

SEEM	Tier I	Tier II
Yes	X	X

B-5 [BUDT]: Usage Data Delivery Timeliness

Definition

This report measures recorded usage data that is delivered to the appropriate CLEC within six (6) calendar days from the receipt of the initial recording

Exclusions

None

Business Rules

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 / b) X 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
- Geographic Scope
  - Region

SQM Level of Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM/SEEM Analog/Benchmark
• Usage Data Delivery Timeliness	>= 95% in Six Calendar Days

SEEM Measure

SEEM	Tier I	Tier II
Yes	X	X

B-10 [BEC]: Percent Billing Adjustment Requests (BAR) Responded to within 45 Business Days

Definition

This report measures timely responses to carrier bill adjustment requests

Exclusions

- Adjustments initiated by BellSouth

Business Rules

This measure applies to CLEC wholesale bill adjustment requests IXC Access billing adjustment requests are not reflected in this measure Elapsed time is measured in business days The clock starts when BellSouth receives the CLEC Billing Adjustment Request (BAR) form and the clock stops when BellSouth either makes an adjustment through BOCRIS or ACATS (generally next CLEC bill unless adjustment request after middle of the month) or BellSouth denies the request in BDATS or ACATS and BellSouth notifies the CLEC of the BAR resolution BellSouth will report separately those adjustment requests that are disputed by BellSouth (BAR form and instructions are found at www interconnection bellsouth com/forms/html/billing&collections html)

Calculation

Percent Billing Adjustments Responded to within 45 Business Days = (a / b) X 100

- a = Total number of BAR requests received in the data month that were responded to in 45 business days
- b = Total number of BAR requests received in the data month

Report Structure

- CLEC Specific
- CLEC Aggregate
- Geographic Scope
  - State

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM/SEEM Analog/Benchmark
• Percent Billing Adjustment Requests responded to	90% <= 45 business days

SEEM Measure

SEEM	Tier I	Tier II
Yes	X	X

Section 6: Trunk Group Performance

TGP-1 [TGP]: Trunk Group Performance

Definition

This report displays Trunk Group blocking performance for both BellSouth and CLECs

Exclusions

- Trunk groups blocked due to unanticipated significant increases in CLEC traffic (An unanticipated, significant increase in traffic is indicated by a 20% increase for small trunk groups or 1800 CCS for large groups over the previous month's traffic when the increase was not forecasted by the CLEC)
- Orders delayed or refused by CLEC
- 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
- Final groups actually overflowing, not blocked

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

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 measurement 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
- CLEC Aggregate
- BellSouth Aggregate
- Geographic Scope
  - State

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation

- CLEC Aggregate and CLEC Specific

SQM/SEEM Analog/Benchmark

BellSouth Aggregate
Any 2 consecutive hours in a 24-hour period where CLEC blockage exceeds BellSouth blockage by more than 0 5% using trunk groups 1, 3, 4, 5, 10 (where CLEC uses that Trunk Group) and 16 for CLECs and 1, 9, 10 (where BellSouth uses that Trunk Group) and 16 for BellSouth

SEEM Measure

SEEM	Tier I	Tier II
Yes	X	X

Section 7: Collocation

C-1 [ART]: Collocation Average Response Time

Definition

This report measures the time it takes BellSouth to respond to the receipt of a complete and accurate collocation application BellSouth must respond as to whether or not space is available within the required number of calendar days after having received a bona fide application for collocation

Exclusions

- Any application canceled by the CLEC

Business Rules

The interval begins on the date BellSouth receives a complete and accurate collocation application accompanied by the appropriate application fee if required The interval stops on the date BellSouth returns a response The interval 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 the reporting period

Report Structure

- CLEC Specific
- CLEC Aggregate
- Geographic Scope
  - State

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
Virtual-Initial	15 Calendar Days
Virtual-Augment	15 Calendar Days
Physical Caged-Initial	15 Calendar Days
Physical Caged Augment	15 Calendar Days
Physical Cageless-Initial	15 Calendar Days
Physical Cageless-Augment	15 Calendar Days

SEEM Measure

SEEM	Tier I	Tier II
No		

C-2 [AT]: Collocation Average Arrangement Time

Definition

This report measures the average time (in calendar days) for provisioning a collocation arrangement

Exclusions

- Any bona fide firm order canceled by the CLEC
- Any bona fide firm order with a CLEC negotiated interval longer than the benchmark interval

Business Rules

The interval (in calendar days) for collocation arrangements begins on the date that BellSouth receives a complete and accurate bona fide firm order accompanied by the appropriate fee, if required and ends 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

- CLEC Specific
- CLEC Aggregate
- Geographic Scope
  - State

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• Virtual-Initial	60 Calendar Days
• Virtual Augment (without space increase)	60 Calendar Days
• Virtual-Augment (with space increase)	60 Calendar Days
• Physical Caged-Initial	90 Calendar Days
• Physical Caged-Augment (without space increase)	45 Calendar Days
• Physical Caged-Augment (with space increase)	90 Calendar Days
• Physical Cageless-Initial	90 Calendar Days
• Physical Cageless-Augment (without space increase)	45 Calendar Days
• Physical Cageless-Augment (with space increase)	90 Calendar Days

SEEM Measure

SEEM	Tier I	Tier II
No		

C-3 [MDD]: Collocation Percent of Due Dates Missed

Definition

This report measures the percentage of missed due dates for collocation arrangements

Exclusions

- Any bona fide firm order canceled by the CLEC

Business Rules

Percent Due Dates Missed is the percentage of total collocation arrangements which BellSouth is unable to complete by the BellSouth committed due date The arrangement is considered a missed due date if it is not completed on or before the committed due date

Calculation

Percent Due Dates Missed = (a / b) X 100

- a = Number of completed collocation arrangements that were not completed by the committed due date in the reporting period
- b = Total number of collocation arrangements completed in the reporting period

Report Structure

- CLEC Specific
- CLEC Aggregate
- Geographic Scope
  - State

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM/SEEM Analog/Benchmark
• Virtual-Initial	>= 95% on time
• Virtual-Augment	>= 95% on time
• Physical Caged-Initial	>= 95% on time
• Physical Caged-Augment	>= 95% on time
• Physical Cageless-Initial	>= 95% on time
• Physical Cageless-Augment	>= 95% on time

SEEM Measure

SEEM	Tier I	Tier II
Yes	X	X

Section 8: Change Management

CM-1 [NT]: Timeliness of Change Management Notices

Definition

This report measures whether CLECs receive required software release notices on time to prepare for BellSouth interface/system changes so CLEC interfaces are not impaired by change The CCP is used by BellSouth and the CLECs to manage requested changes to the BellSouth local interfaces

Exclusions

- Changes to release dates for reasons outside BellSouth control, such as the system software vendor changes (for example a patch to fix a software problem)
- Type 6 Change Requests (Defects/Expedites), as defined by the Change Control Process (CCP)

Business Rules

The interval begins on the notification date and ends on the software release date When project events occur (scope changes, analysis information, etc), the software release date may change A revised notification would be required and the interval would restart Based on release constraints for defects/expedites, notification may be less than the agreed upon interval in the CCP for new features

Calculation

Timeliness of Change Management Notices = (a / b) X 100

- a = Total number of Change Management Notifications sent within required timeframes
- b = Total number of Change Management Notifications sent

Report Structure

- BellSouth Aggregate
- Geographic Scope
  - Region

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM/SEEM Analog/Benchmark
• Notices	98% on time

SEEM Measure

SEEM	Tier I	Tier II
Yes		X

CM-3 [DT]: Timeliness of Documentation Associated with Change

Definition

This report measures whether CLECs received requirements or business rule documentation on time to prepare for BellSouth interface/system changes so CLEC interfaces are not impaired by change The CCP is used by BellSouth and the CLECs to manage requested changes to the BellSouth local interfaces

Exclusions

- Documentation for release dates that slip less than 30 days for a change mandated by regulatory or legal entities (Federal Communications Commission [FCC], a state commission/authority, or state and federal courts) or CLEC request
- Type 6 Change Requests (Defects/Expedites), as defined by the Change Control Process

Business Rules

The interval begins on the date the business rule documentation is released and ends on the software release date When project events occur (scope changes, analysis information, etc), the software release date may change Revisions to documentation could be required and the interval would restart

Documentation standards and timeframes can be found in the Change Control Process, on the Interconnection website (http //www interconnection bellsouth com/markets/lec/ccp_live/index html)

Calculation

Timeliness of Documentation Associated with Change = (a / b) X 100

- a = Change Management documentation sent within required timeframes after notices
- b = Total number of Change Management documentation sent

Report Structure

- BellSouth Aggregate
- Geographic Scope
  - Region

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation

- Documentation

SQM/SEEM Analog/Benchmark

98% on Time

SEEM Measure

SEEM	Tier I	Tier II
Yes		X

CM-5 [ION]: Notification of CLEC Interface Outages

Definition

This report measures the time it takes BellSouth to notify the CLECs of an interface outage as defined by the Change Control Process (CCP) documentation.

Exclusions

None

Business Rules

BellSouth has 15 minutes to notify the CLECs via email, once the Help Desk has verified the existence of an outage An outage is verified to exist when one or more of the following conditions occur

1 BellSouth can duplicate a CLEC reported system error
2 BellSouth finds an error message within the error log that identically matches a CLEC reported system outage
3 When three or more CLECs report the identical type of outage
4 BellSouth detects a problem due to the loss of functionality for users of a system

The 15-minute interval begins once a CLEC reported outage or a BellSouth detected outage has lasted for 20 minutes and has been verified If the outage is not verified within 20 minutes, the interval begins at the point of verification

Calculation

Notification of CLEC Interface Outages = (a / b) X 100

- a = Number of interface outages where CLECs are notified within 15 minutes
- b = Total number of interface outages

Report Structure

- CLEC Aggregate
- Geographic Scope
  - Region

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• By interface type for all interfaces accessed by CLECs	97% <= 15 Minutes

Interface	Applicable to
EDI	CLEC
CSOTS	CLEC
LENS	CLEC
TAG	CLEC
ECTA	CLEC
TAFI	CLEC/BellSouth

SEEM Measure

SEEM	Tier I	Tier II
No		

CM-6 [SEC]: Percentage of Software Errors Corrected in "X" Business Days

Definition

This report measures the percentage of all outstanding software errors, due and overdue, to be-corrected by BellSouth in "X" business days within the report period

Exclusions

- Software corrections having implementation intervals that are longer than those defined in this measure and agreed upon by the CLECs
- Rejected or reclassified software errors (BellSouth must report the number of rejected or reclassified software errors disputed by the CLECs)

Business Rules

The interval begins when a Software Error is validated per the Change Control Process (CCP) and ends when the error is corrected and the notice is posted to the change control website Currently "X" business days is defined in the CCP as 10 = Severity 2, 30 = Severity 3, and 45 = Severity 4 The current intervals for this measure will be consistent with the intervals set in the CCP if agreed to by the CLEC or ordered by the Commission A copy of the most current CCP can be found on the Interconnection website (http //www interconnection bellsouth com/markets/lec/ccp_live/index html) The monthly report should include all defects, due and overdue, to be corrected within the report period Software defects are defined as Type 6 Change Requests in the Change Control Process

Calculation

Percentage of Software Errors Corrected in "X" Business Days = (a / b) X 100

- a = Total number of software errors corrected in "X" business days, as defined for each severity level (Severity 2, Severity 3, and Severity 4)
- b = Total number of Severity 2, Severity 3, and Severity 4 software errors corrected

Report Structure

- Severity 2 = 10 Business Days
- Severity 3 = 30 Business Days
- Severity 4 = 45 Business Days
- Geographic Scope
  - Region

SQM Level of Disaggregation - Analog/Benchmark

SQM Level of Disaggregation

- Errors

SQM/SEEM Analog/Benchmark

95% within Interval

SEEM Measure

SEEM	Tier I	Tier II
Yes		X

CM-7 [CRA]: Percentage of Change Requests Accepted or Rejected within 10 Days

Definition

This report measures the percentage of change requests, other than Type 1 or Type 6 Change Requests, submitted by CLECs that are accepted or rejected by BellSouth in 10 business days within the report period

Exclusions

- Change requests canceled or withdrawn before a response from BellSouth is due

Business Rules

The acceptance/rejection interval begins when the acknowledgement is due to the CLEC per the Change Control Process, a copy of which can be found on the Interconnection website (http //www interconnection bellsouth com/markets/lec/ccp_live/index html) The interval ends when BellSouth issues an acceptance or rejection notice to the CLEC. This metric includes all change requests not subject to the above exclusions that have been responded to within the reporting period

Calculation

Percentage of Change Requests Accepted or Rejected within 10 Business Days = (a / b) X 100

- a = Total number of change request responses due in the reporting period that were accepted or rejected within 10 business days
- b = Total number of change requests due in the reporting period

Report Structure

- BellSouth Aggregate
- Geographic Scope
  - Region

SQM Level of Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM/SEEM Analog/Benchmark
• Requests Accepted/Rejected	95% within Interval

SEEM Measure

SEEM	Tier I	Tier II
Yes		X

CM-8 [CRR]: Percent Change Requests Rejected

Definition

This report measures the percentage of change requests (other than Type 1 or Type 6 Change Requests) submitted by CLECs that are rejected within the report period

Exclusions

- Change requests canceled or withdrawn before a response from BellSouth is due

Business Rules

This metric includes any rejected change requests in the reporting period, regardless of whether received early or late The metric will be disaggregated by major categories of rejections per the Change Control Process, a copy of which can be found on the Interconnection website (http //www interconnection bellsouth com/markets/lec/ccp_live/index html) These reasons are cost, technical feasibility, and industry direction This metric includes all change requests not subject to the above exclusions that have been responded to within the reporting period

Calculation

Percent Change Requests Rejected = (a / b) X 100

- a = Total number of change requests rejected in the reporting period
- b = Total number of change requests responded to within the reporting period

Report Structure

- BellSouth Aggregate
- Geographic Scope
  - Region

SQM Level of Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• Reason – Cost	Diagnostic
• Reason – Technical Feasibility	Diagnostic
• Reason – Industry Direction	Diagnostic

SEEM Measure

SEEM	Tier I	Tier II
No		

CM-9 [NDPR]: Number of Defects in Production Releases (Type 6 CR)

Definition

This report measures the number of defects in production releases This measure will be presented as the number of Type 6 Severity 1 Defects, the number of Type 6 Severity 2 Defects without a mechanized work around, the number of Type 6 Severity 3 Defects, and the number of Type 6 Severity 4 defects resulting within a three week period from a production release date The definition of Type 6 Change Requests (CR) and Severity 1, Severity 2, Severity 3, and Severity 4 Defects can be found in the Change Control Process document

Exclusions

None

Business Rules

This metric measures the number of Type 6 Severity 1 Defects, the number of Type 6 Severity 2 Defects without a mechanized work around, the number of Type 6 Severity 3 Defects, and the number of Type 6 Severity 4 Defects resulting within a three week period from a production release date The definitions of Type 6 Change Requests (CR) and Severity 1, 2, 3, and 4 Defects can be found in the Change Control Process, which can be found on the Interconnection website (http //www interconnection bellsouth com/markets/lec/ccp_live/index html)

Calculation

The number of Type 6 Severity 1 Defects, the number of Type 6 Severity 2 Defects without a mechanized work around, the number of Type 6 Severity 3 Defects, and the number of Type 6 Severity 4 Defects

Report Structure

- Production Releases
- Number of Type 6 Severity 1 Defects
- Number of Type 6 Severity 2 Defects without a mechanized work around
- Number of Type 6 Severity 3 Defects
- Number of Type 6 Severity 4 Defects
- Geographic Scope
  - Region

SQM Level of Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• Number of Type 6 Severity 1 Defects	0 Defects
• Number of Type 6 Severity 2 Defects without a mechanized work around	0 Defects
• Number of Type 6 Severity 3 Defects	0 Defects
• Number of Type 6 Severity 4 Defects	0 Defects

SEEM Measure

SEEM	Tier I	Tier II
No		

CM-10 [SV]: Software Validation

Definition

This report measures software validation test results for production releases of BellSouth local interfaces

Exclusions

None

Business Rules

BellSouth maintains a test deck of transactions that are used to validate that functionality in software production releases work as designed Each transaction in the test deck is assigned a weight factor based on the weights assigned to the metrics Within the software validation metric, weight factors will be allocated among transaction types (e g , Pre-Order, Order Resale, Order UNE, Order UNE-P) and then equally distributed across transactions within the specific type

BellSouth will begin to execute the software validation test deck within one (1) business day following a production release Test deck transactions will be executed using production release software in the CAVE environment Within seven (7) business days following completion of the production release software validation test in CAVE, BellSouth will report the number of test deck transactions that failed Each failed transaction will be multiplied by the transaction's weight factor

A transaction is considered failed if the request cannot be submitted or processed, or results in incorrect or improperly formatted data

The test deck scenario weight table can be found in the Change Control Process, a copy of which can be found on the Interconnection website (http //www interconnection bellsouth com/markets/lec/ccp_live/index html)

Calculation

This software validation metric is defined as the ratio of the sum of the weights of failed transactions using production release software in CAVE to the sum of the weights of all transactions in the test deck

- Numerator = Sum of weights of failed transactions
- Denominator = Sum of weights of all transactions in the test deck

Report Structure

- BellSouth Aggregate
- Geographic Scope
  - Region

SQM Level of Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• Failed Transactions	<= 5%

SEEM Measure

SEEM	Tier I	Tier II
No		

CM-11 [SCRI]: Percentage of Software Change Requests Implemented within 60 Weeks of Prioritization

Definition

This report measures whether BellSouth provides CLECs timely implementation of prioritized software change requests

Exclusions

- Software change requests implemented later than 60 weeks with the consent of the CLECs
- Software change requests where BellSouth has regulatory authority to exceed the interval

Business Rules

The interval for each software change request begins when it has first been prioritized as described in the Change Control Process and ends when the software change request has been implemented by BellSouth and made available to the CLECs However, the 60-week clock may be restarted if a reprioritization is requested solely at the discretion of the CLECs and a CR is moved to a later release

Calculation

Percentage of Type 5 CLEC Initiated Software Change Requests Implemented on Time = (a / b) X 100

- a = Total number of prioritized Type 5 software change requests implemented each month that are less than or equal to 60 weeks of age from the date of their first prioritization plus all other prioritized change requests existing at the end of the month that are less than or equal to 60 weeks of age from prioritization
- b = All entries in "a" above plus all Type 5 software change requests prioritized more than 60 weeks before the end of the monthly reporting period

Percentage of Type 4 BellSouth Initiated Software Change Requests Implemented on Time = (c / d) X 100

- c = Total number of prioritized Type 4 software change requests implemented each month that are less than or equal to 60 weeks of age from the date of the release prioritization list plus all other Type 4 prioritized change requests existing at the end of the month that are less than or equal to 60 weeks of age from prioritization
- d = All entries in "c" above plus all Type 4 software change requests prioritized more than 60 weeks before the end of the monthly reporting period

Report Structure

- BellSouth Aggregate
- Type 4 Requests Implemented
- Type 5 Requests Implemented
- Percent implemented within 16, 32, 48 and 60 weeks
- Geographic Scope
  - Region

SQM Level of Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM/SEEM Analog/Benchmark
• Type 4 Requests Implemented	95% within Interval
• Type 5 Requests Implemented	95% within Interval

SEEM Measure

SEEM	Tier I	Tier II
Yes		X

CM-11A (PCRI): Average Time to Implement Process Change Requests

Definition

This report measures the average time BellSouth takes to implement prioritized Process Change Requests

Exclusions

- Process Change Requests implemented later than 60 days with the consent of the CLECs
- Process Change Requests where BellSouth has regulatory authority to exceed the interval

Business Rules

The interval for each Process Change Request begins when it has been prioritized as described in the Change Control Process and ends when the Process Change Request has been implemented by BellSouth and made available to the CLECs

Calculation

Average Implementation Time for the Type 5 CLEC Initiated Process Change Requests = (a / b)

- a = Sum of implementation times for the prioritized Type 5 Process Change Requests implemented within the data month
- b = Total number of prioritized Type 5 Process Change Requests implemented within the data month

Average Implementation Time for the Type 4 BellSouth Initiated Process Change Requests = (c / d)

- c = Sum of implementation times for the prioritized Type 4 Process Change Requests implemented within the data month
- d = Total number of prioritized Type 4 Process Change Requests implemented within the data month

Report Structure

- BellSouth Aggregate
- Type 4 Process Change Requests implemented
- Type 5 Process Change Requests implemented
- Geographic Scope
  - Region

SQM Level of Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
Type 4 Process Change Requests implemented	Diagnostic
Type 5 Process Change Requests implemented	Diagnostic

SEEM Measure

SEEM	Tier I	Tier II
No		

Appendix A: Glossary of Acronyms and Terms

Symbols used in calculations

-
A mathematical operator representing subtraction

+
A mathematical operator representing addition

/
A mathematical operator representing division

<
A mathematical symbol that indicates the metric on the left of the symbol is less than the metric on the right

<=
A mathematical symbol that indicates the metric on the left of the symbol is less than or equal to the metric on the right

>
A mathematical symbol that indicates the metric on the left of the symbol is greater than the metric on the right

>=
A mathematical symbol that indicates the metric on the left of the symbol is greater than or equal to the metric on the right

( )
Parentheses, used to group mathematical operations which are completed before operations outside the parentheses

A

ACD
Automatic Call Distributor - A service that provides status monitoring of agents in a call center and routes high volume incoming telephone calls to available agents while collecting management information on both callers and attendants

Aggregate
Sum total of all items in a like category, e g CLEC aggregate equals the sum total of all CLEC data for a given reporting level

ALEC
Alternative Local Exchange Company – A BellSouth wholesale customer who competes with the Incumbent Local Exchange Carrier (ILEC) and other carriers in providing local service

ADSL
Asymmetrical Digital Subscriber Line – A transmission technology that allows the use of one existing local twisted-pair to provide high-bandwidth data and voice services simultaneously

ASR
Access Service Request - A request for access service terminating delivery of carrier traffic into a local exchange carrier's network

ATLAS
Application for Telephone Number Load Administration System - The BellSouth Operations System used to administer the pool of available telephone numbers and to reserve selected numbers from the pool for use on pending service requests/service orders

Auto Clarification
A LSR that was electronically rejected from LESOG and electronically returned to the CLEC for correction

B

BILLING
The process and functions by which billing data is collected and by which account information is processed in order to render accurate and timely billing

BOCRIS
Business Office Customer Record Information System (Front-end to the CRIS database) – System used to maintain customer account information which includes, but is not limited to bills, payment history, and memo notations made during customer contact

BRI
Basic Rate ISDN – This product offering is a two-way line side digital port on a two-wire digital loop The two-wire digital loop is a dedicated digital transmission facility

BRC
Business Repair Center – The BellSouth Business Systems trouble receipt center which serves business and CLEC customers

C

CABS
Carrier Access Billing System – The BellSouth proprietary corporate database and billing system for access and certain UNE customers and/or services

CCC
Coordinated Customer Conversions – A simultaneous coordination between the disconnection of existing service and the reconnection of the new service

CCP OSS (Change Management)
Change Control Process OSS – The Change Control Process (CCP) methods and procedures, a collaborative documented process, used by BellSouth and the CLECs to initiate OSS changes to BellSouth pre-ordering, ordering, and provisioning interfaces The process includes change requests, CLEC prioritization, release management, defect management, etc

CCP SQM
Change Control Process SQM – The methods and procedures used by BellSouth to implement changes to performance metrics that have been ordered by a state regulatory commission This process is documented in the PMQAP

Centrex
A business telephone service, offered by local exchange carriers, which is similar to a Private Branch Exchange (PBX) but the switching equipment is located in the telephone company Central Office (CO)

CISC
Carrier Interconnection Switching Center – Formerly known as the LISC, the BellSouth Center dedicated to handling CLEC access service requests for interconnection trunks

CKTID
Circuit Identifier - A unique identifier for elements combined in a service configuration

CLEC
Competitive Local Exchange Carrier – A BellSouth wholesale customer who competes with the Incumbent Local Exchange Carrier (ILEC) and other carriers in providing local service

CLP
Competitive Local Provider – A BellSouth wholesale customer who competes with the Incumbent Local Exchange Carrier (ILEC) and other carriers in providing local service

CMDS
Centralized Message Distribution System - National system used to transfer specially formatted messages among companies

CM OSS
Change Management OSS - See CCP OSS for definition

CM SQM
Change Management SQM - See CCP SQM for definition

COFFI
Central Office Feature File Interface - Provides information about USOCs and class of service COFFI indicates all services available to a customer

COG
Corporate Gateway – System designed for the electronic submission of xDSL Local Service Requests

CRIS
Customer Record Information System - The BellSouth proprietary corporate database and billing system for non-access customers and/or services

CRSG
Complex Resale Support Group - The group within BellSouth which serves as the interface between the LCSC and the outside plant engineering group The responsibility of this organization is to provide the parameters for the type of facilities available to provision the service the CLEC has selected

C-SOTS
CLEC Service Order Tracking System – Provides CLECs the ability to query the service order database to monitor the progess of CLEC service order activity from service order issuance to order completion

CSR
Customer Service Record – A record of the customer/end-user information including detail about the services and physical address of the end-user

CTTG
Common Transport Trunk Group - Trunk groups between BellSouth, Independent end offices, and the BellSouth access tandems

CWINS Center
Customer Wholesale Interconnection Network Services Center (formerly the UNE Center) – This center provides CLECs with provisioning and maintenance for designed and non-designed local service

D

Design
Design Service is defined as any special or plain old telephone service order which requires BellSouth design engineering activities.

Disposition & Cause
Types of trouble conditions, (e g , No Trouble Found (NTF), Central Office Equipment (CO), Customer Premises Equipment (CPE), etc) – These codes identify the location, equipment and/or disposition of a particular trouble Trouble reports will be closed to the most service affecting code which describes the trouble condition repaired

DS0
The worldwide standard speed for one digital voice signal (64,000 bps)

DS1
24 DS0s (1 544Mb/sec)

DGE
Direct Order Entry System - An internal BellSouth service order entry system used by BellSouth service representatives to input service orders in BellSouth format

DOM
Delivery Order Manager – Determines the needed processing steps for the service request It then forwards the request on to each required system, in sequence, checking for errors and accuracy

DSAP
DOE (Direct Order Entry) Support Application - A BellSouth system which assists a service representative or similar carrier agent in negotiating service provisioning commitments for non-designed services and Unbundled Network Elements

DSL
Digital Subscriber Line – Allows customers to provide simltaneous two-way transmission of digital signals at speeds of 256 kbps via a two-wire local channel

DUI
Database Update Information – A functional area measuring the timeliness and accuracy of database updates

E

EDI
Electronic Data Interchange - The computer-to-computer exchange of inter and/or intra-company business documents in a public standard format

ESSX
BellSouth Centrex Service – A central office housed communications system that provides the customer with direct inward and outward dialing, interconnection to all stations, and custom calling features

F

Fatal Reject
LSRs electronically rejected from LEO because the required fields are not correctly populated

Flow-Through
In the context of this document, LSRs submitted electronically via the CLEC mechanized ordering process that flow through to the BellSouth OSS without manual or human intervention

FOC
Firm Order Confirmation - A notification returned to the CLEC confirming the LSR has been received and accepted, including the specified commitment date

FX
Foreign Exchange – A network-provided service in which a telephone in a given local exchange area is connected, via a private line, to a central office in another exchange

G H

HDSL
High Bit Digital Subscriber Line – A dedicated digital transmission facility from BellSouth's Main Distribution Frame (MDF) to an end user's premises

I J K

ILEC
Incumbent Local Exchange Carrier – Regional Bell Operating Company (RBOC)

INP
Interim Number Portability – When the customer is originally provided service by an ILEC and decides to change service to a CLEC, the customer may retain their ILEC telephone number Calls to the ILEC number are rerouted to the CLEC using either the Remote Call Forwarding feature or over a dedicated trunk group from the ILEC switch to the CLEC

ISDN
Integrated Services Digital Network – An integrated digital network in which the same time-division switches and digital transmission paths are used to establish connections for different services ISDN services include telephone, data, electronic mail, and facsmile

L

LAN
Local Area Network – A data communications system that lies within a limited spatial area, has a specific user group, has a specific topology, and is not a public switched telecommunications network, but may be connected to one

LAUTO
The automatic processor in LNP Gateway that validates LSRs and issues service orders

LCSC
Local Carrier Service Center - The BellSouth center which is dedicated to handling CLEC LSRs and preordering transactions, along with associated expedite requests and escalations

Legacy System
Term used to refer to BellSouth Operations Support Systems

LENS
Local Exchange Navigation System - The BellSouth application developed to provide both preordering and ordering electronic interface functions for CLECs

LEO
Local Exchange Ordering - A BellSouth system which accepts the output of CLEC interfaces and provides first-level validation to ensure all appropriate fields are populated

LERG
Local Exchange Routing Guide – The official document which lists all North American Class 5 office (COs or end offices) and which describes their relationship to Class 4 office (tandem offices) Carriers use the LERG in the network design process

LESOG
Local Exchange Service Order Generator - A BellSouth system which accepts the service order output of LEO and enters the service order into the Service Order Control System using terminal emulation technology.

LFACS
Loop Facilities Assignment and Control System - Database of facilities inventory and assignment information

LIDB
Line Information Database – Contains information about the user's calling card and other billing data

LMOS
Loop Maintenance Operations System - A BellSouth operations system that stores the assignment and selected account information for use by downstream OSS and BellSouth personnel during provisioning and maintenance activities

LMOS HOST
Loop Maintenance Operations System Host Computer

LMU
Loop Make-up - The physical characteristics of the loop facilities, starting at an ILEC's central office and ending at the serving distribution terminal

LMUSI
Loop Make-up Service Inquiry – The form submitted by the CLEC to obtain the loop make-up information

LNP
Local Number Portability - In the context of this document, the capability for a subscriber to retain their current telephone number as they transfer to a different local service provider

LNP Gateway
Local Number Portability (gateway) - A system that provides both internal and external communications with various interfaces and processes including

(1) Linking BellSouth to the Number Portability Administration Center (NPAC)

(2) Allowing for inter-company communications between BellSouth and the CLECs for electronic ordering

(3) Providing interface between NPAC and AIN SMS for LNP routing processes

Loops
Transmission paths from the central office to the customer premises

LRN
Location Routing Number – A 10-digit number which routes calls to the appropiate end-user's ported telephone number

LSR
Local Service Request – A request from a CLEC for local resale service or unbundled network elements

M

Maintenance & Repair
The process and function by which trouble reports are sent to BellSouth and the related service problems are resolved

MARCH
BellSouth Operations System which accepts service orders and other data, interprets the coding contained in the service order image, and constructs the specific switching system recent change command messages for input into end office switches

N

NBR
New Business Request - Process required by BellSouth for CLECs to initiate a service, which is not included within its interconnection agreement

NC
No Circuits - All circuits busy announcement

NMLI
Native Mode LAN Interconnection – An intraLATA, shared fiber-based, LAN inter-networking service

NPA
Numbering Plan Area – Area Code portion of a telephone number

NXX
The exchange portion of a telephone number The first three digits in a local telephone number which identify the specific telephone company central office serving that number

O

Ordering
The process and functions where resale services or unbundled network elements are ordered from BellSouth, as well as the process by which an LSR or ASR is placed with BellSouth

Ordering Interface Gateways
Gateways for CLECs to submit LSRs electronically

Order Types
The following order types are used in this document

(1) T - The "to" portion of a change of address This Order Type is used to connect main service at a new address when a customer moves from one address to another in any of the nine states within the BellSouth region A "T" Order Type is always pared with an "F" Order Type which will have the same telephone number following the "F" Order Type Code unless the orders are within different central offices

(2) N - Orders establishing a new account Also, this Order Type Code is occasionally used when changing from one type of system to another, such as when changing from PBX to Centrex

(3) C - Order Type used for the following conditions changes or partial disconnections of service or equipment, change of telephone number, grade or class of main line, additional lines, auxiliary lines, PBX trunks and stations, addition of trunks or lines to existing accounts, move of equipment (other than change of address), temporary suspension and restoration of service at customer's request

(4) R - Order Type used for the following conditions additions, removals or changes in directory listings, responsibility change orders, addition, removal or changes in directory and billing information, other record corrections where no field work is involved

OSPCM
Outside Plant Contract Management System – Provides scheduling and completion information on outside plant construction activities

OSS
Operations Support System – Multiple support systems and databases which are used to mechanize the flow and performance of work The term is used to refer to the overall system consisting of complex hardware, computer operating system(s), and applications which are used to provide the support functions

Out Of Service
Customer has no dial tone and cannot call out

P

PMAP
Performance Measurement Analysis Platform – Provides delivery of performance reports via the web and facilitates analysis of the summary level data

PMQAP
Performance Measurement Quality Assurance Plan – BellSouth Operational Guide which documents the systematic procedures used by BellSouth Telecommunications (BST) to produce accurate and reliable service quality measurement reports

PON
Purchase Order Number – Identifier assigned by the customer originating the service request

POTS
Plain Old Telephone Service – A term often used to distinguish basic voice telephone from data and other services

PREDICTOR
BellSouth system used to administer proactive maintenance and rehabilitation activities on outside plant facilities

Preordering
The process and functions by which information is obtained, verified, or validated prior to placing a service request

PRI
Primary Rate ISDN – An integrated services digital network interface standard designated as having 23B+D channels

Provisioning
The process and functions where necessary work is performed to activate a service requested via a LSR/ASR

Q R

RRC
Residence Repair Center - The BellSouth Consumer Services trouble receipt center which serves residential customers

RSAG
Regional Street Address Guide - The BellSouth database which contains street addresses that have been validated for accuracy with state and local government records

RSAGADDR
Regional Street Address Guide Address - RSAG software contract for address search

RSAGTN
Regional Street Address Guide Telephone Number - RSAG software contract for telephone number search

S

SAC
Service Advocacy Center– Resolves issues in the provisioning process

SDUM
Supporting Data User Manual

SEEM
Self Effectuating Enforcement Mechanism – A tiered remedy structure in which payments are made either to the CLEC and/or state regulatory agency, depending on the type and level of parity/benchmark miss that occurs

SGG
ServiceGate Gateway – A common gateway to receive and send interconnection requests

SOCS
Service Order Control System – BellSouth system which routes service order images among BellSouth provisioning systems

SOG
Service Order Generator - Designed to generate a service order for xDSL

SONGS
Service Order Negotiation and Generation System – This system supports the Consumer, Small Business and Public COUs by providing data entry screens and prompts to aid negotiation and entry of all order types

Syntactically Incorrect Query
A query that cannot be fulfilled due to insufficient or incorrect input data from the end user For example, a CLEC would like to query the legacy system for the following address 1234 Main St Entering "1234 Main St " will be considered syntactically correct because valid characters were used in the address field However, entering "AB34 Main St " will be considered syntactically incorrect because invalid characters (example alpha characters were entered in numeric slots) were used in the address field

T

TAFI
Trouble Analysis Facilitation Interface - The BellSouth Operations System that supports trouble receipt center personnel in taking and handling customer trouble reports

TAG
Telecommunications Access Gateway – TAG was designed to provide an electronic interface or machine-to-machine interface for the bi-directional flow of information between BellSouth's OSSs and participating CLECs

Test Transactions/Records
Transactions created by BellSouth, or in tests originated by CLECs, where the CLEC has coordinated the test with BellSouth to enable identification of the transactions as part of a test used to test system functionality

TN
Telephone Number

Total Manual Fallout
LSRs electronically submitted to BellSouth, which fallout, requiring manual input into a service order generator

U V

UCL
Unbundled Copper Loop - A dedicated metallic transmission facility from BellSouth's Main Distribution Frame (MDF) to a customer's premises

UNE
Unbundled Network Element – Those parts of BellSouth's network required to be unbundled by the Telecommunications Act of 1996 and the implementing regulatory body

USOC
Universal Service Order Code – A set of alpha or numeric characters identifying a particular service or equipment

W

WFA
Work Force Administration – Electronic document tracking system for trouble reports

WMC
Work Management Center – Serves as a single point of contact (SPOC) for all requests for dispatch to the Field Work Group (Central Office or outside technicians)

WTN
Working Telephone Number

X Y Z

XML
eXtensible Markup Language – An international standards-based data formatting option designed for information exchange on network systems

Appendix B: BellSouth Audit Policy

BellSouth currently provides CLECs with certain audit rights as a part of their individual interconnection agreements If requested by a Public Service Commission, BellSouth will agree to undergo an SQM audit The audit should be conducted by an independent third party auditor The results of audits will be made available to all the parties subject to proper safeguards to protect proprietary information Audit will be conducted under the following specifications

1 The cost shall be borne by BellSouth

2 Should an independent third party auditor be required, it shall be selected by BellSouth, and the PSC

3 BellSouth and the PSC shall jointly determine the scope of the audit

4 The PSC may request input regarding selection of the auditor and audit scope from interested parties

These audits are intended to provide the basis for the PSCs and CLECs to determine that the SQM and PMAP produce accurate data that reflects each State's Order for performance measurements

Appendix C: OSS InterfaceTables

OSS-1 [PRR]: OSS Response Interval (Pre-Ordering/Ordering/Maintenance & Repair)

Table 1: Legacy System Access Times For RNS

System	Contract	Data	Avg. Sec.	# of Calls
RSAG	RSAG-TN	Address	x	x
RSAG	RSAG-ADDR	Address	x	x
ATLAS	ATLAS-TN	TN	x	x
DSAP	DSAP-DDI	Schedule	x	x
CRIS	CRSACCTS	CSR	x	x
OASIS	OASISBIG	Feature/Service	x	x

Table 2: Legacy System Access Times For R0S

System	Contract	Data	Avg. sec.	# of Calls
RSAG	RSAG-TN	Address	x	x
RSAG	RSAG-ADDR	Address	x	x
ATLAS	ATLAS-TN	TN	x	x
DSAP	DSAP-DDI	Schedule	x	x
CRIS	CRSOCSR	CSR	x	x
OASIS	OASISBIG	Feature/Service	x	x

Table 3: Legacy System Access Times For LENS

System	Contract	Data	Avg. sec.	# of Calls
RSAG	RSAG-TN	Address	x	x
RSAG	RSAG-ADDR	Address	x	x
ATLAS	ATLAS-TN	TN	x	x
DSAP	DSAP-DDI	Schedule	x	x
CRIS	CRSECSRL	CSR	x	x
COFFI	COFFI/USOC	Feature/Service	x	x
P/SIMS	PSIMS/ORB	Feature/Service	x	x

Table 4: Legacy System Access Times For TAG/XML

System	Contract	Data	Avg. sec.	# of Calls
RSAG	RSAG-TN	Address	x	x
RSAG	RSAG-ADDR	Address	x	x
ATLAS	ATLAS-TN	TN	x	x
ATLAS	ATLAS-MLH	TN	x	x
ATLAS	ATLAS-DID	TN	x	x
DSAP	DSAP-DDI	Schedule	x	x
CRIS	CRSECSRL	CSR	x	x
P/SIMS	PSIM/ORB	Feature/Service	x	x

Table 5: Legacy System Access Times for M&R (TAFI)

System	BellSouth & CLEC	Count <= 10
CRIS	x	x
DLETH	x	x
DLR	x	x
LMOS	x	x
LMOSupd	x	x
LNP Gateway	x	x
MARCH	x	x
OSPCM	x	x
Predictor	x	x
SOCS	x	x
NIW	x	x

OSS-2 [IA]: OSS Interface Availability (Pre-Ordering/Ordering/Maintenance & Repair)

OSS Table 1: SQM Interface Availability for Pre-Ordering/Ordering

OSS Interface Availability Application	Applicable to	% Availability
EDI	CLEC	x
LENS	CLEC	x
LEO	CLEC	x
LESOG	CLEC	x
TAG/XML	CLEC	x
LNP Gateway	CLEC	x
COG	CLEC	x
SGG	CLEC	x
DOE	CLEC/BellSouth	x
SONGS	CLEC/BellSouth	x
ATLAS/COFFI	CLEC/BellSouth	x
BOCRIS/CRIS	CLEC/BellSouth	x
DSAP	CLEC/BellSouth	x
RSAG	CLEC/BellSouth	x
SOCS	CLEC/BellSouth	x
LFACS	CLEC/BellSouth	x
RNS	BellSouth	x
ROS	BellSouth	x

OSS Table 2: SQM Interface Availability for Maintenance & Repair

OSS Interface	% Availability
BellSouth TAFI	x
CLEC TAFI	x
CLEC ECTA	x
BellSouth & CLEC	
CRIS	x
LMOS HOST	x
LNP Gateway	x
MARCH	x
OSPCM	x
PREDICTOR	x
SOCS	x

Appendix D: BellSouth's Policy on Reposting of Performance Data and Recalculation of SEEM Payments

BellSouth will make available reposted performance data as reflected in the Service Quality Measurement (SQM) reports and recalculate Self-Effectuating Enforcement Mechanism (SEEM) payments using the Parity Analysis and Remedy Information System (PARIS), to the extent technically feasible, under the following circumstances

1 Those SQM measures included in a state's specific SQM plan with corresponding sub-metrics are subject to reposting A notice will be placed on the PMAP website advising CLECs when reposted data is available

2 SQM Performance sub-metric calculations that result in a shift in the statewide aggregate performance from an "in parity" condition to an "out of parity" condition will be available for reposting

3 SQM Performance sub-metric calculations with benchmarks where statewide aggregate performance is in an "out of parity" condition will be available for reposting whenever there is a >= 2% decline in BellSouth's performance at the sub-metric level

4 SQM Performance sub-metric calculations with retail analogues that are in an "out of parity" condition will be available for reposting whenever there is a degradation in performance as shown by an adverse change of <= 5 in the z-score at the sub-metric level

5 Any data recalculations that reflect an improvement in BellSouth's performance will be reposted at BellSouth's discretion However, statewide performance must improve by at least 2% for benchmark measures and the z-score must improve by at least 0 5 for retail analogs at the sub-metric level to qualify for reposting

6 SQM Performance data will be reposted for a maximum of three months in arrears from date of detection As an example, should an error be discovered during the analysis of the May data month, and this error triggers a reposting, BellSouth will correct the data beginning with the month of detection (May) and the three months preceding – April, March and February

7 When updated SQM performance data has been reposted or when a payment error in PARIS has been discovered, BellSouth will recalculate applicable SEEM payments where technically feasible, for a maximum of three months in arrears from date of detection Recalculated SEEM payments due to reposted SQM data will be made for the same months that the applicable data was reposted The three month period for recalculating SEEM payments due to an error in PARIS will be determined in the same manner previously described for the SQM For example, should an error in PARIS be discovered for the data month of May, BellSouth will correct data for May and the three preceding months – April, March and February

8 Any adjustments for underpayment of Tier 1 and Tier 2 calculated remedies resulting from the application of this policy will be made consistent with the terms of the state-specific SEEM plan, including the payment of interest Any adjustments for overpayment of Tier 1 and Tier 2 remedies will be made at BellSouth's discretion

9 Any adjustments for underpayments resulting from application of this policy will be made in the next month's payment cycle after the recalculation is made The final current month PARIS reports will reflect the transmitted dollars, including adjustments for prior months where applicable Questions regarding the adjustments should be made in accordance with the normal process used to address CLEC questions related to SEEM payments

When a CLEC believes that an error in its specific data requires reposting where the above statewide thresholds have not been met, the CLEC is responsible for identifying such issues and requesting BellSouth to repost the data Any failure to repost inaccurate data should be brought to the attention of the Commission for resolution if it is estimated that the thresholds described in items 3, 4, or 5 have been met at the CLEC-specific level

Determination of when Reposting Policy Applies

As part of the Change Notification Process, BellSouth performs an analysis of impacts that are proposed to be made to Performance Measurement Application Platform (PMAP) code These impacts are used to identify changes to its reported SQM results

To determine this impact, BellSouth performs a query of the data warehouse to identify those records that would be impacted by the proposed change Once the number of records are identified, the measurement is recalculated to determine the impact This is the general framework for analysis - the specific steps used to evaluate the impact will vary with the issue being analyzed However, the following example may assist in understanding

Assume that service orders with an acitivity code of T were erroneously being included in a UNE-P disaggregation for Percent Missed Installation Appointments They should have been in another product disaggregation Further, assume that the number of records erronously included as UNEP is 110 records out of a total of 86,000 In this example, the numerator and denominator would both be reduced by 110 records and the zscore would be recalculated If the amount of the change was sufficient to meet criteria 2, 4 or 5 above, the Reposting policy will be invoked

Appendix E: Description of Raw Data and Other Supporting Data Files

BellSouth Service Quality Measurement Plan (SQMP) Raw (Supporting) Data Files (SDF) Other Supporting Data Files (OSDF)

I. Definitions and Overview

A. What is Raw Data?

Raw (Supporting) Data is supporting data or records captured in BellSouth Legacy Systems about activity initiated by CLECs or CLEC customers Raw (Supporting) Data has been transformed from legacy system data to information (data with meaning) In some cases this supporting data is a combination of requests and response records, orders and troubles or other combination that provide logical transaction information This supporting data has been normalized (converted from arcane system code to a more readable format) for easier use or, in some cases, the presentation is standardized so that the same data from different systems will be the same In some cases, intervals have been previously calculated and, in other cases, the interval start and stop times are available State, company, product, and other codes have been converted into English names In short, the presentation of the information has been made more "user friendly" to facilitate use by SMEs, auditors and CLECs

This supporting data represents all records that are used to calculate CLEC performance under the SQM sub-metrics

II. Raw (Supporting) Data – General

Raw (Supporting) Data Files (SDF)

Raw (Supporting) Data Files for CLEC data will be published on the PMAP website each month For the measures calculated in PMAP, these files will contain the CLEC initiated records required to replicate the report or reports as applicable These files will be present for those reports generated from data processed by PMAP Some reports are calculated outside of PMAP and the results are simply uploaded for posting These reports will have less detailed Supporting Data Files

Other Supporting Data Files (OSDF)

Other Supporting Data Files will also be provided upon CLEC request each month These files contain CLECs initiated data/records extracted from the legacy systems, but "excluded" from the measures in each segment of the SQMP reports (Ordering, Flow Through Detail, Provisioning and Maintenance) The OSDF will contain only records not included in one of the SDFs The CLEC will be able to access the request form by clicking on the OSDF folder in their section of the PMAP Web Site The requested data will be loaded into the file within 10 business hours The OSDF will also include partial and/or incomplete records if the CLEC owner can be identified The OSDF will be regional in scope (not state-specific) and will include records for all related Measurements The OSDF will not include records that are in any SDF These four files may be large and the CLEC will be responsible for having an appropriate computer and the software necessary to accept and make manipulation of the files possible

A. Raw Data (SDF) Records – OSS

For OSS Metrics:

Supporting data is provided for the following metrics

- OSS-1 [ARI] OSS Response Interval (Pre-Ordering/Ordering/Maintenance & Repair)
- OSS-2 [IA] Interface Availability (Pre-Ordering/Ordering/Maintenance & Repair)
- PO-2 [LMT] Loop Makeup – Response Time – Electronic

B. Raw Data (SDF) Records - Ordering

For Ordering Metrics:

Supporting data is provided for the following metrics

- O-2 [AKC] Acknowledgement Message Completeness
- O-8 [RI] Reject Interval
- O-9 [FOCT] Firm Order Confirmation Timeliness
- O-11 [FOCC] Firm Order Confirmation and Reject Response Completeness

As a general rule, all versions of transactions are provided in the Supporting Data Files Records for Service Requests that are related to a project, cancelled prior to being FOC'd or Clarified/Rejected, and versions of records not used in the reports will be placed into the Other Supporting Data File – Ordering

C. Raw Data (SDF) Records – Provisioning

For Provisioning Metrics:

Supporting data is provided for the following metrics

- P-1 [HOI] Held Order Interval
- P-2A [PJ48] Percentage of Orders Given Jeopardy Notices >= 48 Hours
- P-2B [PJ] Percentage of Orders Given Jeopardy Notices
- P-3 [MIA] Percent Missed Installation Appointments
- P-4 [OCI] Order Completion Interval
- P-5 [CNI] Average Completion Notice Interval
- P-7 [CCI] Coordinated Customer Conversions Interval – Hot Cut Duration
- P-7A [CCT] Coordinated Customer Conversions – Hot Cut Timeliness Percent within Interval
- P-7B [CCRT] Coordinated Customer Conversions – Average Recovery Time
- P-7C [CPT] Hot Cut Conversions - Percent Provisioning Troubles Received within 5 Days of a Completed Service Order
- P-7D [NCDD] Non-Coordinated Customer Conversions – Percent Completed and Notified on Due Date
- P-9 [PPT] Percent Provisioning Troubles within "X" Days of Service Order Completion
- P-11 [SOA] Service Order Accuracy
- P-13B [LOOS] LNP-Percent Out of Service < 60 Minutes
- P-13C [LAT] LNP-Percentage of Time BellSouth Applies the 10-Digit Trigger Prior to the LNP Order Due Date
- P-13D [LDT] LNP-Disconnect Timeliness (Non Trigger)

All service order activity that results from Service Requests generated by the CLEC and used in the calculation of a report will be furnished as a part of the Supporting Data Files Records for D, R, F, and M order types, as well as cancelled orders will be placed in the Other Supporting Data File – Provisioning

D. Raw Data (SDF) Records – M&R

For Maintenance and Repair (M&R) Metrics:

Supporting data is provided for the following metrics

- M&R-1 [MRA] Percent Missed Repair Appointments
- M&R-2 [CTRR] Customer Trouble Report Rate
- M&R-3 [MAD] Maintenance Average Duration
- M&R-4 [PRT] Percent Repeat Customer Troubles within 30 Days
- M&R-5 [OOS] Out of Service (OOS) > 24 Hours

All customer submitted reports used in the calculation of a metric will be furnished as a part of the Supporting Data Files Reports that are excluded, canceled, or in error, will be placed in the Other Supporting Data File - M&R Specifically not included are BellSouth generated tickets such as employee, auto-detect, and tickets associated with service order activity dispatches

E. Raw Data (SDF) Records – Other

For Other Metrics:

Billing:

Supporting data is provided for the following metrics

- B-1 [BIA]· Invoice Accuracy
- B-2 [BIT] Mean Time to Deliver Invoices
- B-5 [BUT]· Usage Data Delivery Timeliness
- B-10 [BEC] Percent Billing Adjustment Requests (BAR) Responded to Within 45 Business Days

The billing Supporting Data File used to create performance measurements for billing is provided for CLECs on the PMAP website This SDF along with the reports resulting from billing supporting data can be used for replicating the measures Any billing data used or not used in creating the billing measures is part of the CLEC's invoices sent to them on a monthly basis Any charges or adjustments are part of their individual invoices, which identify the nature of the charges or adjustments, whether credits or debits

Database Update Information - None

Trunk Group Performance – None

Collocation – None:

Supporting data is provided for the following metrics

- C-1 [ART] Collocation Average Response Time
- C-2 [AT] Collocation Average Arrangement Time
- C-3 [MDD] Collocation Percent of Due Dates Missed

Change Management - None

III. Supporting Data User Manual (SDUM) and Schema for Other Supporting Data Files (OSDF)

The SDUM and Schema can be found at URL (http //pmap bellsouth com) in the Documentation/Exhibits folder

Appendix F: BellSouth PMAP Data Notification Process

1 On the first business day of the month preceding the data month for which BellSouth proposes to make any change to the method by which its performance data is calculated, BellSouth will provide written notice of any such proposed changes (hereinafter referred to as "Proposed Data Changes") This notice will identify the affected measure(s), describe the proposed change, provide a reason for the proposed change, and outline its impact At the same time BellSouth will provide written notice of any known changes BellSouth is considering making to the method of calculating performance data for the following data month (hereinafter referred to as "Preliminary Data Changes")

2 No later than four business days after the written notice referenced above has been provided, BellSouth will conduct an industry conference call at which time the affected parties as well as the Commission can ask questions about either the Proposed Data Changes or the Preliminary Data Changes The call will be conducted from 2 00 to 5 00 p m (Eastern Time)

3 No later than ten (10) business days after the industry conference call, affected parties must file written comments with the Commission to the extent they have objections or concerns about the Proposed Data Changes

4 The Proposed Data Changes set forth in the written notice referenced above would be presumptively valid and deemed approved by the Commission effective thirty (30) calendar days after that notice unless the Commission staff directs BellSouth no to go forward with the changes

Appendix G: SQM Equity Determination

This document describes the approach utilized in the determination of Equity for mean, proportion, and rate measures within the BellSouth Single Report Structure (SRS) The statistical comparison of BST performance data to CLEC performance data is based upon the "Modified Z" methodology

A. Standard Error (S)

The Standard Error must be calculated for use as the denominator in the formula for the Z-Score The appropriate calculation of Standard Error is dependent on the measure type as shown below

MEAN:

$$S = StDev_{BST}\sqrt{\frac{1}{n_{BST}} + \frac{1}{n_{CLEC}}}$$

PROPORTION:

$$S = \sqrt{\hat{p}_{BST}\left(1 - \hat{p}_{BST}\right)\left(\frac{1}{n_{BST}} + \frac{1}{n_{CLEC}}\right)}$$

RATE:

$$S = \sqrt{\hat{r}_{BST}\left(\frac{1}{n_{BST}} + \frac{1}{n_{CLEC}}\right)}$$

n_{BST} = number of observations for BellSouth in current time period
n_{CLEC} = number of observations for CLECs in current time period
$StDev_{BST}$ = estimated standard deviation of BellSouth performance calculated using current time period's data
$\hat{p}_{BST}$ = estimated BellSouth performance proportion calculated using current time period's data
$\hat{r}_{BST}$ = estimated BellSouth performance rate calculated using current time period's data

B. Z-Score (Z)

Once the Standard Error has been calculated, the Z-Score is then calculated using the formula below

$$Z = \frac{\text{BST}^* - CLEC^*}{S}$$

BST^* = estimated BellSouth mean ($\overline{X}_{BST}$), proportion ($\hat{p}_{BST}$), or rate ($\hat{r}_{BST}$) calculated using the current time period's data

$CLEC^*$ = estimated CLEC mean ($\overline{X}_{CLEC}$), proportion ($\hat{p}_{CLEC}$), or rate ($\hat{r}_{CLEC}$) calculated using the current time period's data

C. Equity Determination

After calculation of the Z-Score, Equity is determined using the criteria shown in the table below

	Better Performance ↑	Better Performance ↓
YES	Z <= 1 645	Z >= -1 645
NO	Z > 1 645	Z < -1 645

Exception: A Z-Score value cannot be determined if a Standard Error value is 0 In that case, Equity is determined using the "Direct Comparison" criteria shown in the table below

	Better Performance ↑	Better Performance ↓
YES	CLEC Measure >= BST Measure	CLEC Measure <= BST Measure
NO	CLEC Measure < BST Measure	CLEC Measure > BST Measure

Appendix H: Special Access Measurements

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Reporting Dimensions

CLEC or IXC Carrier specific total, with the following reporting dimensions for all measurements

- Special Access disaggregated by bandwidth
  - Sub Totaled by State
  - Totaled by BellSouth

Comparison reports are required for.

- CLEC/ IXC Carrier Aggregate
- BellSouth Long Distance (BSLD) Aggregate

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 BellSouth 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: Transmission path requests pursuant to an Interconnection Agreement for Unbundled Network Elements (UNE) are excluded from these Performance Measures

Reporting Period: The reporting period is the calendar month, unless otherwise noted, with all averages or percentages displayed to one decimal point

ORDERING

Measurement: SA-1 FOC Receipt

Description

The Firm Order Confirmation (FOC) is the BellSouth response to an Access Service Request (ASR), whether an initial or supplement ASR, that provides the CLEC or IXC Carrier with the specific Due Date on which the requested circuit or circuits will be installed BellSouth will conduct a minimum of an electronic facilities check to ensure due dates delivered in FOCs can be relied upon The performance standard for FOCs received within the standard interval is expressed as a percentage of the total FOCs received during the reporting period A diagnostic distribution is required along with a count of ASRs withdrawn at BellSouth's request due to a lack of BellSouth facilities or otherwise

Calculation Methodology

Percent Meeting Performance Standard

- [Count FOCs received where (FOC Receipt Date – ASR Received Date) < = Performance Standard] / Total FOCs received during reporting period x 100

FOC Receipt - Distribution

- (FOC Receipt Date – ASR Received Date), for each FOC received during reporting period, distributed by

  0 days, >0 - <=1day, >0 day - <=2 days, >0 day - <= 5 days, > 2 days - <= 10 days, > 10 days

ASRs Withdrawn at BellSouth Request due to a lack of BellSouth Facilities or Otherwise:

- Count of ASRs, which have not yet received a FOC. Withdrawn at BellSouth's Request, during the current reporting period, due to a lack of BellSouth facilities or otherwise

Business Rules

1 Counts are based on each instance of a FOC received from BellSouth 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

Exclusions

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

Levels of Disaggregation

- DS0
- DS1
- DS3 (Non Optical)
- DS3 (Optical OCn)

Performance Standard

• Percent FOCs Received within Standard	- DS0 >= 98 0% within 2 business days - DS1 >= 98 0% within 2 business days - DS3 >= 98 0% within 5 business days - OCn - ICB (Individual Case Basis)
• FOC Receipt Distribution	- Diagnostic
• ASRs Withdrawn at BellSouth's Request Due to a Lack of BellSouth Facilities or Otherwise .	- Diagnostic

ORDERING

Measurement: SA-2 FOC Receipt Past Due

Description

The FOC Receipt Past Due measure tracks all ASR requests that have not received an FOC from BellSouth within the expected FOC receipt interval, as of the last day of the reporting period and do not have an open, or outstanding, Query/Reject. This measure gauges the magnitude of late FOCs A distribution of these late FOCs, along with a report of those late FOCs that do have an open Query/Reject, is required for diagnostic purposes

Calculation Methodology

Percent FOC Receipt Past Due - Without Open Query/Reject

- Sum of ASRs without a FOC Received, and a Query/Reject is not open, where (End of Reporting Period – ASR Received Date >Expected FOC Receipt Interval) / Total number of ASRs received during reporting period x 100

FOC Receipt Past Due - Without Open Query/Reject - Distribution

- [(End of Reporting Period – ASR Received date) – (Expected FOC Receipt Interval)] for ASRs without a FOC received and a Query/Reject is not open with the CLEC or IXC Carrier, distributed by

  0 days, >0 - <= 5 days, >5 days - <= 10 days, > 10 days - <= 20 days, > 20 days - <= 30 days, > 30 days - <= 40 days, > 40 days

Percent FOC Receipt Past Due - With Open Query/Reject

- Sum of ASRs without a FOC Received, and a Query/Reject is open, where (End of Reporting Period – ASR Sent Date > Expected FOC Receipt Interval) / Total number of ASRs received during reporting period x 100

Business Rules

1 All counts are based on the latest ASR request sent to BellSouth Where one or more subsequent ASRs have been sent, only the latest ASR would be recorded as Past Due if no FOC had yet been returned
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

Exclusions

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

Levels of Disaggregation

- DS0
- DS1
- DS3 (Non Optical)
- DS3 (Optical OCn)

Performance Standard

- Percent FOC Receipt Past Due - Without Open Query/Reject < 2 0 % FOC Receipt Past Due
- FOC Receipt Past Due – Without Open Query/Reject – Distribution - Diagnostic
- Percent FOC Receipt Past Due - With Open Query/Reject - Diagnostic

ORDERING

Measurement: SA-3 Offered Versus Requested Due Date

Description

The Offered Versus Desired Due Date measure reflects the degree to which BellSouth is committing to install service on the CLEC or IXC Carrier Desired Due Date (CDDD), when a Due Date desired is equal to or greater than the-BellSouth stated interval A distribution of the delta, the difference between the CDDD and the Offered Date, for these FOCs is required for diagnostic purposes

Calculation Methodology

Percent Offered with CLEC or IXC Carrier Requested Due Date

- [Count of ASRs where (FOC Due Date = CDDD] / [Total number of ASRs where (CDDD – ASR Received Date) = >BellSouth Stated Interval] x 100

Offered versus Requested Interval Delta – Distribution

- [(Offered Due Date – CDDD) where (CDDD – ASR Received Date) = > BellSouth Stated Interval] for each FOC received during the reporting period, distributed by

  0 days, >0 - <= 5 days, >5 days - <= 10 days, > 10 days - <= 20 days, > 20 days - <= 30 days, > 30 days - <= 40 days, > 40 days

Business Rules

1 Counts are based on each instance of a FOC received from BellSouth 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

Exclusions

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

Levels of Disaggregation

- DS0
- DS1
- DS3 (Non Optical)
- DS3 (Optical OCn)

Performance Standard

- Percent Offered with CDDD (where CDDD => BellSouth Stated Interval) = 100%
- Offered versus Requested Interval Delta – Distribution - Diagnostic
- BellSouth Stated Intervals To be determined by BellSouth

PROVISIONING

Measurement: SA-4 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 received Customer Not Ready (CNR) situations are defined as Customer Not Ready (SR), No Access (SA), Customer Requests a Later Date (SL), and Customer Other (SO) which 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

- [(Count of Circuits Completed on or before BellSouth Committed Due Date + Count of Circuits Completed after FOC Due Date with a verifiable CNR code) / (Count of Circuits Completed in Reporting Period)] x 100

Percent on Time Performance to FOC Due Date – Without CNR Consideration

- [(Count of Circuits Completed on or before BellSouth Committed Due Date) / (Count of Circuits Completed in Reporting Period)] x 100

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 received and the associated FOC Due Date received from BellSouth
2 Selection is based on circuits completed by BellSouth during the reporting period An ASR may provision more than one circuit and BellSouth may break the ASR into separate internal orders, however, the service order is not considered completed for measurement purposes until all circuits are completed
3 BellSouth Completion Date is the date upon which BellSouth completes installation of the circuit, as noted on a completion notice to the CLEC or IXC Carrier
4 Projects are included
5 A Customer Not Ready (CNR) is defined as a verifiable situation beyond the control of BellSouth that prevents BellSouth from completing an order, including the following CLEC or IXC Carrier is not ready, end user is not ready, connecting company, or CPE (Customer Premises Equipment) supplier, is not ready BellSouth must ensure that established procedures are followed to notify the CLEC or IXC Carrier of a CNR situation and allow a reasonable period of time for the CLEC or IXC Carrier to correct the situation

Exclusions

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

Levels of Disaggregation

- DS0
- DS1
- DS3 (Non Optical)
- DS3 (Optical OCn)

Performance Standard

- Percent On Time to FOC Due Date - With CNR Consideration = > 98 0 % On Time
- Percent On Time to FOC Due Date - Without CNR Consideration - Diagnostic

PROVISIONING

Measurement: SA-5 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 A breakdown of delay days caused by a lack of BellSouth facilities is required for diagnostic purposes

Calculation Methodology

Average Days Late

- Σ [Circuit Completion Date–BellSouth Committed Due Date (for all Circuits Completed Beyond BellSouth Committed Due Date without a CNR code)] / (Count of Circuits Completed Beyond BellSouth Committed Due Date without a CNR code)

Days Late Distribution

- Circuit Completion Date –BellSouth Committed Due Date (for all Circuits Completed Beyond BellSouth Committed Due Date without a CNR code) distributed by

  < = 1 day, 0 - < 3 days, >1 - < =5 days, >5 - < =10 days, >10 - < =20 days, >20 - < =30 days, >30 - <=40 days, >40 days

Average Days Late Due to a Lack of BellSouth Facilities

- Σ [Circuit Completion Date –BellSouth Committed Due Date (for all Circuits Completed Beyond BellSouth Committed Due Date without a CNR code and due to a Lack of BellSouth Facilities] / (Count of Circuits Completed Beyond BellSouth Committed Due Date without a CNR code and due to a Lack of BellSouth Facilities)

Business Rules

1 Measures are based on the latest valid ASR received and the associated FOC Due Date received from the BellSouth
2 Selection is based on circuits completed by BellSouth during the reporting period An ASR may provision more than one circuit and BellSouth may break the ASR into separate internal orders, however, the service order 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
5 A Customer Not Ready (CNR) is defined as a verifiable situation beyond the control of BellSouth that prevents BellSouth from completing an order, including the following CLEC or IXC Carrier is not ready, end user is not ready, connecting company, or CPE (Customer Premises Equipment) supplier, is not ready BellSouth must ensure that established procedures are followed to notify the CLEC or IXC Carrier of a CNR situation and allow a reasonable period of time for the CLEC or IXC Carrier to correct the situation

Exclusions

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

Levels of Disaggregation

- DS0
- DS1
- DS3 (Non Optical)
- DS3 (Optical OCn)

Performance Standard

- Average Days Late < 3 0 Days
- Days Late Distribution . . - Diagnostic
- Average Days Late Due to a Lack of BellSouth Facilities - Diagnostic

PROVISIONING

Measurement: SA-6 Average Intervals - Requested/Offered/Installation

Description

This measure captures three important aspects of the provisioning process and displays them in relation to each other The Average CLEC or IXC Carrier Requested Interval, the Average BellSouth Offered Interval, and the Average Installation Interval, provide a comprehensive view of provisioning, with the ultimate goal of having these three intervals equivalent

Calculation Methodology

Average CLEC or IXC Carrier Requested Interval

- Sum (CDDD – ASR Received Date) / Total Circuits Completed during reporting period

Average BellSouth Offered Interval

- Sum (FOC Due Date – ASR Received Date) / Total Circuits Completed during reporting period

Average Installation Interval

- Sum (BellSouth Completion Date – ASR Received Date) / Total Circuits Completed during reporting period

Business Rules

1 Measures are based on the last ASR received and the associated FOC Due Date received from BellSouth
2 Selection is based on circuits completed by BellSouth during the reporting period An ASR may provision more than one circuit and BellSouth 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
5 The Average Installation Interval includes all completions

Exclusions

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

Levels of Disaggregation

- DS0
- DS1
- DS3 (Non Optical)
- DS3 (Optical OCn)

Performance Standard

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

PROVISIONING

Measurement: SA-7 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 a FOC Due Date but the date has passed Results are separated into those held for BellSouth reasons and those held for CLEC or IXC Carrier reasons (CNRs), with a breakdown, for diagnostic purposes, of Past Due Circuits due to a lack of BellSouth facilities 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

Calculation Methodology

Percent Past Due Circuits

- [(Count of all circuits not completed at the end of the reporting period > 5 days beyond the FOC Due Date, grouped separately for Total BellSouth Reasons, Lack of BellSouth Facility Reasons, and Total CLEC/Carrier Reasons) / (Total uncompleted circuits past FOC Due Date, for all missed reasons, at the end of the reporting period)] x 100

Past Due 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 day, >1 - < =5 days, 0 days - < = 5 days, >5 - < =10 days, >10 - < =20 days, >20 - < =30 days, >30 - <=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 Past Due Circuits is based on the most recent ASR and associated FOC Due Date
2. An ASR may provision more than one circuit and BellSouth may break the ASR into separate internal orders, however, the service order 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
5 A Customer Not Ready (CNR) is defined as a verifiable situation beyond the control of BellSouth that prevents BellSouth from completing an order, including the following CLEC or IXC Carrier is not ready, end user is not ready, connecting company, or CPE (Customer Premises Equipment) supplier, is not ready BellSouth must ensure that established procedures are followed to notify the CLEC or IXC Carrier of a CNR situation and allow a reasonable period of time for the CLEC or IXC Carrier to correct the situation

Exclusions

- Unsolicited FOCs
- Disconnect ASRs
- Record ASRs

Levels of Disaggregation

- DS0 / DS1 / DS3 (Non Optical) / DS3 (Optical OCn)

Performance Standard

- Percent Past Due Circuits - Total BellSouth Reasons — < 3 0 % > 5 days beyond FOC Due Date
- Percent Past Due Circuits - Due to Lack of BellSouth Facilities — - Diagnostic
- Percent Past Due Circuits - Total CLEC Reasons — - Diagnostic
- Past Due Circuits Distribution — - Diagnostic
- Percent Cancellation After FOC Due Date — - Diagnostic

PROVISIONING

Measurement: SA-8 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

- [Count (trouble reports within 30 Calendar Days of Installation) / (Total Number of Circuits Installed in the Report Period)] x 100

Business Rules

1 BellSouth Completion Date is the date upon which BellSouth completes installation of the circuit, as noted on a completion advice to the CLEC or IXC Carrier
2 The calculation for the following 30 calendar days is based on the creation date of the trouble ticket

Exclusions

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

Levels of Disaggregation

- DS0
- DS1
- DS3 (Non Optical)
- DS3 (Optical OCn)
- Below DS3 (DS0 + DS1)
- DS3 and Above (DS3 + OCn)

Performance Standard

- New Installation Trouble Report Rate . .. <= 1 0 trouble reports per 100 circuits installed

MAINTENANCE & REPAIR

Measurement: SA-9 Failure Rate

Description

Failure Rate measures the overall quality of the circuits being provided by the BellSouth 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

Calculation Methodology

Failure Rate – Annualized:

Failure Rate = (a / b)*100

- a = Count of trouble reports resolved during a report period
- b = Number of circuits in service at the end of the report period

Failure Rate Annualized = (c / d)*100

- c = Average count of trouble reports closed per month during the past 12 months
- d = Average number of circuits in service per month for the past 12 months

Business Rules

1 A trouble report/ticket is any record (whether paper or electronic) used by BellSouth for the purposes of tracking related action and disposition of a service repair or maintenance situation
2 A trouble is resolved when BellSouth issues notice to the CLEC or IXC Carrier that the circuit has been restored to 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 the CLEC's or IXC Carrier's request
- CLEC, IXC Carrier, CPE (Customer Premises Equipment), or other customer caused troubles
- BellSouth trouble reports associated with administrative service
- CLEC or IXC Carrier requests for informational tickets
- Tickets used to track referrals of misdirected calls

Levels of Disaggregation

- Below DS3 (DS0 + DS1)
- DS3 and Above (DS3 + OCn)
- DS0
- DS1
- DS3 (Non Optical)
- DS3 (Optical Ocn)

Performance Standard

- Failure Rate Annualized
  - Below DS3 <= 10 0%
  - DS3 and Above <= 10 0%

MAINTENANCE & REPAIR

Measurement: SA-10 Mean Time to Restore

Description

The Mean Time To Restore interval measures the promptness in restoring circuits to operating levels when a problem or trouble is received by BellSouth Calculation is the elapsed time from the CLEC or IXC Carrier submission of a trouble report to BellSouth to the time BellSouth closes the trouble, less any Customer Hold Time or Delayed Maintenance Time due to valid customer, CLEC, or IXC Carrier caused delays A breakdown of the percent of troubles outstanding greater than 24 hours, and the Mean Time to Restore of those troubles recorded as NTF / Test OK, is required for diagnostic purposes

Calculation Methodology

Mean Time To Restore

- Σ [(Date and Time of Trouble Ticket Resolution Closed to the CLEC or IXC Carrier – Date and Time of Trouble Ticket Received by BellSouth) – (Customer Hold Times)] / (Count of Trouble Tickets Resolved in Reporting Period)]

% Out of Service Greater than 24 hrs

- [Count of Troubles where (Date and Time of Trouble Ticket Resolution Closed to the CLEC or IXC Carrier – Date and Time of Trouble Ticket Received by BellSouth) – (Customer Hold Times) is > 24 hrs / (Count of Trouble Tickets Resolved in Reporting Period)] x 100

Mean Time To Restore – NTF / Test OK

- Σ [(Date and Time of Trouble Ticket Resolution Closed to the CLEC or IXC Carrier as NTF /Test OK – Date and Time of Trouble Ticket Referred to BellSouth) – (Customer Hold Times)] / (Count of Trouble Tickets Resolved in Reporting Period as NTF /Test OK)]

Business Rules

1 A trouble report or trouble ticket is any record (whether paper or electronic) used by BellSouth 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 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 A trouble is "resolved" when BellSouth issues notice to the CLEC or IXC Carrier that the customer's service is restored to operating parameters
5 Customer Hold Time or Delayed Maintenance Time resulting from verifiable situations of no access to the end user's premises, or other CLEC or IXC Carrier caused delays, such as holding the ticket open for monitoring, is deducted from the total resolution interval

Exclusions

- Trouble tickets that are canceled at the CLEC's or IXC Carrier's request
- CLEC, IXC Carrier, CPE (Customer Premises Equipment), or other customer caused troubles
- BellSouth trouble reports associated with administrative service
- CLEC or IXC Carrier requests for informational tickets
- Trouble tickets created for tracking and/or monitoring circuits
- Tickets used to track referrals of misdirected calls

Levels of Disaggregation

- Below DS3 (DS0 + DS1)
- DS3 and Above (DS3 + OCn)
- DS0
- DS1
- DS3 (Non Optical)
- DS3 (Optical OCn)

Performance Standard

• Mean Time to Restore	- Below DS3 <= 2 0 Hours - DS3 and Above <= 1 0 Hour
• % Out of Service > 24 Hrs	- Diagnostic
• Mean Time to Restore –NTF/ Test OK	- Diagnostic

MAINTENANCE & REPAIR

Measurement: SA-11 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:

- [(Count of Current Trouble Reports with a previous trouble, reported on the same circuit, in the preceding 30 calendar days)] / (Number of Reports in the Report Period) x 100

Business Rules

1 A trouble report or trouble ticket is any record (whether paper or electronic) used by BellSouth for the purposes of tracking related action and disposition of a service repair or maintenance situation
2 A trouble is resolved when BellSouth issues notice to the CLEC or IXC Carrier that the circuit has been restored to operating parameters
3 If a trouble ticket was closed out previously with the disposition code classifying it as NTF/TOK, then the second trouble must be counted as a repeat trouble report if it is resolved to BellSouth 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 the CLEC's or IXC Carrier's request
- CLEC, IXC Carrier, CPE (Customer Premises Equipment), or other customer caused troubles
- BellSouth 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

- Below DS3 (DS0 + DS1)
- DS3 and Above (DS3 + OCn)
- DS0
- DS1
- DS3 (Non Optical)
- DS3 (Optical OCn)

Performance Standards

- Repeat Trouble Report Rate
  - Below DS3 <= 6 0%
  - DS3 and Above <= 3 0%

GLOSSARY

Term	Definition
Access Service Request (ASR)	A request to BellSouth to order new service, or request a change to existing service, which provides access to the local exchange company's network, under terms specified in the local exchange company's special or switched access tariffs
Business Days	Monday through Friday excluding holidays
CDDD	Customer Desired Due Date
Customer Not Ready (CNR)	A verifiable situation beyond the normal control of BellSouth that prevents BellSouth from completing an order, including the following CLEC or IXC Carrier is not ready, end user is not ready, connecting company, or CPE (Customer Premises Equipment) supplier, is not ready
(SA)	No access to subscriber premises
(SR)	Customer Not Ready
(SL)	Customer Requests Later Date
(SO)	Customer Other
Facility Check	A pre-provisioning check performed by BellSouth, in response to an access service request, to determine the availability of facilities and assign the installation date
Firm Order Confirmation (FOC)	The notice returned from BellSouth, in response to an Access Service Request from a CLEC or IXC Carrier that confirms receipt of the request, that a facility has been made, and that a service request has been created with an assigned due date
NTF	No Trouble Found
Unsolicited FOC	An Unsolicited FOC is a supplemental FOC issued by BellSouth to change the due date or for other reasons, although no change to the ASR was requested by the CLEC or IXC Carrier
Project	Service requests that exceed the line size and/or level of complexity that would allow the use of standard ordering and provisioning processes
Query/Reject	BellSouth response to an ASR requesting clarification or correction to one or more fields on the ASR before an FOC can be issued
Repeat Trouble	Trouble that reoccurs on the same telephone number/circuit ID within 30 calendar days
Supplement ASR	A revised ASR that is sent to change due dates or alter the original ASR request A "Version" indicator related to the original ASR number tracks each Supplement ASR
TOK	Test OK

Symbols Used In Calculations

Σ
A mathematical symbol representing the sum of a series of values following the symbol

-
A mathematical operator representing subtraction

+
A mathematical operator representing addition

/
A mathematical operator representing division

<
A mathematical symbol that indicates the metric on the left of the symbol is less than the metric on the right

<=
A mathematical symbol that indicates the metric on the left of the symbol is less than or equal to the metric on the right

>
A mathematical symbol that indicates the metric on the left of the symbol is greater than the metric on the right

>=
A mathematical symbol that indicates the metric on the left of the symbol is greater than or equal to the metric on the right

( )
Parentheses, used to group mathematical operations which are completed before operations outside the parentheses

CERTIFICATE OF SERVICE

I hereby certify that on April 29, 2005, a copy of the foregoing document was served on the following, via hand delivery, facsimile, overnight, electronic mail or US Mail, addressed as follows:

[ ] Hand
[ ] Mail
[ ] Facsimile
[ ] Overnight
[x] Electronic

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