BellSouth Telecommunications, Inc.
Suite 2101
333 Commerce Street
Nashville, Tennessee 37201-3300

615 214-6301
Fax 615 214-7406

Guy M. Hicks
General Counsel

BELLSOUTH

May 22, 2000

VIA HAND DELIVERY

David Waddell, Executive Secretary
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, TN 37238

Re: *Petition for Arbitration of ITC^DeltaCom Communications, Inc. with BellSouth Telecommunications, Inc. pursuant to the Telecommunications Act of 1996*
Docket No. 99-00430

Dear Mr. Waddell:

Enclosed are the original and thirteen copies of the following documents filed on behalf of BellSouth Telecommunications, Inc.

1. Motion for Reconsideration

2. Final Best Offers

3. Affidavit of David C. Coon

Copies of the enclosed are being provided to counsel of record for all parties.

Very truly yours,

Guy M. Hicks

GMH:ch
Enclosure

213576

CERTIFICATE OF SERVICE

I hereby certify that on May 22, 2000, copies of the foregoing documents were served on the parties of record, via the method indicated:

[✓] Hand
[ ] Mail
[ ] Facsimile
[ ] Overnight

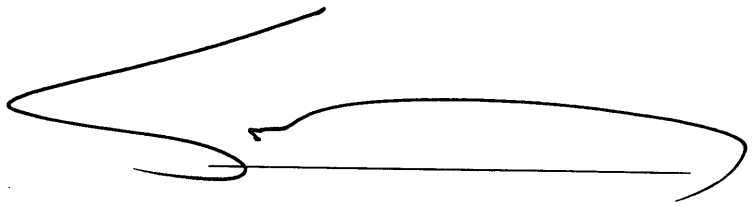
Gary Hotvedt, Esquire
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, TN 37243-0500

[ ] Hand
[✓] Mail
[ ] Facsimile
[ ] Overnight

H. LaDon Baltimore, Esquire
Farrar & Bates
211 Seventh Ave. N, # 320
Nashville, TN 37219-1823

[ ] Hand
[✓] Mail
[ ] Facsimile
[ ] Overnight

Nanette S. Edwards, Esquire
ITC^DeltaCom
4092 South Memorial Parkway
Huntsville, AL 35802



BEFORE THE TENNESSEE REGULATORY AUTHORITY
Nashville, Tennessee

IN RE: ***Petition by ITC^DeltaCom Communications, Inc. for Arbitration of Certain Unresolved Issues in Interconnection Agreement Negotiations Between ITC^DeltaCom and BellSouth Telecommunications, Inc.***

Docket No. 99-00430

BELLSOUTH TELECOMMUNICATIONS, INC.'S FINAL BEST OFFERS

I. INTRODUCTION

Pursuant to the rulings on April 4, 2000 of the Tennessee Regulatory Authority ("Authority"), acting as Arbitrators, BellSouth Telecommunications, Inc. ("BellSouth") respectfully submits and requests approval of its Final Best Offers to ITC^DeltaCom Communications, Inc. ("DeltaCom") on Issue 1(a). The specific contract language reflecting BellSouth's Final Best Offers on this issue is included in BellSouth's "Service Performance Measurements and Enforcement Mechanisms" proposal, which is attached as Attachment 1.

BellSouth's proposal is the culmination of discussions between BellSouth and the staff of the Federal Communications Commission ("FCC"), which began after the FCC denied BellSouth's second petition for long distance authority in Louisiana. In its order denying that petition, the FCC expressed the view that it would be in the public interest for BellSouth to establish a system of self-effectuating enforcement measures, which would ensure that BellSouth does not backslide in the quality of the service it provides to Competing Local Exchange Carriers ("CLECs") after long distance authority is granted. *See In re: Application of BellSouth Corporation, et al, for Provision of In-Region, InterLATA Services in Louisiana,* CC Docket No. 98-121, ¶ 364 (Oct. 13, 1998).

BellSouth's proposal incorporates the third iteration of BellSouth's "Voluntary Self-Effectuating Enforcement Mechanisms" ("VSEEM III") that reflects FCC desired characteristics concerning a self-effectuating enforcement mechanism, addresses CLEC comments about enforcement mechanisms, and takes into account the collaborative work effort by various state public service commissions, including the Louisiana Public Service Commission, the New York Public Service Commission, and the Texas Public Service Commission. It is a comprehensive plan that utilizes progressive statistical methods to assess parity of service for a key set of outcome-based measures and contains both monetary and non-monetary incentives that escalate with the magnitude and duration of the performance failure.

BellSouth's "Service Performance Measurements and Enforcement Mechanisms" proposal is available to all CLECs. In fact, several facilities-based carriers, including ICG Communications, Inc., e.spire Communications, Inc., and KMC Telecom, Inc., have agreed to incorporate this proposal in their respective interconnection agreements, thereby avoiding arbitration of the performance measurement and enforcement mechanism issue. Coon Affidavit ¶ 17.

One of the most contentious aspects of this issue has been when the enforcement mechanisms should take effect. Consistent with decisions of the FCC and the purpose of self-effectuating enforcement mechanisms (i.e., to prevent "back sliding" after long distance authority has been granted), BellSouth believes that the remedies should not apply until after BellSouth receives long distance authority. However, in the spirit of compromise and consistent with the agreements reached with other CLECs, BellSouth will agree that payments to DeltaCom for deficient performance will apply in all of BellSouth's states once BellSouth obtains long distance authority in one state. For example, under BellSouth's proposal, when BellSouth's

application for long distance authority is granted in Georgia, DeltaCom will be entitled to receive payments for deficient performance by BellSouth in Georgia as well as Tennessee in addition to BellSouth's other seven states. BellSouth believes that this approach is reasonable and should be adopted by the Arbitrators.[1]

II. DISCUSSION

A. The Electronic Medium To Be Used In Providing DeltaCom With Access To Performance Reports And Data.

1. BellSouth's proposed language

BellSouth's proposed language is set forth in Section 2 of Attachment 1.

2. BellSouth's rationale

Performance reports for all BellSouth SQMs are currently available electronically on a monthly basis via BellSouth's web-site at https://pmap.bellsouth.com. This web-site also allows DeltaCom to access electronically the raw data underlying those reports to the extent such reports are derived from BellSouth's Performance Measurement and Analysis Platform ("PMAP"), which is the system BellSouth uses to collect, process, and report performance data. This would include the most critical ordering, provisioning, and maintenance & repair measurements in which CLECs generally are interested, including, but not limited to, FOC Timeliness, Reject Interval, Percent Missed Installation Appointments, Average Completion Interval Order Completion Interval Distribution, Missed Repair Appointments, Customer Trouble Report Rate, and Maintenance Average Duration. Coon Affidavit ¶ 67.

[1] This is not to say that DeltaCom is without a remedy prior to BellSouth's obtaining long distance authority. In addition to remedies that are available to DeltaCom under federal and state law to the extent BellSouth fails to comply with its statutory and contractual obligations, BellSouth and DeltaCom have agreed upon language that would entitle DeltaCom to assess charges on BellSouth in the event BellSouth fails to complete a loop conversion at the scheduled time and DeltaCom dispatches a technician.

While every performance report is available electronically, BellSouth does not have the capability to make available electronically the raw data that is used to generate reports outside of PMAP. This would include the raw data for the regional reports that are not specific to a single CLEC, which cannot be efficiently generated electronically. The measurements that reflect the Speed of Answer in the Ordering Center and Speed of Answer in the Maintenance Center are a good example. These measurements reflect the time during which a call in queue until a BellSouth representative answers the call. These work centers are regional in nature and serve all CLECs, which means that numerous calls are received each month. Although each call is individually timed and the averages for the month are posted on the SQM reports, it is not reasonably possible to electronically identify each and every CLEC call underlying these SQM reports. Coon Affidavit ¶ 68.[2]

However, the fact that raw data is not available electronically does not mean that it is not subject to review. In fact, KPMG is currently auditing the raw data underlying BellSouth's SQMs in conjunction with the evaluation of BellSouth's OSS in Georgia, and similar audits are planned in Florida and Louisiana. In addition, both BellSouth's SQMs and VSEEM III proposal include audit mechanisms which will ensure that BellSouth is reporting its performance accurately. Coon Affidavit ¶ 70.

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[2] While it would be possible for BellSouth to manually load each piece of data so that it could be reviewed electronically, this would be an incredibly time consuming and expensive process. BellSouth should not be required to engage in such a process. First, BellSouth is a leader in the industry in terms of making raw data available electronically for review by CLECs, and the access afforded by BellSouth's web-side is unparalleled in the industry. Second, CLECs generally have demonstrated very little interest in accessing PMAPs, let alone the raw data that is currently available. For example, between April through December 1999, an average of only 12 CLECs accessed PMAP on a monthly basis to generate five or more reports, which represents only 2% of the CLECs in BellSouth's region. Coon Affidavit ¶ 69.

For those measurements ordered by the Arbitrators that must be produced manually, BellSouth can provide an electronic version by e-mail. This would include the measurements relating to BellSouth's performance with respect to Bona Fide Requests. Coon Affidavit ¶ 71.[3]

B. The Process To Be Utilized In Determining BellSouth's Compliance Or Noncompliance With The Standards And/Or Benchmarks.

1. BellSouth's proposed language

BellSouth's proposed language is set forth in Section 4 and Exhibits C and D to Attachment 1.

2. BellSouth's rationale

The process to be utilized in assessing BellSouth's performance depends upon the standard against which the performance is being measured. In most cases, BellSouth's performance will be measured against a parity standard, which is used when analogous processes or services exist between BellSouth and DeltaCom. With respect to parity standards, BellSouth proposes to use a statistical method developed by independent statisticians engaged by BellSouth and Dr. Colin Mallows of AT&T Research Laboratories as part of a lengthy collaborative process conducted under the auspices of the Louisiana Public Service Commission. This statistical method is explained in detail in Exhibits C and D to Attachment 1. In those relatively limited instances where there is no BellSouth analogous process or service offering, BellSouth has established benchmarks to determine compliance by comparing BellSouth's performance for DeltaCom against a predefined benchmark.

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[3] BellSouth has filed a motion seeking reconsideration of the Arbitrators' decision to require modifications to BellSouth's SQMs, including adding measurements concerning BellSouth's performance with respect to Bona Fide Requests. Nothing herein should be construed as a waiver of BellSouth's rights in seeking reconsideration or in seeking judicial review of any decision in this arbitration, to the extent necessary.

There also is a category of measurements that qualify as "Parity by Design." "Parity by Design" indicates an underlying process or activity that is performed by BellSouth in such a manner that it cannot distinguish between performance to CLEC end users and performance to BellSouth end users. For example, E911 database updates are performed by a third-party vendor who cannot differentiate between CLEC records and BellSouth records. Likewise, many OSS systems treat all queries the same, regardless of whether they are generated by BellSouth or by a CLEC. Measurements identified as "Parity by Design" do not require either a retail analogue or benchmark.

C. The Standards Or Benchmarks That Should Apply For Each Performance Measurement.

1. BellSouth's proposed language

BellSouth's proposed language is set forth in Section 4 and Exhibit B to Attachment 1.

2. BellSouth's rationale

BellSouth has proposed comprehensive retail analogues and benchmarks that are based on an examination of performance data produced by BellSouth over the past two years. Most measurements are based on retail analogues where applicable, and BellSouth believes that its proposed analogues and benchmarks fairly balance the interests of DeltaCom and BellSouth.

D. Enforcement Mechanisms.

1. BellSouth's proposed language

BellSouth's proposed language is set forth in Attachment 1.

2. BellSouth's rationale

BellSouth has proposed comprehensive enforcement mechanisms that the Authority should adopt for inclusion in BellSouth's Interconnection Agreement with DeltaCom. This same enforcement mechanisms proposal has been adopted by several other CLECs, including ICG,

e.spire, and KMC. This proposal has several noteworthy features, which are discussed briefly below.

First, BellSouth's enforcement mechanisms feature a multi-tiered structure that serves as a powerful incentive for BellSouth to maintain high levels of performance for all CLECs that is at least equal to services provided to BellSouth's retail customers, after Section 271 approval. Tiers 1 and 2 are monetary in nature, while Tier-3 is an escalating point representing the ultimate non-monetary incentive for BellSouth – suspension of long distance marketing activities. Each Tier operates independently, so the onset of a Tier-2 remedy will not cease payout on Tier-1 remedies, nor Tier-3 on Tiers 1 or 2.

Tier-1 Enforcement Mechanisms are self-executing liquidated damages paid directly to DeltaCom when BellSouth delivers non-compliant performance for any month as calculated by BellSouth. Tier-1 contains 37 submetrics that are all evaluated and payable on a monthly basis. The decision point (regarding the pass or fail status of a measure) is determined by DeltaCom's results of the overall test statistic and balancing critical value when parity is the standard. This decision is made at a point where "like-to-likes" have been tested, random variation has been considered, problems around masking discrimination have been solved, and probability errors are accounted for. If a performance failure has occurred, BellSouth will make Tier-1 payments to DeltaCom in those "like-to-like" areas where potential discrimination was detected, based on the magnitude and duration of BellSouth's performance failure.

Tier-2 Enforcement Mechanisms are assessments paid directly to the Authority or its designee. Tier 2 Enforcement Mechanisms are triggered by three consecutive monthly failures in a quarter in which BellSouth performance is out of compliance or does not meet the benchmark for the aggregate of all CLEC data. Tier-2 contains 42 submetrics that are all

evaluated monthly and payable on a quarterly basis. The decision point (regarding the pass or fail status of a measure) is determined by the CLEC aggregate results of the overall test statistic and balancing critical value when parity is the standard. This decision is made at a point where "like-to-likes" have been tested, random variation has been considered, problems around masking discrimination have been solved, and probability errors are accounted for. If an industry performance failure has occurred, BellSouth will make Tier-2 payments to the Authority in those "like-to-like" areas where potential discrimination was detected, based on the magnitude of BellSouth's performance failure.[4]

Tier-3 Enforcement Mechanisms mean the voluntary suspension of additional marketing and sales of long distance services triggered by excessive repeat failures of specific sub-measures. Tier-3 is triggered by three consecutive monthly failures in a quarter in which BellSouth performance is out of compliance or does not meet the benchmark for the aggregate of all CLEC data as calculated by BellSouth. Tier-3 contains 12 submetrics which are all evaluated monthly; however, when any 5 of the 12 experience three consecutive failures in a calendar quarter, Tier-3 is triggered. The decision point (regarding the pass or fail status of a measure) is determined by the CLEC aggregate results of the overall test statistic and balancing critical value when parity is the standard. This decision is made at a point where "like-to-likes" have been tested, random variation has been considered, problems around masking discrimination have been solved, and probability errors are accounted for. If an industry failure has occurred, BellSouth will discontinue long distance marketing in the harmed state. BellSouth

[4] Tier-2 is appropriately triggered when there is a pattern of disparity. Hence, the call for quarterly assessments. BellSouth recognizes that the source of a disparate pattern is not always due to providing sub-standard service, but may be due to improvement initiatives where the root cause is the "learning curve," not targeted discrimination.

may begin marketing long distance when two of the five failed submetrics show favorable results for two consecutive months in the following quarter.

Second, BellSouth's three-tiered enforcement mechanisms are self-escalating in that the severity of the remedies increases with the magnitude and duration of BellSouth's performance failures. However, the payments for each affected item under both Tier-1 and Tier-2 also escalate with failure magnitude and duration, as reflected in the following tables:

LIQUIDATED DAMAGES TABLE FOR TIER-1 MEASURES

PER AFFECTED ITEM						
	Month 1	Month 2	Month3	Month4	Month 5	Month 6
Ordering	$40	$50	$60	$70	$80	$90
Provisioning Resale	$100	$125	$175	$250	$325	$500
Provisioning UNE Incl. Coordinated Customer Conversions	$400	$450	$500	$550	$650	$800
Maintenance and Repair Resale	$100	$125	$175	$250	$325	$500
Maintenance and Repair UNE	$400	$450	$500	$550	$650	$800
LNP	$150	$250	$500	$600	$700	$800
IC Trunks	$100	$125	$175	$250	$325	$500
Collocation	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000

VOLUNTARY PAYMENTS FOR TIER-2 MEASURES

	PER AFFECTED ITEM
OSS Pre-Ordering	$20
Ordering	$60
Provisioning	$300
UNE Provisioning Incl. Coordinated Customer Conversions	$875
Maintenance and Repair	$300
UNE Maintenance and Repair	$875
Billing	$1.00
LNP	$500
Interconnection Trunks	$500
Collocation	$15,000

Third, BellSouth's proposal addresses both Resellers and Facilities-based providers. For Resellers, products are grouped by POTS and Design services. For the Facilities-based providers, products are grouped by UNE Loop and Port Combinations, UNE Loop, Interconnection Trunks, and Collocation. Although much focus has been given to the needs of data-based CLECs as opposed to voice-based CLECs, BellSouth believes it equally important to provide service parity to both types of carriers. The plan is designed such that discrimination is not masked regardless of the type of service the CLEC is offering, so for the data-based CLECs ordering xDSL services, any performance failures by BellSouth will be reflected in the UNE Loop category.[5]

Fourth, consistent with the Arbitrators' decision, BellSouth's proposal includes appropriate annual caps. BellSouth is placing a total of $625 million at risk in the nine-state region, including $ 57 million in Tennessee. The table below shows the dollars at risk and the annual caps that would apply for the BellSouth region:

AL - $54M	**MS - $44M**
FL - $122M	**NC - $77M**
GA - $131M	**SC - $47M**
KY - $34M	**TN - $57M**
LA - $59M	
Regional Total - $625M	

It is BellSouth's desire not to reach the maximum liability; however, in the event the monthly payout exceeds the cumulative maximum liability, BellSouth will make a proportional payout to

[5] BellSouth is developing DSL disaggregation for purposes of reporting BellSouth's performance; however, any remedy for such services is already contained in the UNE Loop category.

all parties harmed. It is likely that Tier-3 would have been triggered before reaching such a point, thus providing an appropriate incentive for BellSouth to take immediate corrective action.[6]

Fifth, BellSouth is committed to making swift payment when it has failed to provide parity of service, or failed a benchmark. Payment will be rendered to DeltaCom and the Authority 30 days after the reporting cycle. Reports are currently available on the 15th of each month for the prior month's performance. In the event, payment is not rendered on time, interest will be payable at the maximum rate allowable by state law. Interest payments are included in the maximum liability. BellSouth believes interest paid (on past due remedy payments) override any need to make payments on past due reports.

Finally, BellSouth's proposal recognizes the importance of annual audits. Under BellSouth's proposal, BellSouth will have an independent auditing and accounting firm certify at the end of each calendar year that the results of all Tier-1 and Tier-2 Enforcement Mechanisms were paid and accounted for in accordance with Generally Accepted Account Principles (GAAP).

The Authority should adopt BellSouth's enforcement mechanism proposal. Although the Arbitrators concluded that it had the authority to require enforcement mechanisms in this arbitration, the FCC has made it clear that the primary, if not sole, purpose of a voluntary self effectuating remedy plan is to guard against RBOC "backsliding;" that is, providing

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[6] BellSouth agrees that there should be a limit on how much financial risk it should have to bear in self-executing payments. However, this by no means guarantees an overall cap on BellSouth's ultimate liability. As the FCC has repeatedly stated, a self-executing enforcement plan is not intended to be "the only means of ensuring that [the RBOC] continues to provide nondiscriminatory service to competing carriers. In addition to the [financial dollars] at stake ... [the RBOC] faces other consequences if it fails to sustain a high level of service to competing carriers, including: federal enforcement action pursuant to section 271(d)(6); ... and remedies associated with antitrust and other legal actions." *See* Bell Atlantic Order, at ¶435.

discriminatory performance after it has received the so-called "carrot" of long distance approval. Moreover, the FCC has set forth the appropriate framework for analyzing the reasonableness of a proposed enforcement plan. Although conceding the details of such plans may legitimately vary widely, the FCC identified five key aspects of a performance assurance plan that should be examined to determine whether it falls "within a zone of reasonableness, and [is] likely to provide incentives that are sufficient to foster post-entry checklist compliance." Id. at ¶433. BellSouth submits that its voluntary proposal should be accepted by the Arbitrators because it clearly falls well within the FCC's prescribed "zone of reasonableness," and provides powerful incentives to foster post-entry checklist compliance. The Authority will continue to monitor BellSouth's performance and can evaluate the effectiveness of VSEEM III once it is put into place to determine if it in fact operates as an effective deterrent against discriminatory performance. If it does not, the Authority retains full authority to re-visit this issue.

BellSouth's proposal more than meets the FCC's five key criteria, as discussed below.

Total Liability at Risk: BellSouth's proposal places $625 million at risk in BellSouth's nine-state region in terms of actual dollars that potentially could be paid out in payments to CLECs and/or the Authority. This represents about 20% of net revenue from local exchange service. In addition, BellSouth's plan offers an extraordinary Tier 3 penalty that, if triggered, would automatically forfeit BellSouth's ability to market interLATA long distance service to new customers. The economic impact of this Tier 3 feature is incalculable. No other RBOC has agreed to a similar provision and this is one of VSEEM III's strongest features.

The FCC concluded that the $269 million in potential bill credits that the Bell Atlantic plan places at risk on an annual basis represents a meaningful incentive for Bell Atlantic to maintain a high level of performance. In so concluding, the FCC rejected arguments that the

total liability under the plan must be sufficient, standing alone, to completely counterbalance the RBOC's incentive to discriminate. Bell Atlantic Order at ¶435. Instead, it agreed with the New York Commission that $269 million, which represents 36% of Bell Atlantic's net return from local exchange revenue, represents "a substantial percentage of Bell Atlantic's profits," and "should deter [Bell Atlantic's] incentive to provide discriminatory service." Id. at 436. BellSouth's VSEEM III plan places even greater dollars at stake than the Bell Atlantic plan. It has $625 million at risk in penalty payments, representing 20% of its net return from local exchange revenue, and a Tier 3 penalty (which is absent from Bell Atlantic's plan) that would shut down BellSouth's ability to market interLATA long distance service. The VSEEM III plan places substantially greater dollars at risk than the Bell Atlantic plan, and will clearly deter any incentive to provide discriminatory service.

Performance Measurements and Standards: The FCC has stated that an effective enforcement plan should have clearly articulated, pre-determined measures and standards, which encompass a comprehensive range of carrier-to-carrier performance. BellSouth's SQMs represent performance measures with clearly articulated definitions that set forth the manner in which the data is to be collected, and any relevant exclusions. Bell Atlantic Order, at ¶438. BellSouth's proposal also includes clearly articulated and pre-determined performance standards, including retail analogues and benchmarks where no analogues exist. Furthermore, BellSouth's VSEEM III plan, like Bell Atlantic's plan, also includes a comprehensive set of "key-competition-affecting metrics" that are sufficient to deter discrimination. These key, outcome-oriented measures were not arbitrarily chosen by BellSouth, but were derived from the collaborative efforts in New York and Texas where CLECs themselves rated the measures as either "critical" or "high" (as opposed to "medium or low").

Structural Elements of the Plan: An effective enforcement plan should have a reasonable structure that is designed to detect and punish poor performance when it occurs. See Bell Atlantic Order, at ¶433. There is no serious dispute here about the appropriateness of VSEEM's multi-tiered structure, which is patterned after the Texas plan. Tier 1 of VSEEM III pays liquidated damages directly to an individual CLEC affected by BellSouth's non-performance on any one or more of 37 key, outcome oriented submetrics included in the plan. Tier 1 penalties are not intended to be the exclusive remedy of the individual CLEC, who retains all rights to pursue further legal remedies. Tier 2 assessments address patterns of poor performance to the CLEC industry and are in addition to, not in lieu of, Tier 1 payments, which will continue to be paid on an escalating basis. These payments cover performance under 42 key, outcome-oriented submetrics and are paid directly to the Authority. Finally, VSEEM has a Tier III remedy, discussed above, which is unique to BellSouth and provides the ultimate incentive for continued non-discriminatory performance.

Self-Executing Mechanism. The FCC has stated that an effective enforcement plan shall "have a self-executing mechanism that does not leave the door open unreasonably to litigation and appeal." *See* Bell Atlantic Order, at ¶433. BellSouth's VSEEM III unquestionably meets this criterion and, indeed, is superior to Bell Atlantic's plan in this respect because it does not include the broad and general exceptions contained in that plan. *See* Bell Atlantic Order, at ¶441. BellSouth's plan also is superior to Bell Atlantic's by virtue of the fact that Tier 1 payments would be available to DeltaCom in all of BellSouth's states, once BellSouth has been granted long distance authority in a single state. Thus, while BellSouth's proposal would not take effect until after Section 271 relief has been granted, it does not require Section 271 relief in each and every BellSouth state for Tier 1 purposes.

Data Validation and Audit Procedures: Finally, an effective enforcement plan should provide reasonable assurances that the reported date is accurate. *See* Bell Atlantic Order, at ¶433. BellSouth's performance measurement processes and data are being audited now by an independent auditor in Georgia, and will also be audited in Louisiana and Florida as well. Additionally, BellSouth's SQMs provide for individual CLEC audit rights, and the VSEEM III plan itself states that at the end of each calendar year, BellSouth will have its independent auditing and accounting firm certify that the results of all Tier 1 and Tier 2 enforcement mechanisms were paid and accounted for in accordance with Generally Accepted Accounting Principles.

BellSouth believes that its enforcement mechanism plan is reasonable, appropriate, and meets the FCC's criteria. Accordingly, the Arbitrators should adopt BellSouth's proposal.

D. Circumstances That Would Warrant A Waiver Request From BellSouth And The Time Frame For Submitting Such A Waiver Request.

1. BellSouth's proposed language

BellSouth's proposed language is contained in Section 4.7.3 of Attachment 1.

2. BellSouth's rationale

Consistent with the Arbitrators' decision, BellSouth should be relieved of liability under Tiers 1 and 2 if the performance failure is caused by circumstances beyond BellSouth's control. These would include: Force Majeure (e.g., acts of God, war, revolution, labor difficulties); an act or omission by DeltaCom that is contrary to any of its obligations under its Interconnection Agreement, the Telecommunications Act of 1996, Authority rule, or state law; an act or omission associated with third-party systems or equipment; or any occurrence that results from an incident reasonably related to the Y2K problem.

As far as timing goes, BellSouth should be required to seek a waiver before it must make payments under either Tier 1 or Tier 2, which, under BellSouth's proposal, would be on or before the thirtieth day following the due date of the performance report for the month in which the obligation arose. Thus, for example, if BellSouth experiences a performance failure in March that would trigger payments to DeltaCom under Tier 1, and that failure is reflected in performance reports released on April 15, BellSouth would be required to either make the Tier 1 payment to DeltaCom or seek a waiver from the Authority by May 15. In the event BellSouth seeks a waiver, applicable interest should not apply unless the waiver is denied.

III. CONCLUSION

For the foregoing reasons, the Arbitrators should adopt BellSouth's Final Best Offers on Issue 1(a) and order that BellSouth's proposed language be incorporated into the interconnection agreement with DeltaCom.

Respectfully submitted this 22nd day of May, 2000.

BELLSOUTH TELECOMMUNICATIONS, INC.

By: _____

Guy M. Hicks
333 Commerce Street., Suite 2101
Nashville, Tennessee 37201-3300
(615) 214-6301

Bennett L. Ross
675 West Peachtree Street, N.E.
Suite 4300, BellSouth Center
Atlanta, GA 30375-0001
(404) 335-0793

213491

BEFORE THE TENNESSEE REGULATORY AUTHORITY
Nashville, Tennessee

IN RE: ***Petition by ITC^DeltaCom Communications, Inc. for Arbitration of Certain Unresolved Issues in Interconnection Agreement Negotiations Between ITC^DeltaCom and BellSouth Telecommunications, Inc.***

Docket No. 99-00430

BELLSOUTH TELECOMMUNICATIONS, INC.'S MOTION FOR RECONSIDERATION

I. INTRODUCTION

BellSouth Telecommunications, Inc. ("BellSouth") respectfully moves that the Tennessee Regulatory Authority ("Authority"), acting as Arbitrators, reconsider certain aspects of its resolution of Issue 1(a) in this arbitration with ITC^DeltaCom Communications, Inc. ("DeltaCom"). While BellSouth supports the Arbitrators' decision to adopt BellSouth's Service Quality Measurements ("SQMs"), at least on an interim basis, the Arbitrators should reconsider their decision to require certain modifications to the SQMs. First, the vast majority of the modifications ordered by the Arbitrators were not requested by DeltaCom, which has since indicated its willingness to accept BellSouth's SQMs, and were based on a performance measurement plan that is not even part of the record in this arbitration. Second, the Arbitrators' proposed modifications are unnecessary in determining whether BellSouth is complying with its obligations under the Telecommunications Act of 1996 ("1996 Act"), and some cannot reasonably be implemented. Finally, in light of the Authority's apparent desire to conduct a generic proceeding to examine performance measurements, BellSouth should not be required to expend the resources to modify the SQMs only on an "interim" basis.

BellSouth recognizes its obligations under the 1996 Act and is committed to providing comprehensive measurements by which BellSouth's performance can be judged. Indeed,

BellSouth continues to update its SQMs to meet the needs of the industry, to comply with regulatory requirements, and to streamline performance reporting. However, as the Federal Communications Commission ("FCC") has cautioned, performance measurements and reporting requirements should "balance our goal of detecting possible instances of discrimination with our goal of minimizing, to the extent possible, burdens imposed on incumbent LECs." Notice of Proposed Rulemaking, *In re: Performance Measurements and Reporting Requirements for Operations Support Systems, Interconnection, and Operator Services and Directory Assistance*, CC Docket No. 98-56, ¶ 36 (Apr. 17, 1998). BellSouth does not believe that the modifications to BellSouth's SQMs ordered by the Arbitrators comply with this standard, particularly when most of the ordered modifications were not even requested by DeltaCom in this arbitration. Accordingly, the Arbitrators should grant BellSouth's Motion for Reconsideration.[1]

II. DISCUSSION

A. Most Of The Modifications To BellSouth's SQMs Ordered By The Arbitrators Were Not Requested By DeltaCom And Were Based Upon A Plan That Is Not Part Of The Record In This Arbitration.

In this Arbitration, DeltaCom proposed a set of performance measurements and enforcement mechanisms set forth in Attachment 10 to its Petition. Petition for Arbitration of ITC^DeltaCom, Issue 1(a) at 5. According to DeltaCom witness Rozycki, DeltaCom's proposed performance measurements were based upon a set of draft performance measurements prepared

[1] BellSouth is not seeking reconsideration of the Arbitrators' decision directing BellSouth to implement performance measurements that have already been developed, such as Directory Assistance Average Speed to Answer and Operator Services Speed to Answer. Transcript of Proceedings, Tr. at 20-21 (April 4, 2000) (Items 11 & 12); Coon Affidavit ¶¶ 31-32. Nor is BellSouth seeking reconsideration of measurements that were under development prior to the Arbitrators' decision, such as adding cageless collocation to BellSouth's collocation performance measurements. Transcript of Proceedings, Tr. at 20-21 (April 4, 2000) (Items 18, 19 & 20). BellSouth had previously begun work on this level of disaggregation and will include its performance with respect to cageless collocation in the SQMs. Coon Affidavit ¶¶ 38-40.

by the Staff of the Texas Public Service Commission. *See* Tr. Vol. 1A at 44-45. As Mr. Rozycki acknowledged, DeltaCom's Attachment 10 did not reflect the many subsequent changes made by the Texas Staff to their proposed performance measurement set. *Id.*

In resolving this Issue, the Arbitrators did not adopt DeltaCom's Attachment 10. Instead, the Arbitrators adopted BellSouth's SQMs on an interim basis. However, the Arbitrators ordered a number of modifications to the SQMs, which were primarily designed to incorporate measures from the "Texas Plan," and directed that BellSouth disaggregate performance data at the state level. *See* Transcript of the Proceedings, at 18-22 (April 4, 2000). The Arbitrators should reconsider this aspect of its decision because the vast majority of the Arbitrators' proposed modifications to BellSouth's SQMs as well as the state level of disaggregation were not even requested by DeltaCom. Indeed, the Texas Plan upon which the Arbitrators' decision was based is not even a part of the record in this proceeding.[2]

For example, the Arbitrators ordered BellSouth to develop three additional billing performance measurements. *See* Transcript of the Proceedings, Docket No. 99-00430, at 19 (April 4, 2000) (Items 4, 5 & 6). None of these billing measurements was included in

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[2] The Texas Plan was actually proposed by ICG Communications, Inc. ("ICG") in Docket 99-00377. However, BellSouth and ICG subsequently resolved the issue of performance measurements and enforcement mechanisms by ICG agreeing to BellSouth's SQMs and latest Voluntary Self-Effecting Enforcement Mechanism proposal ("VSEEM III"). The ICG settlement was submitted to the Authority by BellSouth and ICG on March 13, 2000.

DeltaCom never proposed the Texas Plan and never introduced it into evidence. Mr. Rozycki did attach to his prefiled direct testimony portions of an interconnection agreement between Southwestern Bell Telephone and Southside Communications, LLC, which appears to incorporate some of the measurements from the Texas Plan. However, Mr. Rozycki presented this exhibit merely as "evidence that performance measures should be incorporated in interconnection agreements." Direct Testimony of Christopher J. Rozycki, at 8. Mr. Rozycki did not advocate that the Authority adopt the measures set forth in this interconnection agreement, nor do the modifications ordered by the Authority correspond precisely to information in the Southwestern Bell Telephone/Southside Communications interconnection agreement.

DeltaCom's proposed performance measurements set forth in Attachment 10 to the Arbitration Petition. Coon Affidavit ¶¶ 24-26. Similarly, the Arbitrators ordered BellSouth to develop four additional measurements concerning Local Number Portability ("LNP"). *See* Transcript of the Proceedings, Docket No. 99-00430, at 20 (April 4, 2000) (Items 13, 14, 15 & 16). None of these LNP measurements was included in DeltaCom's proposed performance measurements either. Coon Affidavit ¶¶ 33-36. In total, of the twenty-five specific modifications to BellSouth's SQMs ordered by the Arbitrators upon which BellSouth seeks reconsideration, nineteen (73%) were not even requested by DeltaCom. *See generally* Coon Affidavit ¶¶ 21-50.

The Arbitrators should be particularly reluctant to order BellSouth to modify the SQMs when DeltaCom has since indicated its willingness to accept BellSouth's SQMs. For example, in the DeltaCom arbitration in Georgia in late November 1999, approximately four weeks after the Tennessee hearings, Mr. Rozycki testified as follows:

> Q. DeltaCom is asking the Georgia Commission on this Issue, 1-A, that it should adopt DeltaCom's performance measures, performance guarantees that are set forth in Attachment 10 to its petition?
>
> A. Originally that's what we've asked. In my rebuttal testimony, I've indicated that at this point in the interest of settling this issue, *we would be willing to accept the performance measures, the SQMs, of BellSouth so long as they are coupled with the guarantees that we have proposed.* I don't want to continue fighting with you over this issue of whether we should have different standards for ITC^DeltaCom versus the rest of the industry. *I would concede that your performance measures at this point have come a long way since we originally filed our petition, and that's why we are moving in that direction.* But we still hold fast on the notion that performance guarantees need to be in place.

Transcript of the Proceedings, *In re: Petition by ITC^DeltaCom Communications, Inc. for Arbitration of its Interconnection Agreement with BellSouth Telecommunications, Inc. Pursuant to the Telecommunications Act of 1996,* Docket No. 10854-U, Tr. at 272 (Nov. 29, 1999) (emphasis added) (excerpt attached).

In January 2000, in the arbitration proceeding in Alabama, Mr. Rozycki elaborated on DeltaCom's willingness to accept BellSouth's SQMs, provided they were coupled with enforcement mechanisms:

> Q. Is DeltaCom asking for a separate, different set of performance measurements if there's an industry-wide set of performance measurements established?
>
> A. No, not really. In fact, we prefer the adoption of an industry-wide set of performance measures, but you have to understand that at the time of our -- that we filed this arbitration, the performance measurements that BellSouth had in hand were far from complete. Now, I think BellSouth should be commended at this point. *Since we filed in June our arbitration here, the BellSouth performance measures have moved tremendously in terms of moving towards completion. So BellSouth has done a lot of work in recent months to complete those performance measures.* I don't know what the status is of them today. But as I've stated in other states, *we would be very willing to look at those performance measures, to adopt them as the performance measures in the interconnection agreement, and we would highly recommend that our guarantees be added to the performance measures.*
>
> . . .
>
> Q. And is possible that it could be significant cost involved in implementing Attachment 10 on an interim basis, only to have this Commission adopt BellSouth's SQMs in a generic proceeding six or seven months down the road?
>
> A. There could be, but once again, I'm really interested in implementing our interconnection agreement and getting what we need in place.
>
> . . .
>
> You've made -- you, BellSouth, have made great strides in improving and completing the performance measures that were far from complete six, seven months ago when we had to make a decision to file an arbitration case. So we've been very accommodating there. *We're willing to move off that, accept those -- the SQMs, add the guarantees to them, and move forward.*

Transcript of the Proceedings, *In re: Petition for Arbitration of ITC^DeltaCom Communications, Inc. with BellSouth Telecommunications, Inc.,* Docket No. 27091, Tr. Vol. I at 200-202 & 208-209 (Jan. 18, 2000) (emphasis added) (excerpt attached).

Based upon DeltaCom's expressed willingness to accept BellSouth's SQMs, and in light of the Arbitrators' decision to require Final Best Offers on enforcement mechanisms, the Arbitrators should reconsider their decision to require modifications to BellSouth's SQMs at this time. This is particularly true given that DeltaCom did not ask for the vast majority of these modifications, and when the plan upon which these modifications were based is not even part of the record in this case.

B. The Arbitrators' Modifications Are Unnecessary In Determining Whether BellSouth Is Complying With Its Obligations Under the 1996 Act Or Cannot Reasonably Be Implemented.

The Arbitrators also should reconsider their resolution of Issue 1(a) because the Arbitrators' modifications to BellSouth's SQMs are unnecessary in determining whether BellSouth is complying with its obligations under the 1996 Act.

For example, although not requested by DeltaCom, the Arbitrators directed BellSouth to add a measurement from the Texas Plan to reflect "Percent of Accurate and Complete Formatted Mechanized Bills." Transcript of Proceedings, Tr. at 19 (April 4, 2000) (Item 4). While BellSouth's SQMs measure BellSouth's performance with respect to invoice accuracy, this Texas Plan measurement would add nothing to determining whether BellSouth is rendering accurate bills to its CLEC customers. This is because the Texas Plan measurement that the Arbitrators have ordered BellSouth to develop merely captures whether all of the components of the bill have been added up correctly by the computer producing the bill, regardless of whether the amount billed is actually correct. Coon Affidavit ¶ 25. In other words, this measurement

would find that BellSouth is rendering "accurate" bills, even though every rate on BellSouth's invoice may be wrong, so long as the computer "correctly" multiplied these wrong rates by the quantities ordered. Such a result would be meaningless in assessing BellSouth's billing performance.

Equally meaningless would be the Texas Plan measurement designed to capture the "percentage of missed mechanized INP conversions," which the Arbitrators directed BellSouth to add to its SQMs. Transcript of Proceedings, Tr. at 21 (April 4, 2000) (Item 25). Interim Number Portability ("INP") is a thing of the past in Tennessee with the introduction of Local Number Portability ("LNP"). As of March 31, 2000, LNP has been implemented in 177 of the 201 wire centers in Tennessee, Coon Affidavit ¶ 45, and there is no requirement that BellSouth offer INP in those wire centers where LNP has been deployed. 47 U.S.C. § 271(c)(2)(B)(ix). The 24 Tennessee wire centers where LNP has not been implemented are located in primarily rural areas, such as Jasper, Medina, Dandridge, and Bolivar (just to name a few), which account for less than 5% of BellSouth's access lines in the State. Coon Affidavit ¶ 45. Developing a performance measurement that would apply to only 12% of the wire centers serving less than 5% of BellSouth's access lines in Tennessee, where few, if any, CLECs are even competing, would make little sense.

Other measurements ordered by the Arbitrators have little or no value because of the relatively small number of transactions being measured. Specifically, the Arbitrators ordered BellSouth to add measurements to the SQMs reflecting the percentage of Bona Fide Requests processed within thirty days and the percentage of quotes provided for Bona Fide Requests within certain intervals. Transcript of Proceedings, Tr. at 22 (April 4, 2000) (Items 29 and 30). However, to date this year, BellSouth has received only seven Bona Fide Requests from CLECs

across the entire-region. Coon Affidavit ¶¶ 49 & 50. While BellSouth could report its performance with respect to Bona Fide Requests on a manual basis, it is impossible to draw any conclusions about BellSouth's performance based upon such a limited number of transactions.[3]

Some of the measurements from the Texas Plan that the Arbitrators have directed be added to BellSouth's SQMs have no applicability to BellSouth because these measurements reflect the manner in which SBC operates its network, which is not the way BellSouth's network operates. Specifically, the Arbitrators required BellSouth to add measures to capture the percentage of calls to the "Local Service Center" and "Local Operations Center" that experience a busy signal. Transcript of Proceedings, Tr. at 19 (April 4, 2000) (Items 7 & 8). However, there is no need for either measurement because, unlike SBC, BellSouth has engineered the trunk groups connecting the BellSouth ordering, provisioning, and repair centers so that calls are routed without experiencing blocking. This means that no busy signal is encountered by CLECs calling BellSouth's work centers. Because no busy signal is encountered, if BellSouth were required to produce the measurements defined in the Texas Plan, the report would display "zero" each month. Coon Affidavit ¶¶ 27-28. Furthermore, BellSouth already measures the time a CLEC call to its ordering, provisioning, and repair centers is in the queue, which is a more accurate reflection of BellSouth's performance in handling CLEC calls to its work centers. *Id.*

In other instances BellSouth's SQMs and the Texas Plan measurements capture essentially the same data, albeit in a somewhat different form, and little would be gained by adding the Texas Plan measurements. This is particularly true when BellSouth's measurements

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[3] The limited number of Bona Fide Requests BellSouth has received this year is not unusual. For example, in its recent application for long distance authority in Texas, SBC indicated that it had received only 11 Bona Fide Requests in Texas between February 1999 and January 2000 and that it had provided quotes in response to only four of those requests. Coon Affidavit ¶¶ 49 & 50.

are more comprehensive. For example, the Arbitrators directed BellSouth to add the Texas Plan measure reflecting the "Percent Firm Order Confirmation ("FOC") Returned With Specified Time." Transcript of Proceedings, Tr. at 19 (April 4, 2000) (Item 2). However, this information can readily be derived from the existing FOC Timeliness measure in BellSouth's SQMs, which includes the FOC time frames supported in the Texas Plan in addition to other time frames not supported in the Texas Plan. BellSouth's FOC Timeliness measure also provides for greater disaggregation of FOC data than the Texas Plan measure. While BellSouth's SQMs do not account for the out of hour exclusions identified in the Texas Plan, the critical FOC data presented in BellSouth's SQMs is more comprehensive. Coon Affidavit ¶ 22.[4]

Similarly, the Arbitrators directed BellSouth to add the Texas Plan measure reflecting the "Percent Mechanized Rejects Returned Within One Hour of Receipt of Reject." Transcript of Proceedings, Tr. at 18 (April 4, 2000) (Item 2). However, BellSouth's SQMs are more comprehensive because BellSouth currently measures the percent of mechanized rejected returned within one hour of receipt, in addition those returned within 0-4 minutes, 4-8 minutes, 8-12 minutes, 12-60 minutes 1-8 hours, 8-24 hours, and greater than 24 hours. Anyone interested in knowing only the percentage of mechanized rejects returned within one hour (which seems unlikely) could readily derive this information simply by adding together the percentages

[4] While the Arbitrators directed BellSouth to "remove" the FOC Timeliness measure currently contained in the SQMs, Transcript of Proceedings, Tr. at 18 (April 4, 2000) (Item 1), no explanation was given for this decision. The Arbitrators' decision also is difficult to understand given that the FOC timeliness data BellSouth currently reports is more comprehensive than would be the case were BellSouth to implement the Texas Plan FOC measurement. Furthermore, the FOC Timeliness measure currently reflected in BellSouth's SQMs was ordered by both the Georgia and Louisiana Public Service Commission, and thus BellSouth is not a liberty to "remove" this measure. While BellSouth could report a different measurement for FOC timeliness for Tennessee, this would result in different data being provided to CLECs depending upon the states in which they are operating, which would complicate their ability to evaluate BellSouth's FOC performance. Coon Affidavit ¶ 21.

reflected in the 0-4 minutes, 4-8 minutes, 8-12 minutes, and 12-60 minutes categories in BellSouth's SQMs. Coon Affidavit ¶ 23.

Reconsideration also is warranted because several of the Arbitrators' modifications to BellSouth's SQMs cannot reasonably be implemented. For example, although not requested by DeltaCom, the Arbitrators ordered BellSouth to add a measurement from the Texas Plan to reflect the "percentage of directory assistance database accuracy for manual updates." Transcript of Proceedings, Tr. at 20-21 (April 4, 2000) (Item 23). However, implementing this measurement is problematic because the data necessary to calculate this measurement would not be captured by BellSouth, but rather would be provided by DeltaCom (assuming DeltaCom were willing to do so). Coon Affidavit ¶ 43. None of BellSouth's SQMs is dependent upon data furnished by CLECs, and requiring BellSouth to determine its performance based upon such data would be inconsistent with the Arbitrators' decision to "approve the use of BellSouth data for all measurements and calculations." Transcript of Proceedings, Tr. at 22 (April 4, 2000).

The Arbitrators also directed that BellSouth disaggregate its performance data to the State (Tennessee) level. The vast majority of BellSouth's SQMs already disaggregate performance data to the State level. However, certain performance measurements only capture regional data by virtue of the regional nature of the systems or processes involved. These regional performance measurements either cannot reasonably be disaggregated at the State level or can only be disaggregated at the State level at additional time and expense, even though there is no real benefit to doing so. Coon Affidavit ¶ 52.

BellSouth's SQMs that measure the availability of BellSouth's Pre-Ordering and Maintenance & Repair interfaces provide a good example. BellSouth's Operational Support Systems ("OSS") are regional in nature, and the availability of these systems can only be

reported at the regional level. There is simply no way to distinguish the availability of BellSouth's OSS for a transaction from Tennessee as opposed to a transaction from another state. BellSouth's systems are either available or they are not, regardless of whether the CLEC using the system is located in Tennessee or some other BellSouth state. Coon Affidavit ¶ 54.

The difficulty of disaggregating each and every SQM to the State level is also illustrated by the SQMs that measure the Average Response Time and Response Interval for BellSouth's Pre-Ordering and Maintenance & Repair OSS. Queries to BellSouth's Pre-Ordering and Maintenance & Repair interfaces originate from a regional Gateway to regional operations centers. In other words, pre-ordering queries from a CLEC in Florida as well as those from a CLEC in Tennessee are directed to the same regional Gateway for processing. There is currently no way to identify where the query originated from beyond this regional Gateway. In fact, many CLECs utilize regional service centers of their own, so that a CLEC customer service representative sitting in Denver, Colorado may place a pre-ordering query while on the telephone with the prospective customer in Tennessee. As a result, there is no reasonable way to determine the location of the query, which would be required to report this data at the State level. While BellSouth could attempt to trap each query received and check for the originating telephone number, queried telephone number, or queried address or appointment, doing so would be cost prohibitive and, more importantly would drastically slow the processing time of all queries from CLECs in all states. Coon Affidavit ¶ 53.

The same is true for BellSouth's SQM that measures the Average Answer Time in BellSouth's Repair Centers. The BellSouth repair centers are regional in nature, and all CLEC calls, regardless of the state of origin, are answered in the order of receipt. There is currently no way to identify where the call originated from, which would be required to disaggregate

performance data to the State level. The task is further complicated by the fact that many CLECs utilize regional service centers of their own and that BellSouth receives many repair calls from cellular telephones. While BellSouth conceivably could trap each call received and attempt to check for the originating telephone number or the telephone number or address for which repair service is being requested, this would be cost prohibitive and would drastically slow the processing time for repair calls from CLECs in all states. Coon Affidavit ¶ 56.[5]

BellSouth has offered and will continue to offer performance measurements that are necessary to ensure whether BellSouth is complying with its obligations under the 1996 Act, including a sufficient level of disaggregation to monitor BellSouth's performance in each State. However, the Arbitrators should decline to order measurements and disaggregation levels that do not materially aid in this effort but that impose undue burdens on BellSouth, as the FCC has cautioned. *See* Notice of Proposed Rulemaking, *In re: Performance Measurements and Reporting Requirements for Operations Support Systems, Interconnection, and Operator Services and Directory Assistance*, CC Docket No. 98-56, ¶ 36 (Apr. 17, 1998). Accordingly, the Arbitrators should reconsider its resolution of Issue 1(a).

C. BellSouth Should Not Be Required To Modify Its SQMs On An "Interim" Basis When The Authority May Decline To Adopt Such Modifications On An Ongoing Basis.

In adopting BellSouth's SQMs as modified, the Arbitrators made clear that they were doing so only on an interim basis, indicating the possibility that the Authority would adopt

[5] Other data currently reported on a regional basis could conceivably be reported at the State level, such as Percent Flow-Through Service Requests and BellSouth's usage performance measurements. However, disaggregating BellSouth's usage measurements alone would cost approximately $500,000 to implement, and BellSouth is still waiting for the estimates of the costs involved in disaggregating BellSouth's flow-through data to the State level. Coon Affidavit ¶¶ 55 & 57-59. These costs seem difficult to justify given the marginal benefits associated with reporting regional flow-through and usage data at the State level.

different "measurements and enforcement mechanisms in another proceeding ...." Transcript of Proceedings, Tr. at 18 (April 4, 2000).[6] BellSouth should not be required to expend the resources implementing "interim" modifications to its SQMs, when the Authority may decline to adopt such modifications on an ongoing basis.

Implementing new performance measurements or modifying the existing SQMs is no small task and involves considerably more than simply defining what is to be measured. Rather, BellSouth must have the systems in place to enable it to collect, process, and report the data that corresponds to the performance being measured. The system BellSouth uses to support its SQMs is called the Performance Measurement and Analysis Platform ("PMAP"), which is used to generate the performance reports that are available to CLECs across BellSouth's region and to maintain the raw data files used to generate such reports. Every addition or modification to BellSouth's SQMs requires enhancements or changes to PMAP. Coon Affidavit ¶¶ 5 & 9.

The PMAP system is extremely complex. The sheer size of the database itself and the amount of data that must be extracted, loaded, and analyzed each month is staggering. The current PMAP database stores the equivalent of 1.25 billion pages of text documents, and more than 65 million records are processed each month. Coon Affidavit ¶ 6. In addition, PMAP must join together data from different information systems that use different operating platforms, data

[6] On May 16, 2000, BellSouth filed a motion requesting that the Authority convene a generic proceeding to address performance measurements and enforcement mechanisms. This issue has been raised by various CLECs in arbitrations currently pending before the Authority, and BellSouth believes all parties would be best served by the Authority addressing performance measurements and enforcement mechanisms in a single proceeding rather than on a piecemeal basis in individual arbitrations. BellSouth's motion remains under advisement.

structures, and identifier codes, which is a difficult undertaking. Coon Affidavit ¶ 7.[7] PMAP also must correlate bits and pieces of data from different working groups within BellSouth, each of which uses different systems that capture different information. Coon Affidavit ¶ 8.[8]

Whenever a new performance measurement is added to BellSouth's SQMs or when the existing SQMs are modified, corresponding changes must be made to PMAP in order to generate data and reports that are appropriately disaggregated. Each new or modified performance measurement also necessitates the development of a new or different means by which to view the information on BellSouth's website, where the performance reports and underlying data are made available to CLECs. Each and every addition or modification to the SQMs impacts PMAP from a developmental, operational, and systems standpoint, so what may appear to be an uncomplicated request to add a new measurement or tweak an existing measurement generally involves a much larger effort. Coon Affidavit ¶¶ 11-14.

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[7] For example, the date structures for one database may use a "day-month-year" format while another uses a "month-day-year" format. If there are 5 million records that must be moved over from one database to the other, every one of the records must have its date structure changed before it is read into the other database. Similarly, if the record's timestamp on one system uses a timestamp that goes down to milliseconds, while another uses hundredths of a second, logic must be created to round up the timestamp before moving it into the new database. In PMAP, multiple checks like these must be made on all 65 million records, and adjustments done before the data can be transported into the PMAP database. Coon Affidavit ¶ 7.

[8] For example, data that is important to the Ordering group may be largely irrelevant to the Provisioning group, which means that the data systems used by the Provisioning group may capture very little of this "irrelevant" data. Complication arises out of properly identifying and extracting these key bits and pieces of data from each system and associating them so that correct information can be provided. For example, to identify a certain type of product might require the extraction of characters 89-93 out of a 110-character Provisioning code and cross reference it against characters 20-22 of a 40 character Ordering code before the final product identification can be made. Product identification in PMAP and the appropriate levels of disaggregation require many types of these operations. Coon Affidavit ¶ 8.

In order to implement the modifications to BellSouth's SQMs ordered by the Arbitrators, BellSouth would have to make substantial enhancements to PMAP, in addition to developing new system capabilities that presently do not exist within BellSouth. BellSouth estimates that the cost of these enhancements and development efforts would be approximately $4.2 million. Coon Affidavit ¶ 51. Little use would be served in committing such substantial resources to implementing modifications to BellSouth's SQMs that may be put to use only on an "interim" basis.

Furthermore, from a practical standpoint, the modifications to BellSouth's SQMs ordered by the Arbitrators cannot be implemented until the first or second quarter of 2001, at the earliest. While some of these modifications require programming work that could be completed in three to six months, such programming work cannot even begin until substantial enhancements to PMAP currently underway are completed. These enhancements to PMAPs are designed to: (1) increase the capacity of PMAP, which is necessary because of the strains being placed on the existing system with well over 800 CLECs in BellSouth's region and the corresponding increase in the volume of performance data BellSouth is generating; (2) produce product reporting required by the FCC's Rule 319 Remand Order, such as Digital Subscriber Lines, Enhanced Extended Loops, and Loop Port Combinations; and (3) implement the statistical testing and comparisons required for the implementation of BellSouth's VSEEM III proposal, which has been accepted by several CLECs on a regional basis, including ICG, e.spire Communications, Inc., and KMC Telecom. Coon Affidavit ¶¶ 15-17.

The enhancements to PMAP currently underway are extensive and require considerable resources to implement. For example, the replacements and upgrades necessary to increase the capacity of PMAP alone will cost approximately $2 to $3 million. Coon Affidavit ¶ 15.

However, until these enhancements are completed, which is expected to be December 2000, development work for new performance measurements or for modifications to existing measurements cannot begin. Coon Affidavit ¶ 18.[9]

This means that, before BellSouth can even implement the modifications ordered in this arbitration, the Authority could conduct a generic performance measurements and enforcement mechanisms docket to determine what, if any, changes need to be made to BellSouth's SQMs for the entire CLEC industry. Such a procedure makes considerably more sense than requiring BellSouth to implement costly and time consuming modifications to BellSouth's SQMs on an interim basis – modifications that were not even requested by DeltaCom and may not be what the CLEC industry wants or needs.

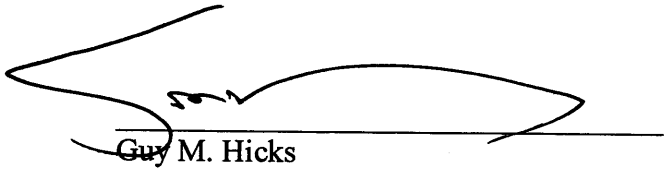
[9] While conceivably BellSouth could stop work on the enhancements currently underway in order to implement the modifications ordered by the Arbitrators, BellSouth's doing so would have any number of undesirable consequences. For example, without increasing PMAP's capacity, the ability of CLECs to continue to obtain timely performance reports and raw data would be adversely affected. In addition, BellSouth's ability to implement new Rule 319 measurements would be delayed, even though it is obligated and has been requested by numerous CLECs to make these measurements available. Furthermore, while BellSouth is prepared to include VSEEM III in its interconnection agreement with DeltaCom, implementation of this proposal would be delayed if work on the enhancements to PMAP currently underway were temporarily halted. Coon Affidavit ¶ 19.

III. CONCLUSION

For the foregoing reasons, the Arbitrators should grant BellSouth's motion and reconsider their resolution of Issue 1(a).

Respectfully submitted this 22nd day of May, 2000.

BELLSOUTH TELECOMMUNICATIONS, INC.



Guy M. Hicks
333 Commerce Street., Suite 2101
Nashville, Tennessee 37201-3300
(615) 214-6301

Bennett L. Ross
675 West Peachtree Street, N.E.
Suite 4300, BellSouth Center
Atlanta, GA 30375-0001
(404) 335-0793

213268

BEFORE THE TENNESSEE REGULATORY AUTHORITY
Nashville, Tennessee

IN RE: ***Petition by ITC^DeltaCom Communications, Inc. for Arbitration of Certain Unresolved Issues in Interconnection Agreement Negotiations Between ITC^DeltaCom and BellSouth Telecommunications, Inc.***

Docket No. 99-00430

AFFIDAVIT OF DAVID A. COON

Comes the affiant, Dave Coon, and being duly sworn, deposes and says:

1. I am employed by BellSouth Telecommunications, Inc. ("BellSouth") as Director – Interconnection Services for the nine-state BellSouth region. My career at BellSouth spans over twenty years and includes positions in Network, Regulatory, Finance, Corporate Planning, Small Business Services and Interconnection Operations. In my current position, I am involved in the establishment, analysis and monitoring of BellSouth process measures and in the development of BellSouth's Service Quality Measures ("SQMs"). I submit this Affidavit in support of BellSouth's Motion for Reconsideration and BellSouth's Final Best Offer on Performance Measurements and Enforcement Mechanisms.

BellSouth Service Quality Measurements ("SQMs")

2. BellSouth's SQMs were first developed in early 1998 in response to an order from the Georgia Public Service Commission. The SQMs have evolved over time, and BellSouth continues to update the SQMs to meet the needs of Competing Local Exchange Carriers ("CLECs"), to reflect new regulatory requirements, and to streamline performance reporting.

3. For example, in this arbitration proceeding with ITC^DeltaCom Communications, Inc. ("DeltaCom"), BellSouth proposed adoption of the September 15, 1999 version of the SQMs, which was the most current version at the time. Since the hearings, however, BellSouth

has released an updated version of the SQMs, which was released on February 29, 2000. BellSouth proposes to include February 29, 2000 version of the SQMs in its interconnection agreement with DeltaCom, a copy of which is attached to BellSouth's Final Best Offer.

4. The February 29, 2000 version of the SQMs differs from the September 15, 1999 version in several respects. For example, BellSouth has added six measurements for Local Number Portability ("LNP"). In addition, Retail Analogs and Benchmarks, which previously were under development, have been added to the February 29, 2000 version of the SQMs. As the SQMs are continually updated, BellSouth will seek to incorporate the most recent version of the SQMs in its interconnection agreements so that BellSouth's performance is continually being evaluated on a uniform basis for all CLECs.

BellSouth's Performance Measurements Analysis Platform ("PMAP")

5. In connection with the development of the SQMs in early 1998, BellSouth began designing the system that would be used to collect, process, and report performance data to correspond to the performance measurements reflected in the SQMs. This system is called BellSouth's Performance Measurement and Analysis Platform ("PMAP"). PMAP was fully deployed in March 1999, although it has been continually enhanced. Additions or modifications to BellSouth's SQMs require further enhancements and changes to PMAP.

6. The PMAP system is extremely complex, primarily because of the sheer size of the database itself and the amount of data that must be extracted, loaded, and analyzed each month. For example, for the August 1999 production cycle, 65 million records composing 18 Gigabytes of data had to be transported and processed. To put this in perspective, one page of this document would require about 2 Kilobytes of storage. PMAP processes the equivalent of 9 million pages each month. Concerning overall size, the current PMAP database is approximately

2.5 Terabytes in size. This translates to 1.25 billion pages of text documents. Because of this enormous size, addition of any new reporting requirements must be carefully evaluated.

7. Complexity also arises from the fact that PMAP is attempting to join together data from many disparate information systems that use different operating platforms, data structures, and identifier codes. Moving the data from one database to another may not be a straightforward task. For example, the date structures for one database may use a "day-month-year" format while another uses a "month-day-year" format. If there are 5 million records that must be moved over from one database to the other, every one of the records must have its date structure changed before it is read into the other database. Similarly, if the record's timestamp on one system uses a timestamp that goes down to milliseconds, while another uses hundredths of a second, logic must be created to round up the timestamp before moving it into the new database. In PMAP, multiple checks like these must be made on all 65 million records, and adjustments done before the data can be transported into the PMAP database.

8. In addition, many performance reports require correlating bits and pieces of data from different groups with BellSouth, including Ordering, Provisioning, and Maintenance & Repair. Data that is important to the Ordering group may be largely irrelevant to the Provisioning group, which means that the data systems used by the Provisioning group may capture very little of this "irrelevant" data. Complication arises out of properly identifying and extracting these key bits and pieces of data from each system and associating them so that correct information can be provided. For example, to identify a certain type of product might require the extraction of characters 89-93 out of a 110-character Provisioning code and cross reference it against characters 20-22 of a 40 character Ordering code before the final product identification

can be made. Product identification in PMAP and the appropriate levels of disaggregation require many types of these operations.

9. Currently, PMAP is used to generate performance reports that are available to CLECs across BellSouth's region and to maintain the raw data files used to generate such reports. Reports are produced on a CLEC-specific and CLEC-aggregate basis for each BellSouth state and on a regional basis, with applicable information concerning BellSouth's retail performance. The raw data maintained in PMAP are CLEC-specific that allows each CLEC to drill down to the individual service order or trouble ticket level. Each CLEC can download its raw data file and create an excel spreadsheet to access its performance data.

10. PMAP is a leading data collection and reporting system. It recently was nominated for the 2000 Computerworld Smithsonian Award, which recognizes outstanding accomplishments in the computing field. According to Ernst & Young, which nominated PMAP for this award, "BellSouth's PMAP data warehouse represents an extraordinary accomplishment in transferring legacy system data elements into meaningful performance measurement information for its wholesale customers and regulators. BellSouth sets the industry standard for performance measurement data management."

Impacts To PMAP Of Adding New Performance Measures or Modifying Existing Measures

11. Whenever a new performance measurement is added to BellSouth's SQMs or when the existing SQMs are modified, corresponding changes must be made to PMAP in order to generate data and reports that are disaggregated appropriately across states, products, etc. Each new or modified performance measurement also necessitates the development of new viewing formats on BellSouth's website, so what appears to be an uncomplicated request

generally involves a much larger effort. The impacts to PMAP of adding or modifying the SQMs can be roughly categorized along three dimensions: (i) development impacts; (ii) operational impacts; and (iii) system impacts.

12. The development impacts address the requirements definition, software development, and unit/system testing that must occur from end-to-end to report the new information. Generating a new performance measurement or modifying an existing measurement would impact the PMAP system from a development standpoint in the following manner (assuming the data is not currently in the system); (i) the business logic required to properly process and present the data must be understood; (ii) the source systems (e.g., LEO, LON, SOCS, etc.) containing the data must be identified; (iii) the source system owners must modify the programs that pull the data from their database and place it into a file available to PMAP; (iv) the automated extract computer programs that PMAP uses to pull/reformat/transform the above source system file must be modified; (v) the computer programs that group, transform, and aggregate the data in a meaningful manner must be created and any interdependencies identified and validated; (vi) the audit trail processing that tracks record counts as the data moves through the various stages of PMAP must be modified; (vii) the computer programs which search the databases and build the reports must be created; and (viii) the new reports must be unit tested for accuracy, and then system tested to ensure the changes have not adversely affected the existing reports.

13. The operational impacts address issues such as how the processing cycle and window are impacted by the addition of computer processing routines. Generating a new performance measurement or modifying an existing measurement would impact the PMAP system from an operational standpoint in the following manner: (i) the impacts to the current

time-constrained processing window must be evaluated (i.e., can BellSouth still produce all reports within the current window and still report monthly in a reasonable period of time); (ii) the production processes, such as job processing order, processing automation programs, and integrity checks must be evaluated and modified; (iii) service level agreements with the source data owners must be arranged so that BellSouth can receive the data in a timely manner (or does BellSouth need to fund changes to those system so that they can provide data in a timely manner?); and (iv) the bandwidth of the current network to allow BellSouth to move all the information about in a timely manner must be assessed.

14. The system impacts address requirements for additional disk space, database changes, processor loading, system reporting security and staffing. Generating a new performance measurement or modifying an existing measurement would impact the PMAP system from a systems standpoint in the following manner: (i) the Development, Test, and Production databases must be modified to provide new space in the database to place the new data; (ii) data storage requirements must be reviewed to ensure that BellSouth has available disk storage capacity for both the data itself and any mirrored data; (iii) the database and web security tables must be updated to reflect who should have access to the new reports; (iv) system loading assessments must be made to see whether the extra report processing requires the addition of more processors so that processing windows can be met; (v) the tape backup system must be examined to ensure that the data can be safely backed up in a timely manner; and (vi) an assessment must be made of the labor resources required to perform the new development.

Scheduled Enhancements To PMAP

15. BellSouth is currently in the midst of enhancing PMAP. First, with well over 800 CLECs in BellSouth's region and with the corresponding increase in the volume of performance

data BellSouth is currently generating, the system is presently at capacity. Work is currently underway to replace and upgrade the computer hardware used in PMAP and to reprogram much of the software so that the monthly reports can be produced more efficiently. The cost of these replacements and upgrades will be approximately $2-3 million.

16. Second, in addition to these hardware and software enhancements, programming also is underway to produce product reporting required by the FCC's 319 Remand Order, such as Digital Subscriber Lines, Enhanced Extended Links and Loop Port Combinations. This product reporting will assist CLECs purchasing these types of products in assessing BellSouth's performance.

17. Third, BellSouth is in the midst of extensive programming necessary to implement the statistical testing and comparisons required for the implementation of BellSouth's latest Voluntary Self Effectuating Enforcement Mechanisms proposal ("VSEEM III"). VSEEM III has been accepted by several CLECs on a regional basis, including e.spire, ICG, and KMC Telecom, and has been offered to other CLECs, including DeltaCom.

18. The enhancements described above are extensive and require considerable resources to implement. BellSouth expects to complete all of these enhancement activities by December 2000. However, in the interim and until these enhancements are completed, developmental work for any new performance measurement or any modification to an existing measurement that requires programming cannot begin. As a result, most of the modifications to BellSouth's SQMs ordered by the Arbitrators in the DeltaCom arbitration cannot be implemented until the first or second quarter of 2001, at the earliest.

19. While conceivably BellSouth could stop work on the enhancements currently underway in order to implement the modifications ordered by the Arbitrators, BellSouth's doing

so would have any number of undesirable consequences. For example, without increasing PMAP's capacity, the ability of CLECs to continue to obtain timely performance reports and raw data would be adversely affected. In addition, BellSouth's ability to implement new Rule 319 measurements would be delayed, even though it is obligated and has been requested by numerous CLECs to make these measurements available. Furthermore, while BellSouth is prepared to include VSEEM III in its interconnection agreement with DeltaCom, implementation of this proposal would be delayed if work on the enhancements to PMAP currently underway were temporarily halted.

Arbitrators' Modifications To BellSouth's SQMs

20. I have reviewed the transcript of the Arbitrators' deliberations on April 4, 2000, a copy of the written motion presented by Director Greer, and the requirements of the Texas Plan Measurement ("Texas Plan"). The Texas Plan referenced in the Arbitrators' decision was proposed by ICG Communications. Nevertheless, I am generally familiar with the terms of the Texas Plan and offer the following comments on the Arbitrators' proposed modifications to BellSouth's SQMs.

21. Issue 1: Remove the SQM on Firm Order Confirmation Timeliness. The Firm Order Confirmation ("FOC") Timeliness measure currently reflected in BellSouth's SQMs was ordered by both the Georgia and Louisiana Public Service Commissions in their generic performance measurement dockets. Therefore, BellSouth must continue to produce this measurement, at least in BellSouth's other states. While BellSouth conceivably could produce a different FOC timeliness measure just for Tennessee, this would result in different data being provided to CLECs depending upon the states in which they are operating, which would complicate their ability to evaluate BellSouth's FOC performance.

22. Issue 2: Add Percent Firm Order Confirmation Returned Within Specified Time (Texas Plan No. 5). BellSouth's existing FOC Timeliness measure currently captures most of the information that would be included in this proposed measurement. In fact, this information could be derived from the existing BellSouth FOC Timeliness measure simply by adding up the intervals displayed on BellSouth's report, although this would not account for the out of hour exclusions identified in the Texas Plan. Like the Texas Plan, BellSouth's FOC Timeliness measurement reflects the Percent of FOCs returned within specified time frames and provides an average interval measurement. These time frames include those supported in the Texas Plan plus additional time frames not currently supported in the Texas Plan, which also includes an average FOC interval. BellSouth's FOC Timeliness measurement also provides for greater disaggregation of the data, separating BellSouth's performance for Manual, Fully Mechanized, and Partially Mechanized orders. By contrast, the Texas Plan disaggregates only by Mechanized and Manual orders. Although BellSouth believes that its FOC Timeliness measurement is more comprehensive than the corresponding measurement under the Texas Plan, BellSouth could implement the necessary programming changes to replicate precisely the data captured by Texas Plan Measurement No. 5 by the first quarter of 2001.

23. Issue 3: Add Percent Mechanized Rejects Returned within one hour of receipt of reject in LASR (Texas Plan No. 10). This measurement was not included in DeltaCom's proposed performance measurements. BellSouth also does not have an application called "LASR," although presumably this would equate to rejects of mechanized Local Service Requests submitted via BellSouth's ordering interfaces. In the current BellSouth SQMs, the Percent Rejected Service Requests measurement reflects the percent of mechanized rejects returned within one hour of receipt along with seven other time increments. The additional time

increments are 0-4 minutes, 4-8 minutes, 8-12 minutes, 12-60 minutes, 1-8 hours, 8-24 hours, and greater than 24 hours. Thus, BellSouth's existing measurement is more comprehensive than the Texas Plan measurement. As in the case with Issue 2 above, the Texas Plan measurement No. 10 could be derived simply by adding up BellSouth's existing timeframes in the SQM. However, to replicate exactly the Texas Plan measurement, BellSouth would be required to make programming changes that could be implemented by the first quarter of 2001.

24. Issue 4: Add Percent of Accurate and Complete Formatted Mechanized Bills (Texas Plan No. 15). This measurement was not included in DeltaCom's proposed performance measurements. Based on BellSouth's review of the Texas Plan, this measurement simply produces a report that reflects whether all of the components of the bill are added up correctly by the computer producing the bill. Thus, this measurement does not reflect the accuracy of the bill, but only that the computer added the numbers correctly, regardless of whether the amount actually billed is correct. Additionally, the Texas Plan measurement applies only to EDI billing data, which further limits its usefulness. By contrast, BellSouth's SQM for Invoice Accuracy reflects the adjustment to total billed revenues from monthly adjustments in CLEC bills versus the same level of adjustment for BellSouth retail bills. This comparison provides a more accurate reflection of any discrepancies in the billing treatment for CLECs versus BellSouth retail than could possibly be obtained using the Texas Plan measurement. Nevertheless, BellSouth could, for EDI orders only, modify its billing system to capture the requested data and could produce the corresponding performance data by the second quarter of 2001.

25. Issue 5: Add Billing Completeness (Texas Plan No. 17). This measurement was not included in DeltaCom's proposed performance measurements. Furthermore, the data necessary to produce this measurement is not currently available from BellSouth's billing

systems, CRIS and CABS. In order to produce this measurement in accordance with the Texas Plan, BellSouth would have to make modifications to both CRIS and CABs, which because of the numerous other planned modifications to BellSouth's billing systems that are already in progress, would likely not be completed before the second quarter of 2001. Modifications would then have to be made in BellSouth's PMAP system to capture this data and deliver the reports, which could be available by the fourth quarter of 2001.

26. Issue 6: Add Unbillable Usage (Texas Plan No. 20). This measurement was not included in DeltaCom's proposed performance measurements. Furthermore, the data necessary to produce this measurement is not currently available from BellSouth's billing systems, CRIS and CABS. In order to produce this measurement in accordance with the Texas Plan, BellSouth would have to modify both CRIS and CABs, which, because of the numerous other planned modifications to BellSouth's billing systems that are already in progress, would likely not be completed before the second quarter of 2001. Modifications would then have to be made in BellSouth's PMAP system to capture this data and deliver the reports, which could be available by the fourth quarter of 2001.

27. Issue 7: Add Percent Busy in the Local Service Center (Texas Plan No. 23). BellSouth does not believe there is any need for this measurement because, unlike SBC, BellSouth has engineered the trunk groups connecting to the BellSouth ordering center so that all calls are routed to the trunk groups serving the ordering center without blocking. This means that no busy signal is encountered by a CLEC calling the BellSouth ordering center. Therefore, BellSouth's SQM measurement, Speed of Answer in the Ordering Center, which measures the time the call is in the queue, is a more accurate reflection of BellSouth's performance for calls to the ordering center. Because no busy signal is encountered, if BellSouth were required to

produce this measurement as defined in the Texas Plan, the report would display zero every month. Nevertheless, the programming changes necessary to implement this measurement could be completed by the second quarter of 2001.

28. Issue 8: Add Percent Busy in the Local Operations Center (Texas Plan No. 26). This measurement was not included in DeltaCom's proposed performance measurements, although DeltaCom did request that BellSouth measure the percent busy in BellSouth's UNE Center. However, BellSouth does not believe there is any need for this measurement because, unlike SBC, BellSouth has engineered the trunk groups connecting to the BellSouth provisioning and repair centers so that all calls are routed to the trunk groups serving those centers without blocking. This means that no busy signal is encountered by a CLEC calling the BellSouth provisioning and repair centers. Therefore, BellSouth's SQM measurement, Average Answer Time – Repair Center, which measures the time the call is in the queue, is a more accurate reflection of BellSouth's performance for calls to the provisioning and repair centers. Because no busy signal is encountered, if BellSouth were required to produce this measurement as defined in the Texas Plan, the report would display zero every month. Nevertheless, the programming changes necessary to implement this measurement could be completed by the second quarter of 2001.

29. Issue 9: Add Percent Installations Completed within Industry Guidelines for LNP with Loop (Texas Plan No. 56.1). This measurement was not included in DeltaCom's proposed performance measurements. However, BellSouth's new SQM measurement, Percent Missed Installation Appointments for LNP, provides basically the same information captured under the Texas Plan measurement for mechanized LSRs, with some variation in the level of disaggregation. The BellSouth measurement disaggregates by LNP and UNE Loop associated

with LNP, and Total Misses vs. End User Caused Misses. This measurement is now available and is described in greater detail in the February 2000 version of BellSouth's SQMs. However, to produce this measurement exactly as defined in the Texas Plan would require programming work that could not be completed before the second quarter of 2001.

30. Issue 10: Add Average Response Time for Loop Makeup Information (Texas Plan No. 57). This measurement was not included in DeltaCom's proposed performance measurements. However, the process by which CLECs obtain loop makeup information is the same for CLECs as it is for BellSouth retail, which ensure that BellSouth provides nondiscriminatory access. Currently, BellSouth does not have the capability to capture the time and the date when loop makeup information is requested or provided. Thus, in order to develop this measurement as defined in the Texas Plan, BellSouth would have to develop a new system capability to produce the data as well as modify BellSouth's PMAP system to capture and produce reports on BellSouth's performance. The estimated timeframe for completing this work is the first quarter of 2002.

31. Issue 11: Add Directory Assistance Average Speed of Answer (Texas Plan No. 80). This measurement was not included in DeltaCom's proposed performance measurements. However, BellSouth's existing SQM measurement, Average Speed to Answer (Directory Assistance), is the same as this Texas Plan measurement.

32. Issue 12: Add Operator Services Speed of Answer (Texas Plan No. 80). This measurement was not included in DeltaCom's proposed performance measurements. However, BellSouth's existing SQM measurement, Average Speed to Answer (Toll), is the same as this Texas Plan measurement.

33. Issue 13: Add Percentage of LNP Only Due Dates within Industry Guidelines (Texas Plan No. 91). This measurement was not included in DeltaCom's proposed performance measurements. BellSouth believes that its new measurement, Percent Missed Installation Appointments for LNP, provides this Authority and DeltaCom with the necessary information to identify any discrimination with respect to number portability. This measurement is now available and is described in greater detail in the February 2000 version of BellSouth's SQMs. The data necessary to calculate the measurement as defined in the Texas Plan, however, is not currently available because BellSouth lacks the LNP Gateway updates and feature packages that capture LNP due dates, which SBC already has in place. BellSouth is in the process of purchasing these LNP Gateway updates and feature packages, which should be in place by the third quarter of 2000. After the LNP Gateway updates and feature packages have been fully installed and tested, modifications would have to be made to the BellSouth PMAP system in order to collect the relevant data and produce the requisite performance report. BellSouth believes this measurement could be produced by the second quarter of 2001.

34. Issue 14: Add Percentage of Time the Old Service Provider Releases the Subscription Prior to the Expiration of the second 9 Hour (T2) Timer (Texas Plan No. 92). This measurement was not included in DeltaCom's proposed performance measurements. However, BellSouth has developed a new measurement, Average Disconnect Timeliness & Disconnect Timeliness Interval Distribution, which BellSouth believes more accurately reflects its performance in responding to the CLEC message to activate the number porting. BellSouth's measurement defines disconnect timeliness as the interval between the time the LNP Gateway receives the "Number Ported" message from Numbering Plan Administrative Center (signifying the CLEC activation of number porting) until the time that service is disconnected. This interval

effectively measures BellSouth's responsiveness by isolating it from impacts that are caused by CLEC related activities. The data necessary to calculate the measurement as defined in the Texas Plan, however, is not currently available because BellSouth lacks the LNP Gateway updates and feature packages that capture LNP due dates, which SBC already has in place. BellSouth is in the process of purchasing these LNP Gateway updates and feature packages, which should be in place by the third quarter of 2000. After the LNP Gateway updates and feature packages have been fully installed and tested, modifications would have to be made to the BellSouth PMAP system in order to collect the relevant data and produce the requisite performance report. BellSouth believes this measurement could be produced by the second quarter of 2001.

35. Issue 15: Add Percentage of Customer Account Restructured Prior to LNP Due Date (Texas Plan No. 93). This measurement was not included in DeltaCom's proposed performance measurements. Furthermore, the data necessary to calculate the measurement as defined in the Texas Plan is not currently available because BellSouth lacks the LNP Gateway updates and feature packages that capture the restructuring of customer accounts, which SBC already has in place. BellSouth is in the process of purchasing these LNP Gateway updates and feature packages, which should be in place by the third quarter of 2000. After the LNP Gateway updates and feature packages have been fully installed and tested, modifications would have to be made to the BellSouth PMAP system in order to collect the relevant data and produce the requisite performance report. BellSouth believes this measurement could be produced by the second quarter of 2001.

36. Issue 16: Add Percentage Pre-mature Disconnects for LNP Orders (Texas Plan No. 96). This measurement was not included in DeltaCom's proposed performance measurements. Furthermore, the data necessary to calculate the measurement as defined in the

Texas Plan is not currently available because BellSouth lacks the LNP Gateway updates and feature packages that capture premature disconnects for LNP orders, which SBC already has in place. BellSouth is in the process of purchasing these LNP Gateway updates and feature packages, which should be in place by the third quarter of 2000. After the LNP Gateway updates and feature packages have been fully installed and tested, modifications would have to be made to the BellSouth PMAP system in order to collect the relevant data and produce the requisite performance report. BellSouth believes this measurement could be produced by the second quarter of 2001.

37. Issue 17: Add Average Days Required to Process a Request -- Poles, Conduit, Rights of Way (Texas Plan No. 106). This measurement was not included in DeltaCom's proposed performance measurements. Furthermore, BellSouth does not believe it is necessary to produce this measurement, particularly since the FCC has already determined that BellSouth provides nondiscriminatory access to poles, ducts, conduits, and rights of way. *Second Louisiana Order,* CC Docket 98-121, ¶ 174. The FCC made this determination based upon BellSouth's "nondiscriminatory procedures for access to poles, ducts, conduits and rights-of-way," without the need for data reflecting the "average days required to process a request." BellSouth does not currently capture the date when requests for access to poles, ducts, conduits, and rights-of-way are made or when such requests are processed. To develop this measurement as defined in the Texas Plan, BellSouth would be required to implement a new system capability to capture the data as well as to modify BellSouth's PMAP system to produce reports on the performance of the new system capability. The estimated timeframe for implementation is the second quarter of 2001.

38. Issue 18: Add Cageless Collocation to the Level of Disaggregation on BST's SQM "Collocation Average Response Time." BellSouth had begun efforts to measure its performance with respect to cageless collocation before the Arbitrators' decision in this docket, and BellSouth fully intends to include this measurement as part of its SQMs. The data necessary to produce this report will be captured electronically when BellSouth's new web-based collocation ordering interface becomes available the third quarter of this year. Once the data is available, modifications will be made to BellSouth's PMAP system to capture the data and produce reports, which should be completed by the end of the first quarter of 2001.

39. Issue 19: Add Cageless Collocation to the Level of Disaggregation on BST's SQM "Collocation Average Arrangement Time." BellSouth had begun efforts to measure its performance with respect to cageless collocation before the Arbitrators' decision in this docket, and BellSouth fully intends to include this measurement as part of its SQMs. The data necessary to produce this report will be captured electronically when BellSouth's new web-based collocation ordering interface becomes available the third quarter of this year. Once the data is available, modifications will be made to BellSouth's PMAP system to capture the data and produce reports, which should be completed by the end of the first quarter of 2001.

40. Issue 20: Add Cageless Collocation to the Level of Disaggregation on BST's SQM "Collocation Percent of Due Dates Missed." BellSouth had begun efforts to measure its performance with respect to cageless collocation before the Arbitrators' decision in this docket, and BellSouth fully intends to include this measurement as part of its SQMs. The data necessary to produce this report will be captured electronically when BellSouth's new web-based collocation ordering interface becomes available the third quarter of this year. Once the data is

available, modifications will be made to BellSouth's PMAP system to capture the data and produce reports, which should be completed by the end of the first quarter of 2001.

41. Issue 21: Add Percentage of Updates Completed into the DA Database within 72 Hours for Facility Based CLECs (Texas Plan No. 110). This measurement was not included in DeltaCom's proposed performance measurements. Furthermore, there is no need to measure the timeliness of directory assistance updates because all directory assistance database updates are processed at the same time and in the same manner for BellSouth retail customers and CLEC customers. This ensures that BellSouth is providing nondiscriminatory access to directory assistance. In order to produce this measurement as defined in the Texas Plan, BellSouth would not only have to modify PMAP, but also would be required to make major changes in several database administration systems in order to capture and report the date and time of DA updates and to separately segregate DA updates submitted from facilities-based CLECs. The earliest this measurement could be available would be the second quarter of 2001.

42. Issue 22: Add Average Update Interval for DA Database for Facility Based CLECs (Texas Plan No. 111). This measurement was not included in DeltaCom's proposed performance measurements. Furthermore, there is no need to measure the timeliness of directory assistance updates because all directory assistance database updates are processed at the same time and in the same manner for BellSouth retail customers and CLEC customers. This ensures that BellSouth is providing nondiscriminatory access to directory assistance. In order to produce this measurement as defined in the Texas Plan, BellSouth would not only have to modify PMAP, but also would be required to make major changes in several database administration systems in order to capture and report the date and time of DA updates and to separately segregate DA

updates submitted from facilities-based CLECs. The earliest this measurement could be available would be the second quarter of 2001.

43. Issue 23: Add Percentage of DA Database Accuracy for Manual Updates (Texas Plan No. 112). This measurement was not included in DeltaCom's proposed performance measurements. Furthermore, under the Texas Plan, the data necessary to calculate this measurement is not captured by SBC, but rather is provided by the various CLECs, which is then "verified" by SBC in producing the performance report. None of BellSouth's SQMs is dependent upon data furnished by CLECs, and requiring BellSouth to determine its performance based upon such data would be inconsistent with the Arbitrators' decision to "approve the use of BellSouth data for all measurements and calculations ...." Transcript of Proceedings, Tr. at 22. Because this Texas Plan measurement is dependent upon CLEC-furnished data, BellSouth is unable to provide a reasonable commitment date for when this measurement could be available until DeltaCom and every other CLEC indicate when they would be able to furnish the requisite data, even assuming they are willing to do so.

44. Issue 24: Add Percentage of Premature Disconnects (Coordinated Cutovers) (Texas Plan No. 114). BellSouth is developing a new performance measurement, "Hot Cut" Timeliness," which will capture data concerning the timeliness with which BellSouth performs "hot cuts" of unbundled loops. This measurement will be produced manually and will be available in July of this year. It will provide the Authority and DeltaCom with the information necessary to ensure that BellSouth is providing nondiscriminatory access to unbundled loops. The difference between BellSouth's "Hot Cut" measurement and the measurement as defined in the Texas Plan is that the proposed BellSouth measurement captures the difference in actual cutover time before *and* after the agreed upon planned cutover time. In contrast, the Texas Plan

measurement only addresses the difference in cutover time before the planned cutover time. In order to develop the measurement as defined in the Texas Plan, BellSouth would be required to modify its PMAP system, which could be completed by the second quarter of 2001.

45. Issue 25: Add Percentage of Missed Mechanized INP Conversions (Texas Plan No. 116). This measurement was not included in DeltaCom's proposed performance measurements. Furthermore, little use would be served in gathering performance data on Interim Number Portability conversions, since Interim Number Portability has been replaced with LNP in most parts of Tennessee. As of March 31, 2000, BellSouth has implemented LNP in 177 of the 201 wire centers in the State. The 24 wire centers were LNP has not been deployed are in primarily rural areas and include: Dayton, Jasper, Whitwell, Camden, Greenfield, Huntingdon, Medina, Selmer, Trenton, Dandridge, Rogersville, Surgoinsville, White Pine, Harriman, Rockwood, Sweetwater, Bolivar, Middleton, Huntland, Manchester, Blanche, Flintville, Sewanee, and McEwen, Tennessee. These 24 wire centers serve less than 5% of BellSouth's access lines in the State.

46. Issue 26: Add Percent NXXs loaded and tested prior to the LERG effective date (Texas Plan No. 117). This measurement was not included in DeltaCom's proposed performance measurements. Furthermore, BellSouth's systems do not currently capture the date an NXX is loaded or tested or the LERG effective date. In order to develop this measurement as defined in the Texas Plan, BellSouth would be required to develop a new system capability to capture this data as well as modify its PMAP system to produce reports on the performance of the new system capability. BellSouth estimates that this work necessary to produce this measurement could be completed by the fourth quarter of 2001.

47. Issue 27: Add Average Delay Days for NXX Loading and Testing (Texas Plan No. 118). This measurement was not included in DeltaCom's proposed performance measurements. Furthermore, BellSouth's systems do not currently capture the date an NXX is loaded or tested. In order to develop this measurement as defined in the Texas Plan, BellSouth would be required to develop a new system capability to capture this data as well as modify its PMAP system to produce reports on the performance of the new system capability. BellSouth estimates that this work necessary to produce this measurement could be completed by the fourth quarter of 2001.

48. Issue 28: Add Mean Time to Repair NXX Trouble Reports (Texas Plan No. 119). This measurement was not included in DeltaCom's proposed performance measurements. Furthermore, this information is already included in the performance data BellSouth reports for the average repair interval generally. Not distinction is currently made in repairs for NXX trouble reports as opposed to other types of trouble reports. In order to develop this measurement as defined in the Texas Plan, BellSouth would be required to develop a new system capability to separate NXX troubles from other types of troubles and to eliminate NXX troubles caused by the CLECs as opposed to BellSouth (since BellSouth would not able to determine when CLEC-caused NXX troubles were "repaired." BellSouth also would be required to modify its PMAP system to produce reports on the performance of this new system capability BellSouth estimates that this work necessary to produce this measurement could be completed by the fourth quarter of 2001.

49. Issue 29: Add Percentage of Bona Fide Requests Processed within 30 Business Days (Texas Plan No. 120). This measurement was not included in DeltaCom's proposed performance measurements, although DeltaCom did request that BellSouth measure the

percentage of Bona Fide Requests processed with 45 days. Bona Fide Requests are a manual process used by BellSouth to respond to a CLEC's request for a nonstandard service or arrangement. Because of the relatively low volume of Bona Fide Requests received, it makes no sense to spend the resources to track electronically this process. For example, according to the reports filed by SBC in connection with its application to the FCC for long distance authority in Texas (page 271 – No. 123-121), SBC received only 11 Bona Fide Requests in Texas between February 1999 and January 2000. To date this year, BellSouth has only received a total of seven Bona Fide Requests from CLECs across the entire region. However, BellSouth estimates that it could produce a manual report of its Bona Fide Requests within sixty (60) days.

50. Issue 30: Add Percentage of Quotes Provided for Authorized BFRs/Special Requests within X (10,30,90) Days (Texas Plan No. 121). This measurement was not included in DeltaCom's proposed performance measurements, although DeltaCom did request that BellSouth measure the percentage of quotes provided within 30 days. Bona Fide Requests are a manual process used by BellSouth to respond to a CLEC's request for a nonstandard service or arrangement. Because of the relatively low volume of Bona Fide Requests received, it makes no sense to spend the resources to track electronically this process. For example, according to the reports filed by SBC in connection with its application to the FCC for long distance authority in Texas (page 271 – No. 123-121), SBC provided four quotes within 90 business days between February 1999 and January 2000. However, BellSouth estimates that it could produce a manual report of the percentage of quotes provided in response to Bona Fide Requests within sixty (60) days.

51. In preparing its good faith estimates of the time necessary to implement the modifications to BellSouth's SQMs adopted by the Arbitrators, BellSouth has taken into account

the work associated with such modifications as well the work currently underway to support the latest version of the SQMs and to enhance the PMAP system. BellSouth also estimates that the cost of implementing the modifications adopted by the Arbitrators, which BellSouth had not already implemented or made plans to implement, would be approximately $ 4.2 million.

Disaggregation Of Performance Data At State (Tennessee) Level

52. The vast majority of BellSouth's SQMs already disaggregate performance data at the State level. However, certain performance measurements only capture regional data by virtue of the regional nature of the systems or processes involved. These regional performance measurements either cannot reasonably be disaggregated at the State level or can only be disaggregated at the State level at additional time and expense, even though there is no real benefit to doing so.

53. Average Response Time and Response Interval (Pre-Ordering) and Response Interval (Maintenance & Repair). Queries to BellSouth's Pre-Ordering and Maintenance & Repair interfaces originate from a regional Gateway to regional operations centers. In other words, pre-ordering queries from a CLEC in Florida as well as those from a CLEC in Tennessee are directed to the same regional Gateway for processing. There is currently no way to identify where the query originated from beyond this regional Gateway. In fact, many CLECs utilize regional service centers of their own, so that a CLEC customer service representative sitting in Denver, Colorado may place a pre-ordering query while on the telephone with a prospective customer in Tennessee. As a result, there is simply no reasonable way to determine the location of a query, which would be required in order to report this data at the State level. The only way to attempt to do so would be to trap each query received and check for originating telephone number, queried telephone number, queried address or appointment. The trapping and

examination of this information would be cost prohibitive and, more importantly, would drastically slow the processing time of all queries from all CLECs in all states.

54. Interface Availability (Pre-Ordering) and Interface Availability (Maintenance & Repair). BellSouth's Operations Support Systems are regional in nature, and the availability of these systems can only be reported at the regional level. There is simply no way to distinguish the availability of BellSouth's systems for a transaction from Tennessee as opposed to a transaction from another state. BellSouth's systems are either available or they are not, regardless of whether the CLEC using the system is located in Tennessee or some other BellSouth state.

55. Percent Flow-Through Service Requests. This measurement could be reported at the state level, although there is marginal benefit in so doing since LSRs are processed from regional centers using regional systems. However, in order to report Percent Flow-Through on a state basis, the BellSouth OSS that provide the data would have to be modified to capture state specific information from the LSRs and additional modifications would have to be made in BellSouth's PMAP system to capture the data and produce reports. BellSouth is still waiting on estimates on the OSS modifications and timeframes for delivery. However, in addition to these costs that have not yet been quantified, BellSouth's PMAP system would require modifications to capture the data and produce the reports, which could not be completed until at least 6 months after the necessary OSSs modifications have been made.

56. Average Answer Time – Repair Centers. The BellSouth repair centers are regional for all CLECs. All calls, regardless of the state of origination, are answered in the order of receipt. There is currently no way to identify where the call originated from, which would be required to disaggregate performance data to the State level. In fact, many CLECs utilize

regional service centers of their own, so that a CLEC customer service representative sitting in Denver, Colorado may place a repair call for a customer in Tennessee. Furthermore, BellSouth receives many repair calls from cellular phones, which further complicates the task of identify the state where the repair called originated. The only way to attempt to do so would be to trap each call received and conceivably check for originating telephone number or the telephone number or address for which repair service is being requested. The trapping and examination of this information would be cost prohibitive and, more importantly, would drastically slow the processing time of repair calls from all CLECs in all states.

57. Usage Data Delivery Accuracy. This measurement could be reported at the state level. However, the BellSouth OSS that provide the data would have to be modified to capture state specific information and additional modifications would have to be made in BellSouth's PMAP system to capture the data and produce reports. The modifications to the OSSs would cost an estimated $253,000 and data could not be produced until the end of the second quarter of 2001. In addition to these costs, BellSouth's PMAP system would require modifications to capture the data and produce the reports at a cost of $102,000 and a minimum of 6 months after the modifications to the OSS have been completed.

58. Usage Data Delivery Completeness. This measurement could be reported at the state level. However, BellSouth's PMAP system would have to be modified to capture the data and produce the reports, which would cost approximately $72,000 and which would require a minimum of 6 months of development work.

59. Mean Time to Deliver Usage. This measurement could be reported at the state level. However, BellSouth's PMAP system would have to be modified to capture the data and

produce the reports, which would cost approximately $72,000 and which would require a minimum of 6 months of development work.

Measurements And Disaggregation "Under Development"

60. The September 15, 1999 version of the SQMs identified certain measurements and disaggregation levels that were "under development," including: (i) Retail Analogs and Benchmarks; (ii) LNP Measurements; (iii) Switching, Local Transport, and Loop/Port Combination Measurements; (iv) Total Service Order Cycle Time Measurement; (v) Total Line and Circuit Count associated with Mean Held Order Interval; (vi) Average Jeopardy Notice for BellSouth Aggregate; and (vii) BellSouth Aggregate for Speed of Answer – Ordering and Maintenance Centers. Outlined below is a status report for each of these items.

61. Retail Analogs and Benchmarks. BellSouth has developed Retail Analogs and Benchmark, which are included in the February 29, 2000 version of the SQMs. These Retail Analogs and Benchmarks were posted on BellSouth's website in February of this year and are being used in Florida and Georgia in connection with the third-party testing of BellSouth's OSS.

62. LNP Measurements. The February 29, 2000 version of the SQMs includes six LNP measurements. These measurements are: Percent Rejected Service Requests; Reject Interval Distribution & Average Reject Interval; Firm Order Confirmation Timeliness Interval Distribution & First Order Confirmation Average Interval; Percent Missed Installation Appointments; Average Disconnect Timeliness Interval & Disconnect Timeliness Interval Distribution; and Total Service Order Cycle Time. Reporting for these six LNP measurements began in March 2000.

62. Total Service Order Cycle Time Measurement. This measurement was implemented in December 1999 for all orders not involving Local Number Portability and in March, 2000 for orders related to LNP.

63. Switching, Local Transport, and Loop/Port Combination Measurements. BellSouth has received a low volume of CLEC orders for unbundled Switching and Local Transport. However, specific reporting for both products is planned for completion by the end of the fourth quarter of 2000. Reporting on Loop Port Combinations is presently in trial with full production targeted for implementation in August 2000.

64. Total Line and Circuit Count associated with Mean Held Order Interval. Separate reporting for held orders of less than ten circuits and ten circuits or more was implemented in late 1999.

65. Average Jeopardy Notice for BellSouth Aggregate. The BellSouth aggregate for jeopardy notice interval and percent jeopardy was implemented in late 1999.

66. BellSouth Aggregate for Speed of Answer – Ordering and Maintenance Centers. A programming change has been initiated to aggregate the results for the BellSouth ordering centers serving residence and business. These results are currently being reported separately. The speed of answer for the maintenance centers was aggregated for reporting purposes in late 1999.

Electronic Access To Performance Reports And Data

67. Performance reports for all BellSouth SQMs are currently available electronically on a monthly basis via BellSouth's web-site at https://pmap.bellsouth.com. This web-site also allows DeltaCom to access electronically the raw data underlying those reports to the extent such reports are derived from PMAP. This would include the most critical ordering, provisioning,

and maintenance & repair measurements in which CLECs generally are interested, including, but not limited to, FOC Timeliness, Reject Interval, Percent Missed Installation Appointments, Average Completion Interval Order Completion Interval Distribution, Missed Repair Appointments, Customer Trouble Report Rate, and Maintenance Average Duration.

68. While every performance report is available electronically, BellSouth does not have the capability to make available electronically the raw data that is used to generate reports outside of PMAP. This would include the raw data for the regional reports that are not specific to a single CLEC, which cannot be efficiently generated electronically. The measurements that reflect the Speed of Answer in the Ordering Center and Speed of Answer in the Maintenance Center are a good example. These measurements reflect the time during which a call in queue until a BellSouth representative answers the call. These work centers are regional in nature and serve all CLECs, which means that hundreds of thousands of calls are received each month. Although each call is individually timed and the averages for the month are posted on the SQM reports, it is not reasonably possible to electronically identify each and every CLEC call underlying these SQM reports.

69. While it would be possible for BellSouth to manually load each piece of data so that it could be reviewed electronically, this would be an incredibly time consuming and expensive process. BellSouth should not be required to engage in such a process. First, BellSouth is a leader in the industry in terms of making raw data available electronically for review by CLECs, and the access afforded by BellSouth's web-side is unparalleled in the industry. Second, CLECs generally have demonstrated very little interest in accessing PMAPs, let alone the raw data that is currently available. For example, between April through December 1999, an average of only 12

CLECs accessed PMAP on a monthly basis to generate five or more reports, which represents only 2% of the CLECs in BellSouth's region.

70. The fact that raw data is not available electronically does not mean that it is not subject to review. In fact, KPMG is currently auditing the raw data underlying BellSouth's SQMs in conjunction with the evaluation of BellSouth's OSS in Georgia, and similar audits are planned in Florida and Louisiana. In addition, both BellSouth's SQMs and VSEEM III proposal include audit mechanisms which will ensure that BellSouth is reporting its performance accurately.

71. For those measurements ordered by the Arbitrators that must be produced manually, BellSouth can provide an electronic version by e-mail. This would include the measurements relating to BellSouth's performance with respect to Bona Fide Requests.

Further, affiant sayeth naught.

David A. Coon

Subscribed and sworn to before me this 22nd day of May 2000

Notary Public

213240

ATTACHMENT 1

Service Performance Measurements And Enforcement Mechanisms

1. Scope

This Attachment includes Enforcement Measurements with corresponding Enforcement Mechanisms applicable to this Agreement.

2. Reporting

2.1 In providing services pursuant to this Agreement, BellSouth will report its performance to DeltaCom in accordance with BellSouth's Service Quality Measurements, which are contained in this Attachment as Exhibit A and in accordance with BellSouth's Enforcement Measurements, which are contained in this Attachment as Exhibit B.

2.2 BellSouth will make performance reports available to DeltaCom on a monthly basis. The reports will contain information collected in each performance category and will be available to DeltaCom through some electronic medium to be determined by BellSouth. BellSouth will also provide electronic access to the raw data underlying the performance measurements to the extent available. Within thirty (30) days of execution of this Agreement, BellSouth will provide a detailed session of instruction to DeltaCom regarding access to the reports and to the raw data as well as the nature of the format of the data provided.

3. Modifications to Measurements

3.1 Service Quality Measurements

3.1.1 BellSouth will update the Service Quality Measurements contained in Exhibit A of this Attachment each calendar quarter. BellSouth will not delete any Service Quality Measurement without prior written consent of DeltaCom. DeltaCom may provide input to BellSouth regarding any suggested additions, deletions or other modifications to the Service Quality Measurements. BellSouth will provide notice of all changes to the Service Quality Measurements via BellSouth's internet website.

3.1.2 Notwithstanding the foregoing, BellSouth may, from time to time, be ordered by a regulatory or judicial body to modify or amend the Service Quality Measurements. BellSouth will make all such changes to the Service Quality Measurements consistent with the General Terms and Conditions of this Agreement, incorporated herein by reference. Nothing herein shall preclude either party from participating in any proceeding

involving BellSouth's Service Quality Measurements or from advocating that those Measurements be modified from those contained herein.

3.1.3 Notwithstanding any other provision of this Agreement, in the event a dispute arises regarding the modification or amendment of the Service Quality Measurements, the parties will refer the dispute to the appropriate state Commission.

3.2 Enforcement Measurements and Statistical Test

3.2.1 In order for BellSouth to accurately administer the Enforcement Measurements contained in Exhibit B of this Attachment, the Enforcement Measurements shall be modified or amended only if BellSouth determines such modification or amendment is necessary. However, BellSouth will not delete any Enforcement Measurement without prior written consent of DeltaCom. BellSouth will notify DeltaCom of any such modification or amendment to the Enforcement Measurements via BellSouth's internet website.

3.2.2 Notwithstanding the foregoing, BellSouth may, from time to time, be ordered by a regulatory or judicial body to modify or amend the Enforcement Measurements and/or Statistical Test. BellSouth will make all such changes to the Enforcement Measurements and/or Statistical Test consistent with the General Terms and Conditions of this Agreement, incorporated herein by reference. Nothing herein shall preclude either party from participating in any proceeding involving the Enforcement Measurements and/or Statistical Test or from advocating that those Measurements or Test be modified from those contained herein.

3.2.3 Notwithstanding any other provision of this Agreement, in the event a dispute arises regarding the modification or amendment of the Enforcement Measurements and/or Statistical Test, the parties will refer the dispute to the appropriate state Commission.

4. Enforcement Mechanisms

4.1 Purpose

This section establishes meaningful and significant enforcement mechanisms voluntarily provided by BellSouth to verify and maintain compliance between BellSouth and DeltaCom's operations as well as to maintain access to Operational Support System (OSS) functions. This section provides the terms and conditions for such self-effectuating enforcement mechanisms. To the extent the FCC issues an order authorizing BellSouth to provide interLATA telecommunications service under section 271 of the Act that contains enforcement mechanisms that deviate

from those contained herein, BellSouth and DeltaCom agree to amend this Attachment to conform to the FCC's order.

4.2 Effective Date

Tier-1 Enforcement Mechanisms shall become effective in all BellSouth states upon an effective FCC order, which has not been stayed, authorizing BellSouth to provide interLATA telecommunications service under section 271 of the Act within any given state. Tier-2 and Tier-3 Enforcement Mechanisms set forth in this section shall only become effective upon an effective FCC order, which has not been stayed, authorizing BellSouth to provide interLATA telecommunications services under section 271 of the Act within a particular state and shall only apply to BellSouth's performance in any state in which the FCC has granted BellSouth interLATA authority.

4.3 Definitions

4.3.1 Enforcement Measurement Elements means the performance measurements set forth in Exhibit B, attached hereto and incorporated herein by this reference.

4.3.2 Enforcement Measurement Benchmark means a competitive level of performance negotiated by BellSouth used to compare the performance of BellSouth and DeltaCom where no analogous process, product or service is feasible. See Exhibit B.

4.3.3 Enforcement Measurement Compliance means comparing performance levels provided to BellSouth retail customers with performance levels provided by BellSouth to the CLEC customer, as set forth in Exhibit C, attached hereto and incorporated herein by this reference.

4.3.4 Test Statistic and Balancing Critical Value is the means by which enforcement will be determine using statistically valid equations. See Exhibit C.

4.3.5 Cell is the point (below the wire center level) 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 DeltaCom resold services for residential customers, requiring a dispatch, in the same wire center, at a particular point in time. When determining compliance, these cells can have a positive or negative value. See Exhibit C.

4.3.6 Affected Volume means that proportion of the total impacted DeltaCom volume or CLEC Aggregate volume for which remedies will be paid.

4.3.7 Parity Gap refers to the incremental departure from a compliant-level of service. (See Exhibit D). This is also referred to as "diff" in the Statistical paper (See Exhibit C).

4.3.8 Tier-1 Enforcement Mechanisms means self-executing liquidated damages paid directly to DeltaCom when BellSouth delivers non-compliant performance of any one of the Enforcement Measurement Elements for any month as calculated by BellSouth.

4.3.9 Tier-2 Enforcement Mechanisms means Assessments paid directly to a state Public Service Commission ("Commission") or its designee. Tier 2 Enforcement Mechanisms are triggered by three consecutive monthly failures in a quarter in which BellSouth performance is out of compliance or does not meet the benchmarks for the aggregate of all CLEC data as calculated by BellSouth for a particular Enforcement Measurement Element.

4.3.10 Tier-3 Enforcement Mechanisms means the voluntary suspension of additional marketing and sales of long distance services triggered by excessive repeat failures of those specific submeasures as defined in Exhibit D attached hereto and incorporated herein by this reference.

4.4 Application

4.4.1 The application of the Tier-1, Tier-2, and Tier-3 Enforcement Mechanisms does not foreclose other non-contractual legal and regulatory claims and remedies available to DeltaCom.

4.4.2 Proof of damages resulting from BellSouth's failure to maintain Enforcement Measurement Compliance would be difficult to ascertain and, therefore, liquidated damages are a reasonable approximation of any contractual damage. Liquidated damages under this provision are not intended to be a penalty.

4.5 Methodology

4.5.1 Tier-1 Enforcement Mechanisms will be triggered by BellSouth's failure to achieve Enforcement Measurement Compliance or Enforcement Measurement Benchmarks for the State for a given Enforcement Measurement Element in a given month based upon a test statistic and balancing critical value calculated by BellSouth utilizing BellSouth generated data. The method of calculation is attached hereto as Exhibit D and incorporated herein by this reference.

4.5.1.1 Tier-1 Enforcement Mechanisms apply on a per transaction basis for each negative cell and will escalate based upon the number of consecutive months that BellSouth has reported non-compliance.

4.5.1.2 Fee Schedule for Tier-1 Enforcement Mechanisms is shown in Table-1 attached hereto as Exhibit E and incorporated herein by this reference. Failures beyond Month 6 (as set forth in Table 1) will be subject to Month 6 fees.

4.5.2 Tier-2 Enforcement Mechanisms will be triggered by BellSouth's failure to achieve Enforcement Measurement Compliance or Enforcement Measurement Benchmarks for the State for given Enforcement Measurement Elements for three consecutive months in a given calendar quarter based upon a statistically valid equation calculated by BellSouth utilizing BellSouth generated data. The method of calculation is attached hereto as Exhibit D and incorporated herein by reference.

4.5.2.1 Tier- 2 Enforcement Mechanisms apply, for an aggregate of all CLEC data generated by BellSouth, on a per transaction basis for each negative cell for a particular Enforcement Measurement Element.

4.5.2.2 Fee Schedule for Total Quarterly Tier-2 Enforcement Mechanisms is show in Table-2 attached hereto as Exhibit E and incorporated herein by this reference.

4.5.3 Tier-3 Enforcement Mechanisms will be triggered by BellSouth's failure to achieve Enforcement Measurement Compliance or Enforcement Measurement Benchmarks for the State for given Enforcement Measurement Elements for three consecutive months in a given calendar quarter. The method of calculation for specified submeasures is identical to the method of calculation for Tier-2 Enforcement Mechanisms as described above. The specific submeasures which are the mechanism for triggering and removing a Tier-3 Enforcement Mechanisms are described in more detail in Exhibit D attached hereto and incorporated herein by this reference.

4.6 Payment of Tier-1 and Tier-2 Amounts

4.6.1 If BellSouth performance triggers an obligation to pay Tier-1 Enforcement Mechanisms to DeltaCom or an obligation to remit Tier-2 Enforcement Mechanisms to the Commission, BellSouth shall make payment in the required amount on or before the thirtieth (30^{th}) day following the due date of the performance measurement report for the month in which the obligation arose.

4.6.2 For each day after the due date that BellSouth fails to pay DeltaCom the required amount, BellSouth will pay interest to DeltaCom at the maximum rate permitted by state law.

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

4.6.4 If DeltaCom disputes the amount paid to DeltaCom for Tier-1 Enforcement Mechanisms, DeltaCom shall submit a written claim to BellSouth within sixty (60) days after the date of the performance measurement report for which the obligation arose. BellSouth shall investigate all claims and provide DeltaCom written findings within thirty (30) days after receipt of the claim. If BellSouth determines DeltaCom is owed additional amounts, BellSouth shall pay DeltaCom such additional amounts within thirty (30) days after its findings along with interest paid at the maximum rate permitted by law.

4.6.5 At the end of each calendar year, BellSouth will have its independent auditing and accounting firm certify that the results of all Tier-1 and Tier-2 Enforcement Mechanisms were paid and accounted for in accordance with Generally Accepted Account Principles (GAAP).

4.7 Limitations of Liability

4.7.1 BellSouth will not be responsible for DeltaCom acts or omissions that cause performance measures to be missed or fail, including but not limited to accumulation and submission of orders at unreasonable quantities or times or failure to submit accurate orders or inquiries. BellSouth shall provide DeltaCom with reasonable notice of such acts or omissions and provide DeltaCom any such supporting documentation.

4.7.2 BellSouth shall not be obligated for Tier-1, Tier-2 or Tier 3 Enforcement Mechanisms for non-compliance with a performance measure if such non-compliance was the result of an act or omission by DeltaCom that is in bad faith.

4.7.3 BellSouth shall not be obligated to pay Tier-1 Enforcement Mechanisms or Tier-2 Enforcement Mechanism for non-compliance with a performance measurement if such non-compliance was the result of any of the following: a Force Majeure event as set forth in the General Terms and Conditions of this Agreement; an act or omission by DeltaCom that is contrary to any of its obligations under its Interconnection Agreement with BellSouth; an act or omission by DeltaCom that is contrary to any of its obligations under the Act, Commission rule, or state law; an act or

omission associated with third-party systems or equipment; or any occurrence that results from an incident reasonably related to the Y2K problem.

4.7.4 It is not the intent of the Parties that BellSouth be liable for both Tier-2 Enforcement Mechanisms and any other assessments or sanctions imposed by the Commission. DeltaCom will not oppose any effort by BellSouth to set off Tier-2 Enforcement Mechanisms from any additional assessment imposed by the Commission.

4.7.5 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. The payment of any Tier-1 Enforcement Mechanisms to DeltaCom shall release BellSouth for any liability associated with or related to the service performance measurement for the month for which the Enforcement Mechanisms was paid to DeltaCom.

4.7.6 DeltaCom acknowledges and argues that the Enforcement Mechanisms contained in this attachment have been provided by BellSouth on a completely voluntary basis in order to maintain compliance between BellSouth and DeltaCom. Therefore, DeltaCom may not use the existence of this section or any payments of any Tier-1 or Tier-2 Enforcement Mechanisms under this section as evidence that BellSouth has not complied with or has violated any state or federal law or regulation.

4.8 Enforcement Mechanism Caps

4.8.1 BellSouth's total liability for the payment of Tier-1 and Tier-2 Enforcement Mechanisms shall be collectively capped at $625M per year for the entire BellSouth region as set forth below.

AL - $54M	MS - $44M
FL - $122M	NC - $77M
GA - $131M	SC - $47M
KY - $34M	TN - $57M
LA - $59M	
Regional Total - $625M	

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 liability for the payment of Tier-1 and Tier-2 Enforcement Mechanisms exceed the caps referenced in this attachment, DeltaCom may commence a proceeding with the Commission to demonstrate why

BellSouth should pay any amount in excess of the cap. DeltaCom shall have the burden of proof to demonstrate why, under the circumstances, BellSouth should have additional liability.

4.9 Dispute Resolution

4.9.1 Notwithstanding any other provision of this Agreement, any dispute regarding BellSouth's performance or obligations pursuant to this Attachment shall be resolved by the appropriate state Commission.

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EXHIBIT A

BellSouth
Service Quality Measurements Performance Reports

TABLE OF CONTENTS

TABLE OF CONTENTS – (continued)

* These reports are subject to change due to regulatory requirements or to correct errors and etc.

OSS (Operations Support Systems

Report/Measurement :

OSS-1. Average Response Time and Response Interval (Pre-Ordering)

Definition:

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

Exclusions:

None

Business Rules:

The average response time for retrieving pre-order/order information from a given legacy system is determined by summing the response times for all requests submitted to the legacy during the reporting period and dividing by the total number of legacy requests for that month X 100. The response interval starts when the client application (LENS or TAG for CLECs and RNS for BST) submits a request to the legacy system and ends when the appropriate response is returned to the client application. The number of legacy accesses during the reporting period, which take less than 2.3 seconds and the number, which take more than 6 seconds are also captured.

Level of Disaggregation:

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

Calculation:

Σ[(Date & Time of Legacy Response) – (Date & Time of Request to Legacy)] / (Number of Legacy Requests During the Reporting Period) X 100

Report Structure:

- Not CLEC Specific
- Not product/service specific
- Regional Level

Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Legacy Contract (per reporting dimension) • Response Interval • Regional Scope	• Report Month • Legacy Contract (per reporting dimension) • Response Interval • Regional Scope

Retail Analog/Benchmark:

See Appendix D

Revision Date: 02/22/00 (lg)

LEGACY SYSTEM ACCESS TIMES FOR RNS

System	Contract	Data	< 2.3 sec	> 6 sec	Avg. Sec	# of Calls
RSAG	RSAG-TN	Address	x	x	x	x
RSAG	RSAG-ADDR	Address	x	x	x	x
ATLAS	ATLAS-TN	TN	x	x	x	x
DSAP	DSAP-DDI	Schedule	x	x	x	x
CRIS	CRSACCTS	CSR	x	x	x	x
OASIS	OASISBSN	Feature/Service	x	x	x	x
OASIS	OASISCAR	Feature/Service	x	x	x	x
OASIS	OASISLPC	Feature/Service	x	x	x	x
OASIS	OASISMTN	Feature/Service	x	x	x	x
OASIS	OASISBIG	Feature/Service	x	x	x	x

LEGACY SYSTEM ACCESS TIMES FOR LENS

System	Contract	Data	< 2.3 sec	> 6 sec	Avg. Sec	# of Calls
RSAG	RSAG-TN	Address	x	x	x	x
RSAG	RSAG-ADDR	Address	x	x	x	x
ATLAS	ATLAS-TN	TN	x	x	x	x
DSAP	DSAPDDI	Schedule	x	x	x	x
HAL	HAL/CRIS	CSR	x	x	x	x
COFFI	COFFI/USOC	Feature/Service	x	x	x	x
P/SIMS	PSIMS/ORB	Feature/Service	x	x	x	x

LEGACY SYSTEM ACCESS TIMES FOR TAG

System	Contract	Data	< 2.3 sec	> 6 sec	Avg. Sec	# of Calls
RSAG	RSAG-TN	Address	x	x	x	x
RSAG	RSAG-ADDR	Address	x	x	x	x
ATLAS	ATLASTN	TN	x	x	x	x
DSAP	DSAPDDI	Schedule	x	x	x	x
HAL	HAL/CRIS	CSR	x	x	x	x
CRIS	CRSEINIT	CSR	x	x	x	x
CRIS	CRSECSR	CSR	x	x	x	x

Revision Date: 08/10/99 (lg)

OSS (Operations Support Systems

Report/Measurement:	
OSS-2. Interface Availability (Pre-Ordering)	
Definition:	
Percent of time OSS interface is functionally available compared to scheduled availability. Availability percentages for CLEC interface systems and for all Legacy systems accessed by them are captured	
Exclusions:	
None	
Business Rules:	
This measurement captures the availability percentages for the BST systems, which are used by CLECs during Pre-Ordering functions. Comparison to BST results allow conclusions as to whether an equal opportunity exists for the CLEC to deliver a comparable customer experience.	
Level of Disaggregation:	
Regional Level	
Calculation:	
(Functional Availability) / (Scheduled Availability) X 100	
Report Structure:	
• Not CLEC Specific • Not product/service specific • Regional Level	
Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report Month • Legacy contract type (per reporting dimension) • Regional Scope • Hours of Downtime	• Report Month • Legacy contract type (per reprorting dimension) • Regional Scope
Retail Analog/Benchmark:	
Benchmark – 99.5%	

OSS Interface Availability

OSS Interface	Applicable to	% Availability
LENS	CLEC	x
LEO Mainframe	CLEC	x
LEO UNIX	CLEC	x
LESOG	CLEC	x
EDI	CLEC	x
HAL	CLEC	x
BOCRIS	CLEC/BST	x
ATLAS/COFFI	CLEC/BST	x
RSAG/DSAP	CLEC/BST	x
SOCS	CLEC/BST	x
TAG	CLEC	x

Revision Date: 02/22/00 (lg)

OSS (Operations Support Systems

Report/Measurement:	
OSS-3. Interface Availability (Maintenance & Repair)	
Definition:	
The percentage of time the OSS Interface is functionally available compared to scheduled availability. Availability percentage for the CLEC and BST interface systems and for the legacy systems accessed by them are captured.	
Exclusions:	
None	
Business Rules:	
This measure is designed to compare the OSS availability versus scheduled availability of BST's legacy systems.	
Calculation:	
OSS Interface Availability = (Actual System Functional Availability) / (Actual planned System Availability) X 100	
Report Structure:	
• CLEC Aggregate • BST Aggregate • BST/CLEC	
Level of Disaggregation:	
Region	
Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Availability of CLEC TAFI • Availability of LMOS HOST, MARCH, SOCS, CRIS, PREDICTOR, LNP and OSPCM • ECTA (Under Development)	• Availability of BST TAFI • Availability of LMOS HOST, MARCH, SOCS, CRIS, PREDICTOR, LNP and OSPCM
Retail Analog/Benchmark:	
Parity by design; Retail Analog ECTA Benchmark – 99.5%	

OSS Interface Availability (M&R)

OSS Interface	% Availability
BST TAFI	x
CLEC TAFI	x
CLEC ECTA (under development)	
BST and CLEC	x
CRIS	x
LMOS HOST	x
LNP	x
MARCH	x
OSPCM	x
PREDICTOR	x
SOCS	x

Revision Date: 02/22/00 (see)

OSS (Operations Support Systems)

Report/Measurement:	
OSS-4. Response Interval (Maintenance & Repair)	
Definition:	
The response intervals are determined by subtracting the time a request is received on the BST side of the interface until the response is received from the legacy system. Percentages of requests falling into each interval category are reported, along with the actual number of requests falling into those categories.	
Exclusions:	
None	
Business Rules:	
This measure is designed to monitor the time required for the CLEC and BST interface system to obtain from BST's legacy systems the information required to handle maintenance and repair functions. The clock starts on the date and time when the request is received and the clock stops when the response has been transmitted through that same point to the requester. **NOTE:** The OSS Response Interval BST Total Report Is a BST Residence and Business Total.	
Calculation:	
OSS Response Interval = (Query Response Date and Time for Category "X") - (Query Request Date and Time for Category "X") / (Number of Queries Submitted in the Reporting Period) where, "X" is 0-4, $\geq$ 4 to 10, $\geq$ 10, $\geq$ 30 seconds.	
Report Structure:	
• CLEC • BST Residence • BST Business by interface for each legacy system and function as appropriate. • BST Total (Business + Residence)	
Level of Disaggregation:	
Region	
Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• CLEC Transaction Intervals	• BST Business and Residence transaction Intervals
Retail Analog/Benchmark:	
OSS Response Interval for CLEC's is comparable to OSS Response Interval for BST.	

System	BST & CLEC	Count < = 4	Count > 4, < = 10	Count <=10	Count >10	Count >30
CRIS	x	x	x	x	x	x
DLETH	x	x	x	x	x	x
DLR	x	x	x	x	x	x
LMOS	x	x	x	x	x	x
LMOSupd	x	x	x	x	x	x
LNP	x	x	x	x	x	x
MARCH	x	x	x	x	x	x
OSPCM	x	x	x	x	x	x
Predictor	x	x	x	x	x	x
SOCS	x	x	x	x	x	x
NIW	x	x	x	x	x	x

Revision Date: 02/22/00 (see)

ORDERING

Report/Measurement:

O-1. Percent Flow-Through Service Requests (Summary)

Definition:

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

Exclusions:

- Fatal Rejects
- Auto Clarification
- Manual Fallout
- CLEC System Fallout

Business Rules:

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

Definitions:

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

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

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

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

*Attached is 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 system functionality. If it is determined the error is caused by the CLEC, the LSR will be sent back to the CLEC as clarification. If it is determined the error is BST caused, the LCSC representative will correct the error, and the LSR will continue to be processed.

ORDERING – (Percent Flow Through Service Requests (Summary) – Continued)

Calculation:	
Percent Flow Through = (The total number of LSRs that flow through LESOG/LAUTO and reach a status for a FOC to be issued) / (the number of LSRs passed from LEO/LNP Gateway to LESOG/LAUTO) – Σ[(the number of LSRs that fall out for manual processing) + (the number of LSRs that are returned to the CLEC for clarification) + (the number of LSRs that contain errors made by CLECs)] X 100.	
Report Structure:	
• CLEC Aggregate ➢ Region	
Level of Disaggregation:	
• Geography ➢ Region • Product ➢ Residence ➢ Business ➢ UNE ➢ LNP	
Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report month • Total number of LSRs received, by interface, by CLEC ➢ TAG ➢ EDI ➢ LENS • Total number of errors by type, by CLEC: ➢ Fatal rejects ➢ Auto clarification ➢ CLEC caused system fallout • Total number of errors by error code • Total fallout for manual processing	• Report month • Total number of errors by type: ➢ BST system error
Retail Analog/Benchmark:	
Residence 90% Business 80% UNE 80%	

Revision Date: 02/22/00 (tm)

ORDERING

Report/Measurement:

O-2. Percent Flow-Through Service Requests (Detail)

Definition:

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

Exclusions:

- Fatal Rejects
- Auto Clarification
- Manual Fallout
- CLEC System Fallout

Business Rules:

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

Definitions:

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

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

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

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

*Attached is 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 system functionality. If it is determined the error is caused by the CLEC, the LSR will be sent back to the CLEC as clarification. If it is determined the error is BST caused, the LCSC representative will correct the error, and the LSR will continue to be processed.

ORDERING – (Percent Flow Through Service Requests (Detail) – Continued)

Calculation:

Percent Flow Through = The total number of LSRs that flow through LESOG/LAUTO and reach a status for a FOC to be issued / (the number of LSRs passed from LEO/LNP Gateway to LESOG/LAUTO) – Σ[(the number of LSRs that fall out for manual processing + the number of LSRs that are returned to the CLEC for clarification + the number of LSRs that contain errors made by CLECs)] X 100.

Report Structure:

- Provides the flow through percentage for each CLEC (by alias designation) submitting LSRs through the CLEC mechanized ordering process. The report provides the following:
  - CLEC (by alias designation)
  - Number of fatal rejects
  - Mechanized interface used
  - Total mechanized LSRs
  - Total manual fallout
  - Number of auto clarifications returned to CLEC
  - Number of validated LSRs
  - Number of BST caused fallout
  - Number of CLEC caused fallout
  - Number of Service Orders Issued
  - Base calculation
  - CLEC error excluded calculation

Level of Disaggregation:

- CLEC Specific (by alias designation to protect CLEC specific proprietary data)
- Geographic:
  - Region
- Product
  - Residence
  - Business
  - UNE
  - LNP

Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**

• Report month
• Total number of LSRs received, by interface, by CLEC
  ➢ TAG
  ➢ EDI
  ➢ LENS
• Total number of errors by type, by CLEC
  ➢ Fatal rejects
  ➢ Auto clarification
  ➢ CLEC errors
• Total number of errors by error code
• Total fallout for manual processing
	• Report month
	• Total number of errors by type:
	  ➢ BST system error

Retail Analog/Benchmark:

Residence 90%
Business 80%
UNE 80%

Revision Date: 02/22/00 (tm)

ORDERING

Report/Measurement:	
O-3. Flow-Through Error Analysis	
Definition:	
An analysis of each error type (by error code) that was experienced by the LSRs that did not flow through and reach a status for a FOC to be issued.	
Exclusions:	
Each Error Analysis is error code specific; therefore exclusions are not applicable.	
Business Rules:	
The CLEC mechanized ordering process includes all LSRs, including supplements (subsequent versions) which are submitted through one of the three gateway interfaces (TAG, EDI, and LENS), that flow through and reach a status for a FOC to be issued. The CLEC mechanized ordering process does not include LSRs, which are, submitted manually (e.g., fax, and courier).	
Calculation:	
Σ Of errors by type	
Report Structure:	
• Provides an analysis of each error type (by error code). The report is in descending order by count of each error code and provides the following: ➢ Error Type (by error code) ➢ Count of each error type ➢ Percent of each error type ➢ Cumulative percent ➢ Error Description ➢ CLEC Caused Count of each error code ➢ Percent of aggregate by CLEC caused count ➢ Percent of CLEC by CLEC caused count ➢ BST Caused Count of each error code ➢ Percent of aggregate by BST caused count ➢ Percent of BST by BST caused count	
Level of Disaggregation:	
Region	
Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report month • Total number of LSRs received • Total number of errors by type (by error code) ➢ CLEC caused error	• Report month • Total number of errors by type (by error code) ➢ BST system error
Retail Analog/Benchmark:	
Not Applicable	

Revision Date: 02/22/00 (tm)

BellSouth
Service Quality Measurements Performance Reports

LSR Flow-Through Matrix

PRODUCT	F/T	COMPLEX SERVICE	COMPLEX ORDER	PLANNED FALLOUT FOR MANUAL HANDLING [1]	EDI	TAG [2]	LENS 99 [4]	LENS [3]	COMMENTS
2 wire analog DID trunk port	No [5]	UNE	Yes	Yes	N	N	N	N	
2 wire analog port	Yes	UNE	No	No	Y	Y	N	N	
2 wire ISDN digital line side port	No	UNE	Yes	Yes	N	N	N	N	
2 wire ISDN digital loop	No	UNE	Yes	NA	Y	Y	N	N	
3 Way Calling	Yes	No	No	NA	Y	Y	Y	Y	
4 wire analog voice grade loop	Yes	UNE	Yes	NA	Y	Y	N	N	
4 wire DS0 & PRI digital loop	No	UNE	Yes	Yes	N	N	N	N	
4 wire DS1 & PRI digital loop	No	UNE	Yes	Yes	N	N	N	N	
4 wire ISDN DSI digital trunk ports	No	UNE	Yes	Yes	N	N	N	N	
Accupulse	No	Yes	Yes	NA	N	N	N	N	
ADSL	No	UNE	Yes	Yes	N	N	N	N	
Area Plus	Yes	No	No	No	Y	Y	Y	Y	
Basic Rate ISDN	No	Yes	Yes	Yes	Y	Y	N	N	
Call Block	Yes	No	No	No	Y	Y	Y	Y	
Call Forwarding-Variable	Yes	No	No	No	Y	Y	Y	Y	
Call Return	Yes	No	No	No	Y	Y	Y	Y	
Call Selector	Yes	No	No	No	Y	Y	Y	Y	
Call Tracing	Yes	No	No	No	Y	Y	Y	Y	
Call Waiting	Yes	No	No	No	Y	Y	Y	Y	
Call Waiting Deluxe	Yes	No	No	No	Y	Y	Y	Y	
Caller ID	Yes	No	No	No	Y	Y	Y	Y	
CENTREX	No	Yes	Yes	NA	N	N	N	N	
DID WITH PBX ACT W	No	Yes	Yes	Yes	Y	N	Y	N	
DID ACT W	No	Yes	Yes	Yes	Y	N	Y	N	
Digital Data Transport	No	UNE	Yes	NA	N	N	N	N	
Directory Listing Indentions	No	No	No	Yes	Y	Y	Y	Y	
Directory Listings Captions	No	No	Yes	Yes	Y	Y	Y	N	
Directory Listings (simple)	Yes	No	No	No	Y	Y	Y	Y	

DS3	No	UNE	Yes	NA	N	N	N	N	
DS1 Loop	Yes	UNE	Yes	Yes	Y	Y	N	N	
DSO Loop	Yes	UNE	Yes	Yes	Y	Y	N	N	
Enhanced Caller ID	Yes	No	No	No	Y	Y	Y	Y	
ESSX	No	Yes	Yes	NA	N	N	N	N	
Flat Rate/Business	Yes	No	No	No	Y	Y	Y	Y	
Flat Rate/Residence	Yes	No	No	No	Y	Y	Y	Y	
FLEXSERV	No	Yes	Yes	NA	N	N	N	N	
Frame Relay	No	Yes	Yes	NA	N	N	N	N	
FX	No	Yes	Yes	NA	N	N	N	N	
Ga. Community Calling	Yes	No	No	No	Y	Y	Y	Y	
HDSL	No	UNE	Yes	NA	N	N	N	N	
Hunting MLH	No	C/S [6]	C/S	Yes	Y	Y	N	N	
Hunting Series Completion DM10	No	C/S	C/S	Yes	Y	Y	Y	Y	
Hunting Series Completion	No	C/S	C/S	Yes	Y	Y	Y	Y	
INP RECTYPE B	Yes	UNE	No	No	Y	Y	N	N	
INP RECTYPE C	Yes	UNE	No	No	Y	Y	N	N	
LightGate	No	Yes	Yes	NA	N	N	N	N	
Local Number Portability	Yes	UNE	Yes	No	Y	Y	N	N	Yes - LENS, April 2000
LNP with Complex Listing	No	UNE	Yes	Yes	Y	Y	N	N	
LNP with Partial Migration	No	UNE	Yes	Yes	Y	Y	N	N	
LNP with Complex Services	No	UNE	Yes	Yes	Y	Y	N	N	
INP to LNP Conversions	No	UNE	Yes	Yes	Y	Y	N	N	
Measured Rate/Bus.	Yes	No	No	No	Y	Y	Y	Y	
Measured Rate/Res.	Yes	No	No	No	Y	Y	Y	Y	
Megalink	No	Yes	Yes	NA	N	N	N	N	
Megalink-T1	No	Yes	Yes	NA	N	N	N	N	
Memory Call	Yes	No	No	No	Y	Y	Y	Y	
Memory Call Ans. Svc.	Yes	No	No	No	Y	Y	Y	Y	
Multiserv	No	Yes	Yes	NA	N	N	N	N	
Native Mode LAN Interconnection (NMLI)	No	Yes	Yes	NA	N	N	N	N	
Off-Prem Stations	No	Yes	Yes	NA	N	N	N	N	
Optional Calling Plan	Yes	No	No	No	Y	Y	Y	Y	
Package/Complete Choice and area plus	Yes	No	No	No	Y	Y	Y	Y	

Pathlink Primary Rate ISDN	No	Yes	Yes	NA	N	N	N	N	
Pay Phone Provider	No	No	No	NA	N	N	N	N	
PBX Standalone ACT A,C, D	No	Yes	Yes	Yes	Y	Y	Y	N	
PBX Trunks	No	Yes	Yes	Yes	Y	Y	Y	N	
Port/Loop Combo	Yes	UNE	No	N	Y	Y	N	N	Yes - LENS, April 2000
Port/Loop PBX	No	No	No	Yes	Y	Y	N	N	
Preferred Call Forward	Yes	No	No	No	Y	Y	Y	Y	
RCF Basic	Yes	No	No	NA	N	N	N	N	
Remote Access to CF	Yes	No	No	No	Y	Y	Y	Y	
Repeat Dialing	Yes	No	No	No	Y	Y	Y	Y	
Ringmaster	Yes	No	No	No	Y	Y	Y	N	
Smartpath	No	Yes	Yes	NA	N	N	N	N	
SmartRING	No	Yes	Yes	NA	N	N	N	N	
Speed Calling	Yes	No	No	No	Y	Y	Y	Y	
Synchronet	No	Yes	Yes	NA	Y	Y	N	N	
Tie Lines	No	Yes	Yes	NA	N	N	N	N	
Touchtone	Yes	No	No	No	Y	Y	Y	Y	
Unbundled Loop-Analog 2W, SL1, SL2	Yes	UNE	No	No	Y	Y	N	N	Yes - LENS, April 2000
WATS	No	Yes	Yes	NA	N	N	N	N	
XDSL Extended LOOP	No	UNE	Yes	NA	N	N	N	N	

Note [1]: Planned Fallout for Manual Handling denotes those services that are electronically submitted and are not intended to flow through due to the complexity of the service.

Note [2]: The TAG column includes those LSR submitted via RoboTAG.

Note [3]: The LENS column denotes the ordering status of services prior to OSS 99.

Note [4]: The LENS 99 column denotes the ordering status of services post OSS 99.

Note [5]: For all services that indicate 'No' for flow-through, the following reasons, in addition to errors or complex services, also prompt manual handling: Expedites from CLECs, special pricing plans, for denials – restore and conversion or disconnect and conversion both required, partial migrations (although conversions-as-is flow through), class of service invalid in certain states with some TOS – e.g. gov't, or cannot be changed when changing main TN on C activity, low volume – e.g. activity type T=move, pending order review required, more than 25 business lines, restore or suspend for UNE combos, transfer of calls option for CLEC end user— new TN not yet posted to BOCRIS. All but the last one are unique to the CLEC environment.									
Note [6]: Services with C/S in the Complex Service and/or the Complex Order columns can be either complex or simple									

ORDERING

Report/Measurement:

O-4. Percent Rejected Service Requests

Definition:

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

Exclusions:

Service Requests canceled by the CLEC prior to being rejected/clarified.

Business Rules:

Fully Mechanized: An LSR is considered "rejected" when it is submitted electronically but does not pass LEO edit checks in the ordering systems (EDI, TAG, LEO, LESOG) and is returned to the CLEC without manual intervention. There are two types of "Rejects" in the Mechanized category:

- A Fatal Reject occurs when a CLEC attempts to electronically submit an LSR but required fields are either not populated or incorrectly populated and the request is returned to the CLEC before it is considered a valid LSR. In LEO, Fatal Rejects are included in the "Other" category for Regional reports only.

- An Auto Clarification occurs when a valid LSR is electronically submitted but rejected from LESOG because it does not pass further edit checks for order accuracy.

Partially Mechanized: A valid LSR, which is electronically submitted (via EDI, LENS, TAG) cannot be processed electronically and "falls out" for manual handling. It is then put into "clarification" and (rejected) sent back to the CLEC.

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

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

Calculation:

Percent Rejected Service Requests = (Total Number of Rejected Service Requests in the reporting period) / (Total Number of Service Requests Received in the reporting period) X 100.

Report Structure:

- Fully Mechanized, Partially Mechanized, Total Mechanized, Non-Mechanized
- CLEC Specific
- CLEC Aggregate

Level of Disaggregation:

- Product Reporting Levels
  - Resale Residence
  - Resale Business
  - Resale - Design (Special)
  - UNE
  - UNE Loop with NP
  - Interconnection Trunks
- Geographic Scope
  - State, Region and further geographic disaggregation as required by State Commission Order
- Mechanized: 0-4 minutes, 4-8 minutes, 8-12 minutes, 12-60 minutes, 0-1 hour, 1-8 hours, 8-24 hours, > 24 hours.
- Non-mechanized: 0-1 hour, 1-4 hours, 4-8 hours, 8-12 hours, 12-16 hours, 16-20 hours, 20-24 hours > 24 hours.
- Average Interval for mechanized reports in hours, non-mechanized and Trunk reports in days.
- Trunks: < 5days, > 5-8 days, > 8-12 days, > 12-14 days, > 14-17 days, > 17-20 days, > 20 days.

ORDERING - Percent Rejected Service Requests – Continued)

Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
• Report Month • Total number of LSRs • Total number of Rejects • Total Number of Errors • State and Region • Total Number of ASRs (Trunks)	
Retail Analog/Benchmark:	
See Appendix D	

Revision Date: 02/22/00 (lg)

ORDERING

Report/Measurement:

O-5. Reject Interval

Definition:

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

Exclusions:

- Service Requests canceled by CLEC prior to being rejected/clarified.
- For Non-Mechanized LSRs, weekend hours outside of normal business hours.

Business Rules:

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

- **Total Mechanized**: Combination of Fully Mechanized and Partially Mechanized LSRs which are electronically submitted by the CLEC.

- **Non-Mechanized**: The elapsed time from receipt of a valid LSR (date and time stamp of FAX or date and time mailed LSR is received in the LCSC) until notice of the reject is (clarification) returned to the CLEC via LON.

Calculation:

Reject Interval = Σ[(Date and Time of Service Request Rejection) – (Date and Time of Service Request Receipt)] / (Number of Service Requests Rejected in Reporting Period)

Report Structure:

- CLEC Specific
- CLEC Aggregate
- Fully Mechanized, Partially Mechanized, Total Mechanized, Non-Mechanized, Trunks

Level of Disaggregation:

- Product Reporting Levels
  - Resale – Residence
  - Resale – Business
  - Resale – Design (Special)
  - UNE
  - UNE Loop with and NP
  - .Interconnection Trunks
- Geographic Scope
  - State, Region and further geographic disaggregation as required by State Commission Order
- Mechanized: 0-4 minutes, 4-8 minutes, 8-12 minutes, 12-60 minutes, 0-1 hour 1-8 hours, 8-24 hours, >24 hours.
- Non-mechanized: 0-1 hour, 1-4 hours, 4-8 hours, 8-12 hours, 12-16 hours, 16-20 hours, 20-24 hours >24 hours
- Trunks: < 5 days, > 5-8 days, > 8-12 days, > 12-14 days, > 14-17 days, > 17-20 days, > 20 days
- Average Interval for mechanized reports in hours, non-mechanized and Trunk reports in days.

ORDERING – (Reject Interval – Continued)

Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
• Report Month • Reject Interval • Total Number of LSRs • Total number of Rejects • State and Region • Total Number of ASRs (Trunks)	
Retail Analog/Benchmark:	
See Appendix D	

Revision Date: 01/02/00(lg)

ORDERING

Report/Measurement:

O-6. Firm Order Confirmation Timeliness

Definition:

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

Exclusions:

- Rejected LSRs
- Partially Mechanized or Non-Mechanized LSRs received and/or FOCd outside of normal business hours.

Business Rules:

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

Calculation:

Firm Order Confirmation Timeliness = Σ[(Date and Time of Firm Order Confirmation) – (Date and Time of Service Request Receipt)] / (Number of Service Requests Confirmed in Reporting Period)

Report Structure:

- Fully Mechanized, Partially Mechanized, Total Mechanized, Non-Mechanized
- CLEC Specific
- CLEC Aggregate

Level of Disaggregation:

- Product Reporting Levels
  - Resale – Residence
  - Resale – Business
  - Resale – Design (Special)
  - UNE Design
  - UNE Loop with NP
  - Interconnection Trunks
- Geographic Scope
  - State, Region and further geographic disaggregation (MSA) as required by State Commission Order
- Mechanized: 0-15 minutes, 15-30 minutes, 30-45 minutes, 45-60 minutes, 60-90 minutes, 90-120 minutes, 120-240 minutes, 4-8 hours, 8-12 hours, 12-16 hours, 16-20 hours, 20-24 hours, 24-48 hours, > 48 hours.
- Non-mechanized: 0-4 hours, 4-8 hours, 8-12 hours, 12-16 hours, 16-20 hours, 20-24 hours, 24-48 hours, > 48 hours.
- Trunks: 0-5 days, 6-8 days, 9-11 days, 12-14 days, 15-17 days, 18-20 days, >20 days
- < 10 and > 10 Circuits / Lines
- Average Interval in Days

ORDERING - (Firm Order Confirmation Timeliness – Continued)

Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
• Report Month • Interval for FOC • Total number of LSRs • State and Region • Total Number of ASRs (Trunks)	
Retail Analog/Benchmark:	
See Appendix D	

Revision Date: 02/28/00 (lg)

ORDERING

Report/Measurement:	
O-7. Speed of Answer in Ordering Center	
Definition:	
Measures the average time a customer is in queue.	
Exclusions:	
None	
Business Rules:	
The clock starts when the appropriate option is selected (i.e. 1 for Resale Consumer, 2 for Resale Multiline, and 3 for UNE-LNP, etc.) and the call enters the queue for that particular group in the LCSC. The clock stops when a BST service representative in the LCSC answers the call. The speed of answer is determined by measuring and accumulating the elapsed time from the entry of a CLEC call into the BellSouth automatic call distributor (ACD) until the a service representative in BSTs Local Carrier Service Center (LCSC) answers the CLEC call.	
Calculation:	
(Total time in seconds to reach the LCSC) / (Total Number of Calls) in the Reporting Period.	
Report Structure:	
• CLEC Aggregate • BST Aggregate (Combination of Residence Service Center and Business Service Center data under development)	
Level of Disaggregation:	
• CLEC Aggregate • BST Aggregate (Combination of Residence Service Center and Business Service Center data under development)	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Mechanized tracking through LCSC Automatic Call Distributor	• Mechanized tracking through BST Retail center support systems
Retail Analog/Benchmark:	
For CLEC, Speed of Answer in Ordering Center (LCSC) is comparable to Speed of Answer in BST Business Offices. See Appendix D	

Revision Date: 02/16/00 (lg)

ORDERING – (LNP)

Report/Measurement:

LNP-8. Percent Rejected Service Requests

Definition:

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

Exclusions:

- Service Requests canceled by the CLEC
- Fatal Rejects
- Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.) where identifiable.

Business Rules:

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

Fully Mechanized: There are two types of "Rejects" in the Fully Mechanized category:

- A Fatal Reject occurs when a CLEC attempts to electronically submit an LSR (via EDI or TAG) but required fields are not populated correctly and the request is returned to the CLEC.
  Fatal rejects are reported in a separate column, and for informational purposes ONLY. They are not considered in the calculation of the percent of total LSRs rejected or the total number of rejected LSRs.
- An Auto Clarification is a valid LSR which is electronically submitted (via EDI or TAG), but is rejected from LAUTO because it does not pass further edit checks for order accuracy. Auto Clarifications are returned without manual intervention.

Partially Mechanized: A valid LSR which is electronically submitted (via EDI or TAG), but cannot be processed electronically due to a CLEC error and "falls out" for manual handling. It is then put into "clarification", and sent back to the CLEC.

Total Mechanized: Combination of Fully Mechanized and Partially Mechanized rejects.

Calculation

Percent Rejected Service Requests:
[(Number of Service Requests Rejected in the Reporting Period) / (Number of Service Requests Received in the Reporting Period)] x 100

Report Structure:

- Fully Mechanized, Partially Mechanized, Total Mechanized
- CLEC Specific
- CLEC Aggregate

Level of Disaggregation:

- Product Reporting Levels
  - LNP
  - UNE Loop with LNP
- Geographic Scope
  - .State, Region

Retail Analog/Benchmark:

See Appendix D

Revision Date: 02/16/00 (lg)

ORDERING – (LNP)

Report/Measurement:

LNP-9. Reject Interval Distribution & Average Reject Interval

Definition:

Reject Interval is the average reject time from receipt of an LSR to the distribution of a Reject. An LSR is considered valid when it is electronically submitted by the CLEC and passes LNP Gateway edit checks to insure the data received is correctly formatted and complete, i.e., fatal rejects are excluded.

Exclusions:

- Service Requests canceled by CLEC
- Fatal Rejects
- Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.) where identifiable.

Business Rules:

The Reject interval is determined for each rejected LSR processed during the reporting period. The Reject interval is the elapsed time from when BST receives LSR until that LSR is rejected back to the CLEC. Elapsed time for each LSR is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the associated total number of rejected LSRs to produce the reject interval distribution.

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

Fully Mechanized: There are two types of "Rejects" in the Fully Mechanized category:

- A Fatal Reject occurs when a CLEC attempts to electronically submit an LSR but required fields are not populated correctly and the request is returned to the CLEC.
  Fatal rejects are reported in a separate column, and for informational purposes ONLY. They are not considered in the calculation of the percent of total LSRs rejected or the number of rejected LSRs.
- An Auto Clarification is a valid LSR which is electronically submitted (via EDI or TAG), but rejected from LAUTO because it does not pass further edit checks for order accuracy. Auto Clarifications are returned without manual intervention.

Partially Mechanized: A valid LSR which is electronically submitted (via EDI or TAG), but cannot be processed electronically due to a CLEC error and "falls out" for manual handling. It is then put into "clarification", and sent back to the CLEC.

Total Mechanized: Combination of Fully Mechanized and Partially Mechanized rejects.

Calculation:

Average Reject Interval:

Σ[(Date & Time of Service Request Rejection) - (Date & Time of Service Request Receipt)] / (Total Number of Service Requests Rejected in Reporting Period)

Reject Interval Distribution:

[Σ (Service Requests Rejected in "X" minutes/hours) / (Total Number of Service Requests Rejected in Reporting Period)] X 100

Report Structure:

- Fully Mechanized, Partially Mechanized, Total Mechanized
- CLEC Specific
- CLEC Aggregate

ORDERING – (LNP) - Reject Interval Distribution & Average Reject Interval – Continued)

Level of Disaggregation:

• Reported in intervals = 0 - 4 minutes, 4 - 8 minutes, 8 - 12 minutes, 12 - 60 minutes, 0 - 1 hours, 1 - 8 hours, 8 - 24 hours, >24 hours
• Product Reporting Levels
  ➢ LNP
  ➢ UNE Loop with LNP
• Geographic Scope
  ➢ .State, Region
• Average Interval in Days

Retail Analog/Benchmark:
See Appendix D

Revision Date: 02/16/00 (lg)

ORDERING – (LNP)

Report/Measurement:

LNP-10. Firm Order Confirmation Timeliness Interval Distribution & Firm Order Confirmation Average Interval

Definition:

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

Exclusions:

- Rejected LSRs (Clarifications or Fatal Rejects)
- Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.) where identifiable.

Business Rules:

The Firm Order Confirmation interval is determined for each FOC'd LSR processed during the reporting period. The Firm Order Confirmation interval is the elapsed time from when BST receives an LSR until that LSR is confirmed back to the CLEC. Elapsed time for each LSR is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the associated total number of orders completed to produce the Firm Order Confirmation timeliness interval distribution.

- **Mechanized** - The elapsed time from receipt of a valid LSR until the LSR is processed and appropriate service orders are generated in SOCS without manual intervention.
- **Partially Mechanized** - The elapsed time from receipt of an electronically submitted LSR which falls out for manual handling by the LCSC personnel until appropriate service orders are issued by a BST service representative via Direct Order Entry (DOE) or Service Order Negotiation Generation System (SONGS).
- **Total Mechanized** - Combination of Fully Mechanized and Partially Mechanized FOCs.

Calculation:

Average FOC Interval:

Σ [(Date & Time of Firm Order Confirmation) - (Date & Time of Service Request Receipt)] / (Total number of Service Requests Confirmed in the Reporting Period)

FOC Interval Distribution:

Σ[(Service Requests Confirmed in "X" minutes/hours in the Reporting Period) / (Total Service Requests Confirmed in the Reporting Period)] X 100

Report Structure:

- Fully Mechanized, Partially Mechanized, Total Mechanized
- CLEC Specific
- CLEC Aggregate

Level of Disaggregation:

- Reported in intervals = 0 - 15 minutes, 15 - 30 minutes, 30 - 45 minutes, 45 - 60 minutes, 90 - 120 minutes, 120 - 240 minutes, 4 - 8 hours, 8 - 12 hours, 12 - 16 hours, 16 - 20 hours, 20 - 24 hours, 24 - 48 hours, >48 hours
- Product Reporting Levels
  - LNP
  - UNE Loop with LNP
- Geographic Scope
  - .State, Region

Retail Analog/Benchmark:

See Appendix D

Revision Date: 02/16/00 (lg)

Provisioning Disaggregation

Product Reporting Levels

- Resale and Retail
  - Pots – Residence
  - Pots – Business
  - Design
  - PBX (Louisiana SQM)
  - CENTREX (Louisiana SQM)
  - ISDN (Louisiana SQM) (**NOTE**: ISDN included in POTS for Georgia Only)
  - ESSX (Louisiana SQM)

- Unbundled Network Elements
  - UNE Design
  - UNE Non – Design
  - UNE 2 Wire Loop (Louisiana SQM)
  - UNE Loop Other (Louisiana SQM)
  - Unbundled Ports (Louisiana SQM)

- Trunks
  - Local Interconnection Trunks

- Geographic Scope
  - State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area – MSA)

The following measure is the exception for all states:
Coordinated Customer Conversion

Which is disaggregated as follows:
UNE LOOPS with INP
UNE LOOPS without INP

PROVISIONING

Report/Measurement:
P-1. Mean Held Order Interval & Distribution Intervals
Definition:
When delays occur in completing CLEC orders, the average period that CLEC orders are held for BST reasons, pending a delayed completion, should be no worse for the CLEC when compared to BST delayed orders.
Exclusions:
Order Activities of BST associated with internal or administrative use of local services.
Business Rules:
Mean Held Order Interval: This metric is computed at the close of each report period. The held order interval is established by first identifying all orders, at the close of the reporting interval, that both have not been reported as completed in SOCS and have passed the currently committed due date for the order. For each such order, the number of calendar days between the committed due date and the close of the reporting period is established and represents the held order interval for that particular order. The held order interval is accumulated by the standard groupings, unless otherwise noted, and the reason for the order being held. The total number of days accumulated in a category is then divided by the number of held orders within the same category to produce the mean held order interval. The interval is by calendar days with no exclusions for Holidays or Sundays. CLEC Specific reporting is by type of held order (facilities, equipment, other), total number of orders held, and the total and average days. **Held Order Distribution Interval:** This measure provides data to report total days held and identifies these in categories of >15 days and > 90 days. (orders counted in >90 days are also included in >15 days).
Calculation:
Mean Held Order Interval: Σ(Reporting Period Close Date – Committed Order Due Date) / (Number of Orders Pending and Past The Committed Due Date) for all orders pending and past the committed due date. **Held Order Distribution Interval:** (# of Orders Held for ≥90 days) / (Total # of Orders Pending But Not Completed) X 100 (# of Orders Held for ≥15 days) / (Total # of Orders Pending But Not Completed) X 100
Report Structure:
• CLEC Specific • CLEC Aggregate • BST Aggregate
Level of Disaggregation:
Circuit breakout < 10, > = 10

PROVISIONING - Mean Held Order Interval & Distribution Intervals – Continued)

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Order Number and PON (PON) • Order Submission Date (TICKET_ID) • Committed Due Date (DD) • Service Type(CLASS_SVC_DESC) • Hold Reason • Total line/circuit count • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • BST Order Number • Order Submission Date • Committed Due Date • Service Type • Hold Reason • Total line/circuit count • Geographic Scope
Retail Analog/Benchmark:	
CLEC Residence Resale / BST Residence Retail CLEC Business Resale / BST Business Retail CLEC Non-UNE Design / BST Design Interconnection Trunks-CLEC / Interconnection Trunks –BST UNEs-(See Appendix D)	

Revision Date: 02/24/00 (taf)

PROVISIONING

Report/Measurement:	
P-2. Average Jeopardy Notice Interval & Percentage of Orders Given Jeopardy Notices	
Definition:	
When BST can determine in advance that a committed due date is in jeopardy, it will provide advance notice to the CLEC.	
Exclusions:	
• Orders held for CLEC end user reasons • Orders submitted to BST through non-mechanized methods	
Business Rules:	
When BST can determine in advance that a committed due date is in jeopardy it will provide advance notice to the CLEC. The number of committed orders in a report period is the number of orders that have a due date in the reporting period.	
Calculation:	
Average Jeopardy Interval = Σ [(Date and Time of Scheduled Due Date on Service Order) - (Date and Time of Jeopardy Notice)]/[Number of Orders Notified of Jeopardy in Reporting Period). **Percent of Orders Given Jeopardy Notice** = Σ [(Number of Orders Given Jeopardy Notices in Reporting Period) / (Number of Orders Confirmed (due) in Reporting Period)	
Report Structure:	
• CLEC Specific • CLEC Aggregate • BST Aggregate	
Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report Month • CLEC Order Number and PON • Date and Time Jeopardy Notice sent • Committed Due Date • Service Type **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • BST Order Number • Date and Time Jeopardy Notice sent • Committed Due Date • Service Type
Retail Analog/Benchmark:	
95% > = 24 hours	

Revision Date: 01/05/00 (taf)

PROVISIONING

Report/Measurement:

P-3. Percent Missed Installation Appointments

Definition:

"Percent missed installation appointments" monitors the reliability of BST commitments with respect to committed due dates to assure that CLECs can reliably quote expected due dates to their retail customer as compared to BST.

Exclusions:

- Canceled Service Orders
- Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.)
- Disconnect (D) & From (F) orders
- End User Misses on Interconnection Trunks

Business Rules:

Percent Missed Installation Appointments is the percentage of total orders processed for which BST is unable to complete the service orders on the confirmed due dates. Missed Appointments caused by end-user reasons will be included and reported separately. A business day is any time period within the same date frame, which means there cannot be a cutoff time for commitments as certain types of orders are requested to be worked after standard business hours. Also, during Daylight Savings Time, field technicians are scheduled until 9PM in some areas and the customer is offered a greater range of intervals from which to select.

Calculation:

Percent Missed Installation Appointments = Σ (Number of Orders Not Complete by Committed Due Date in Reporting Period) / (Number of Orders Confirmed in Reporting Period) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

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

Level of Disaggregation:

- Reported in categories of <10 lines/circuits; > = 10 lines/circuits
- Dispatch/No Dispatch

Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report Month • CLEC Order Number and PON (PON) • Committed Due Date (DD) • Completion Date (CMPLTN DD) • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • BST Order Number • Committed Due Date (DD) • Completion Date (CMPLTN DD) • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope

Retail Analog/Benchmark:

CLEC Residence Resale / BST Residence Retail
CLEC Business Resale / BST Business Retail
CLEC Non-UNE Design / BST Design
Interconnection Trunks-CLEC / Interconnection Trunks –BST
UNEs-(See Appendix D)

Revision Date: 02/28/00 (taf)

PROVISIONING

Report/Measurement :
P-4. Average Completion Interval (OCI) & Order Completion Interval Distribution
Definition:
The "average completion interval" measure monitors the interval of time it takes BST to provide service for the CLEC or its' own customers. The "Order Completion Interval Distribution" provides the percentage of orders completed within certain time periods.
Exclusions:
• Canceled Service Orders • Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.) • D (Disconnect) and F (From) orders. (From is disconnect side of a move order when the customer moves to a new address). • "L" Appointment coded orders (where the customer has requested a later than offered interval)
Business Rules:
The actual completion interval is determined for each order processed during the reporting period. The completion interval is the elapsed time from when BST issues a FOC or SOCS date time stamp receipt of an order from the CLEC to BST's actual order completion date. The clock starts when a valid order number is assigned by SOCS and stops when the technician or system completes the order in SOCS. Elapsed time for each order is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the associated total number of orders completed. The interval breakout for UNE and Design is: 0-5 = 0-4.99, 5-10 = 5-9.99, 10-15 = 10-14.99, 15-20 = 15-19.99 20-25 = 20-24.99, 25-30 = 25-29.99, >=30 = 30 and greater.
Calculation :
Average Completion Interval: Σ [(Completion Date & Time) - (Order Issue Date & Time)] / Σ (Count of Orders Completed in Reporting period) **Order Completion Interval Distribution:** Σ (Service Orders Completed in "X" days) / (Total Service Orders Completed in Reporting Period) X 100
Report Structure:
• CLEC Specific • CLEC Aggregate • BST Aggregate
Level of Disaggregation:
• ISDN Orders included in Non Design - GA Only • Dispatch/No Dispatch categories applicable to all levels except trunks. • Residence & Business reported in day intervals = 0,1,2,3,4, 5, 5+ • UNE and Design reported in day intervals = 0-5, 5-10, 10-15, 15-20, 20-25, 25-30, >=30 • All Levels are reported <10 line/circuits; >=10 line/circuits

PROVISIONING –
(Average Completion Interval (OCI) & Order Completion Interval Distribution – Continued)

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Company Name • Order Number (PON) • Submission Date & Time (TICKET_ID) • Completion Date (CMPLTN_DT) • Service Type (CLASS_SVC_DESC) • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • BST Order Number • Order Submission Date & Time • Order Completion Date & Time • Service Type • Geographic Scope
Retail Analog/Benchmark	
CLEC Residence Resale / BST Residence Retail CLEC Business Resale / BST Business Retail CLEC Non-UNE Design / BST Design Interconnection Trunks-CLEC / Interconnection Trunks-BST UNEs-(See Appendix D)	

Revision Date: 02/28/00 (taf)

PROVISIONING

Report/Measurement:

P-5. Average Completion Notice Interval

Definition:

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

Exclusions:

- Non-mechanized Orders
- Cancelled Service Orders
- Order Activities of BST associated with internal or administrative use of local services
- D & F orders

Business Rules:

Measurement of interval of completion date and time by a field technician on dispatched orders, and 5PM start time on the due date for non-dispatched orders; to the release of a notice to the CLEC/BST of the completion status. The field technician notifies the CLEC the work was complete and then he enters the completion time stamp information in his computer. This information switches through to the SOCS systems either completing the order or rejecting the order to the Work Management Center (WMC). If the completion is rejected, it is manually corrected and then completed by the WMC. The notice is returned on each individual order submitted and as the notice is sent electronically, it can only be switched to those orders that were submitted by the CLEC electronically. The start time is the completion stamp either by the field technician or the 5PM due date stamp; the end time is the time stamp the notice was submitted to the CLEC/BST system.

Calculation:

Σ (Date and Time of Notice of Completion) – (Date and Time of Work Completion) / (Number of Orders Completed in Reporting Period)

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Level of Disaggregation:

- Reporting intervals in Hours: 0-1, 1-2, 2-4, 4-8, 8-12, 12-24, > 24, plus Overall Average Hour Interval
- Reported in categories of <10 line/circuits; >= 10 line/circuits

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Order Number • Work Completion Date • Work Completion Time • Completion Notice Availability Date • Completion Notice Availability Time • Service Type • Activity Type • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • BST Order Number • Work Completion Date • Work Completion Time • Completion Notice Availability Date • Completion Notice Availability Time • Service Type • Activity Type • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.

Retail Analog/Benchmark:

CLEC Residence Resale / BST Residence Retail
CLEC Business Resale / BST Business Retail
CLEC Non-UNE Design / BST Design
Interconnection Trunks-CLEC / Interconnection Trunks-BST
UNEs – (See Appendix D)

Revision Date 02/24/00 (taf)

PROVISIONING

Report/Measurement:	
P-6. Coordinated Customer Conversions	
Definition:	
This category measures the average time it takes BST to disconnect an unbundled loop from the BST switch and cross connect it to a CLEC's equipment. This measurement applies to service orders with and without INP, and where the CLEC has requested BST to provide a coordinated cutover.	
Exclusions:	
• Any order canceled by the CLEC will be excluded from this measurement. • Delays due to CLEC following disconnection of the unbundled loop • Unbundled Loops where there is no existing subscriber loop and loops where coordination in not requested.	
Business Rules:	
Where the service order includes INP, the interval includes the total time for the cutover including the translation time to place the line back in service on the ported line. The interval is calculated for the entire cutover time for the service order and then divided by items worked in that time to give the average per item interval for each service order.	
Calculation:	
Σ [(Completion Date and Time for Cross Connection of an Coordinated Unbundled Loop)- (Disconnection Date and Time of an Coordinated Unbundled Loop)] / Total Number of Unbundled Loop with Coordinated Conversions (items) for the reporting period.	
Report Structure:	
• CLEC Specific • CLEC Aggregate	
Level of Disaggregation:	
Reported in intervals <=5 minutes; >5,< =15 minutes; >15 minutes, plus Overall Average interval	
Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report Month • CLEC Order Number • Committed Due Date (DD) • Service Type (CLASS_SVC_DESC) • Cutover Start Time • Cutover Completion time • Portability start and completion times (INP orders) • Total Conversions (Items) **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• No BST Analog Exists
Retail Analog/Benchmark:	
There is no retail analog for this measurement because it measures cutting loops to the CLEC. Benchmark – See Appendix D	

Revision Date: 02/28/00 (taf)

PROVISIONING

Report/Measurement:

P-7. % Provisioning Troubles within 30 days of Service Order Activity

Definition:

Percent Provisioning Troubles within 30 days of Installation measures the quality and accuracy of installation activities.

Exclusions:

- Canceled Service Orders
- Order Activities of BST or the CLEC associated with internal or administrative use of local services (R Orders, Test Orders, etc.)
- D & F orders

Business Rules:

Measures the quality and accuracy of completed orders. The first trouble report from a service order after completion is counted in this measure. Subsequent trouble reports are measured in Repeat Report Rate. Reports are calculated searching in the prior report period for completed service orders and following 30 days after completion for a trouble report.

D & F orders are excluded as there is no subsequent activity following a disconnect.

Calculation:

% Provisioning Troubles within 30 days of Service Order Activity = Σ (Trouble reports on all completed orders ≤ 30 days following service order(s) completion) / (All Service Orders completed in the report calendar month) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Level of Disaggregation:

- Reported in categories of <10 line/circuits; > = 10 line/circuits
- Dispatch / No Dispatch

Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report Month • CLEC Order Number and PON • Order Submission Date(TICKET_ID) • Order Submission Time (TICKET_ID) • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • BST Order Number • Order Submission Date • Order Submission Time • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope

Retail Analog/Benchmark:

CLEC Residence Resale / BST Residence Retail
CLEC Business Resale / BST Business Retail
CLEC Non-UNE Design / BST Design
Interconnection Trunks-CLEC / Interconnection Trunks –BST
UNEs-(See Appendix D)

Revision Date: 02/28/00 (taf)

PROVISIONING

Report/Measurement :	
P-8. Total Service Order Cycle Time (TSOCT)	
Definition:	
This report measures the total service order cycle time from receipt of a valid service order request to the completion of the service order.	
Exclusions:	
• Canceled Service Orders • Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.) • D (Disconnect) and F (From) orders. (From is disconnect side of a move order when the customer moves to a new address). • "L" Appointment coded orders (where the customer has requested a later than offered interval) • Orders with CLEC/Subscriber caused delays or CLEC/Subscriber requested due date changes.	
Business Rules:	
The interval is determined for each order processed during the reporting period. This measurement combines two reports: FOC (Firm Order Confirmation) with Average Order Completion Interval. This interval starts with the receipt of a valid service order request and stops when the technician or system completes the order in SOCS. Elapsed time for each order is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the associated total number of orders completed.	
Calculation :	
Total Service Order Cycle Time Σ(Date and Time of Service Request Receipt) – (Completion Date and Time of Service Order) (SOCS HIST-CD DATE) / (Count of Orders Completed in Reporting Period)	
Report Structure:	
• CLEC Specific • CLEC Aggregate • BST Aggregate	
Level of Disaggregation:	
• Reported in categories of < 10 line/circuits; > = 10 line/circuits • Dispatch/No Dispatch categories applicable to all levels except trunks. • Intervals 0-5, 5-10, 10-15, 15-20, 20-25, 25-30, > = 30 Days	
Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report Month • Interval for FOC • CLEC Company Name • Order Number (PON) • Submission Date & Time (TICKET_ID) • Completion Date (CMPLTN_DT) • Service Type (CLASS_SVC_DESC) • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • BST Order Number • Order Submission Date & Time • Order Completion Date & Time • Service Type • Geographic Scope
Retail Analog/Benchmark	
See Appendix D	

Revision Date: 02/28/00 (taf)

PROVISIONING

Report/Measurement:	
P-9. Service Order Accuracy GEORGIA ONLY	
Definition:	
The "service order accuracy" measurement measures the accuracy and completeness of BST service orders by comparing what was ordered and what was completed.	
Exclusions:	
• Cancelled Service Orders • Order Activities of BST associated with internal or administrative use of local services • D & F orders	
Business Rules:	
A manual sampling of service orders, completed during a monthly reporting period, is compared to the original account profile and the order that the CLEC sent to BST. An order is "completed without error" if all service attributes and account detail changes (as determined by comparing the original order) completely and accurately reflect the activity specified on the original order and any supplemental CLEC order.	
Calculation:	
Percent Service Order Accuracy = Σ (Orders Completed without Error) / Σ (Orders Completed in Reporting Period) x 100	
Report Structure:	
CLEC Aggregate	
Level of Disaggregation:	
• Reported in categories of <10 line/circuits; > = 10 line/circuits • Dispatch / No Dispatch	
Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report Month • CLEC Order Number and PON • Local Service Request (LSR) • Order Submission Date • Committed Due Date • Service Type • Standard Order Activity **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Being investigated at this time
Retail Analog/Benchmark:	
(Under Investigation)	

Revision Date: 01/05/00 (taf)

PROVISIONING

Report/Measurement:
LNP – 10. Percent Missed Installation Appointments
Definition:
Percent Missed Installation Appointments monitors the reliability of BST commitments with respect to committed due dates to assure that CLECs can reliably quote expected due dates to their retail customer as compared to BST.
Exclusions:
• Canceled Service Orders • Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.) where identifiable.
Business Rules:
Percent Missed Installation Appointments (PMI) is the percentage of total orders processed for which BST is unable to complete the service orders on the committed due dates. Missed Appointments caused by end-user reasons will be included and reported in a separate category. A business day is any time period within the same date frame, which means there cannot be a cutoff time for commitments as certain types of orders are requested to be worked after standard business hours. Also, during Daylight Savings Time, field technicians are scheduled until 9PM in some areas and the customer is offered a greater range of intervals from which to select.
Calculation:
Percent Missed Installation Appointments: [(Number of Orders Not Completed by Committed Due Date in Reporting Period) / (Number of Orders Completed in Reporting Period)] X 100
Report Structure:
• Mechanized (service orders generated by LSRs submitted via EDI or TAG) • CLEC Specific • CLEC Aggregate **Report explanation:** Total Missed Appointments is the total % of orders missed either by BST or the CLEC end user. End User MA represents the percentage of orders missed by the CLEC end user. The difference between End User Missed Appointments and Total Missed Appointments is the result of BST caused misses.
Level of Disaggregation:
• Product Reporting Levels ➢ LNP ➢ UNE Loop Associated w/LNP • Geographic Scope ➢ State, Region
Retail Analog/Benchmark:
See Appendix D

Revision Date: 02/16/00 (taf)

PROVISIONING – (LNP)

Report/Measurement :

LNP-11. Average Disconnect Timeliness Interval & Disconnect Timeliness Interval Distribution

Definition:

Disconnect Timeliness is defined as the interval between the time the LNP Gateway receives the 'Number Ported' message from NPAC (signifying the CLEC 'Activate') until the time that the Disconnect service order for an LSR is completed in SOCS. This interval effectively measures BST responsiveness by isolating it from impacts that are caused by CLEC related activities.

Exclusions:

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

Business Rules:

The Disconnect Timeliness interval is determined for the last Disconnect service order processed on an LSR during the reporting period. The Disconnect Timeliness interval is the elapsed time from when BST receives the last 'Number Ported' message for an LSR from NPAC (signifying the CLEC 'Activate') until the last Disconnect service order is completed in SOCS. Elapsed time for each order is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the total number of selected disconnect orders which have been completed.

Calculation :

Average Disconnect Timeliness Interval:

Σ[(Disconnect Service Order Completion Date & Time) - ('Number Ported' Message Received Date & Time)] / Σ (Total Number of Disconnect Service Orders Completed in Reporting Period)

Disconnect Timeliness Interval Distribution:

[Σ (Disconnect Service Orders Completed in "X" days) / (Total Disconnect Service Orders Completed in Reporting Period)] X 100

Report Structure:

- Mechanized (service orders generated by LSRs submitted via EDI or TAG)
- CLEC Specific
- CLEC Aggregate

Level of Disaggregation:

- Reported in day intervals = 0,1,2,3,4, 5, >5 days
- Product Reporting Levels
  - LNP
- Geographic Scope
  - State, Region

Retail Analog/Benchmark:

See Appendix D

Revision Date: 02/16/00 (taf)

PROVISIONING

Report/Measurement :
LNP-12. Total Service Order Cycle Time
Definition:
Total Service Order Cycle Time measures the interval from receipt of a valid service order request to the completion of the final service order associated with that service request.
Exclusions:
• Canceled Service Orders • Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.) where identifiable • "L" appointment coded orders (indicating the customer has requested a later than offered interval) • "S" missed appointment coded orders (indicating subscriber missed reasons), except for "SP" codes (indicating subscriber prior due date requested).
Business Rules:
The interval is determined for each service request processed during the reporting period. This measurement combines two reports: FOC (Firm Order Confirmation) with Average Order Completion Interval. This interval starts with the receipt of a valid service request and stops when the technician or system completes all the related service orders for the LSR in SOCS. Elapsed time for each service request is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the associated total number of service requests completed to produce the total service order cycle time.
Calculation :
Average Total Service Order Cycle Time: Σ[(Service Order Completion Date & Time) - (Service Request Receipt Date & Time)] / Σ (Total Number Service Requests Completed in Reporting Period) **Total Service Order Cycle Time Interval Distribution:** Σ (Total Number of Service Requests Completed in "X" minutes/hours) / (Total Number of Service Requests Received in Reporting Period)] X 100
Report Structure:
• Mechanized (service orders generated by LSRs submitted via EDI or TAG) • CLEC Specific • CLEC Aggregate • "W" Appointment Code Only (Company Offered)
Level of Disaggregation:
• Reported in day intervals 0 - 5, 5 - 10, 10 - 15, 15 - 20, 20 - 25, 25 - 30, >30 days • Product Reporting Levels ➢ LNP ➢ UNE Loop with LNP • Geographic Scope ➢ State, Region
Retail Analog/Benchmark:
See Appendix D

Revision Date: 02/16/00 (taf)

Maintenance and Repair Level of Disaggregation

Product Reporting Levels

- Resale / Retail
  - Pots – Residence
  - Pots – Business
  - PBX (Louisiana SQM)
  - ESSX (Louisiana SQM)
  - CENTREX (Louisiana SQM)
  - ISDN (Louisiana SQM) (**NOTE**: ISDN Troubles included in Non-Design Georgia Only)
  - Design

- Unbundled Network Elements
  - UNE Design (Georgia and Regional SQM)
  - UNE Non – Design (Georgia and Regional SQM)
  - UNE 2 Wire Loop (Louisiana SQM)
  - UNE Loop Other (Louisiana SQM)
  - Unbundled Ports (Louisiana SQM)
  - UNE Other Non - Design

- Trunks
  - Local Interconnection Trunks

- Dispatch/No Dispatch categories applicable to all product levels

- Geographic Scope
  - State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area – MSA)

MAINTENANCE & REPAIR

Report/Measurement:

M&R-1. Missed Repair Appointments

Definition:

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

Exclusions:

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

Business Rules:

The negotiated commitment date and time is established when the repair report is received. The cleared time is the date and time that BST personnel clear the trouble and closes the trouble report in his Computer Access Terminal (CAT) or workstation. If this is after the Commitment time, the report is flagged as a "Missed Commitment" or a missed repair appointment. When the data for this measure is collected for BST and a CLEC, it can be used to compare the percentage of the time repair appointments are missed due to BST reasons. Note: Appointment intervals vary with force availability in the POTS environment. Specials and Trunk intervals are standard interval appointments of no greater than 24 hours.

Calculation:

Percentage of Missed Repair Appointments =Σ (Count of Customer Troubles Not Cleared by the Quoted Commitment Date and Time) / Σ (Total Trouble reports closed in Reporting Period) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report Month • CLEC Company Name • Submission Date & Time (TICKET_ID) • Completion Date (CMPLTN_DT) • Service Type (CLASS_SVC_DESC) • Disposition and Cause (CAUSE_CD & CAUSE_DESC) • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • BST Company Code • Submission Date & Time • Completion Date • Service Type • Disposition and Cause (Non-Design /Non-Special Only) • Trouble Code (Design and Trunking Services) • Geographic Scope

Retail Analog/Benchmark

CLEC Residence-Resale / BST Residence-Retail
CLEC Business-Resale / BST Business-Retail
CLEC Design-Resale / BST Design-Retail
CLEC PBX, Centrex, and ISDN Resale/ BST PBX, Centrex, and ISDN Retail
CLEC Trunking-Resale / BST Trunking-Retail
UNEs – (See Appendix D)

Revision Date: 02/22/00 (see)

MAINTENANCE & REPAIR

Report/Measurement:

M&R-2. Customer Trouble Report Rate

Definition:

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

Exclusions:

- Trouble tickets canceled at the CLEC request.
- BST trouble reports associated with administrative service.
- Customer provided Equipment (CPE) troubles or CLEC equipment troubles.

Business Rules:

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

Calculation:

Customer Trouble Report Rate = (Count of Initial and Repeated Trouble Reports in the Current Period) / (Number of Service Access Lines in service at End of the Report Period) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report Month • CLEC Company Name • Ticket Submission Date & Time (TICKET_ID) • Ticket Completion Date (CMPLTN_DT) • Service Type (CLASS_SVC_DESC) • Disposition and Cause (CAUSE_CD & CAUSE_DESC) • # Service Access Lines in Service at the end of period • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • BST Company Code • Ticket Submission Date & Time • Ticket Completion Date • Service Type • Disposition and Cause (Non-Design / Non-Special Only) • Trouble Code (Design and Trunking Services) • # Service Access Lines in Service at the end of period • Geographic Scope

Retail Analog/Benchmark:

CLEC Residence-Resale / BST Residence -Retail
CLEC Business-Resale / BST Business-Retail
CLEC Design-Resale / BST Design-Retail
CLEC PBX, Centrex and ISDN Resale/ BST PBX, Centrex, and ISDN Retail
CLEC Trunking-Resale / BST Trunking-Retail
UNEs – (See Appendix D)

Revision Date: 02/22/00 (see)

MAINTENANCE & REPAIR

Report/Measurement:

M&R-3. Maintenance Average Duration

Definition:

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

Exclusions:

- Trouble reports canceled at the CLEC request
- BST trouble reports associated with administrative service
- Customer Provided Equipment (CPE) troubles or CLEC Equipment Troubles.
- Trouble reports greater than 10 days

Business Rules:

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

NOTE: Customer can be BST or CLEC

Calculation:

Maintenance Average Duration = Σ(Date and Time of Service Restoration) – (Date and Time Trouble Ticket was Opened) / Σ(Total Closed Troubles in the reporting period)

Report Structure:

- CLEC Specific
- BST Aggregate
- CLEC Aggregate

Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report Month • Total Tickets (LINE_NBR) • CLEC Company Name • Ticket Submission Date & Time (TIME_ID) • Ticket Completion Date (CMPLTN_DT • Service Type (CLASS_SVC_DESC) • Disposition and Cause (CAUSE_CD & CAUSE_DESC) • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • Total Tickets • BST Company Code • Ticket Submission Date • Ticket submission Time • Ticket completion Date • Ticket Completion Time • Total Duration Time • Service Type • Disposition and Cause (Non – Design /Non-Special Only) • Trouble Code (Design and Trunking Services) • Geographic Scope

Retail Analog/Benchmark:

CLEC Residence-Resale / BST Residence-Resale
CLEC Business-Resale / BST Business-Retail
CLEC Design-Resale / BST Design-Retail
CLEC PBX, Centrex and ISDN Resale / BST PBX, Centrex and ISDN Retail
CLEC Trunking-Resale /BST Trunking-Retail
UNEs – (See Appendix D)

Revision Date: 02/22/00 (see)

MAINTENANCE & REPAIR

Report/Measurement:

M&R-4. Percent Repeat Troubles within 30 Days

Definition:

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

Exclusions:

- Trouble Reports canceled at the CLEC request
- BST Trouble Reports associated with administrative service
- Customer Provided Equipment (CPE) Troubles or CLEC Equipment Troubles.

Business Rules:

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

Calculation:

Percent Repeat Troubles within 30 Days = (Count of Customer Troubles where more than one trouble report was logged for the same service line within a continuous 30 days) / (Total Trouble Reports Closed in Reporting Period) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • Total Tickets (LINE_NBR) • CLEC Company Name • Ticket Submission Date & Time (TICKET_ID) • Ticket Completion Date (CMPLTN_DT) • Total and Percent Repeat Trouble Reports within 30 Days (TOT_REPEAT) • Service Type • Disposition and Cause (CAUSE_CD & CAUSE_DESC) • Geographic Scope **NOTE:** Code parentheses is the corresponding header format found in the raw data file	• Report Month • Total Tickets • BST Company Code • Ticket Submission Date • Ticket Submission Time • Ticket Completion Date • Ticket Completion Time • Total and Percent Repeat Trouble Reports within 30 Days • Service Type • Disposition and Cause (Non – Design/Non-Special only) • Trouble Code (Design and Trunking Services) • Geographic Scope

Retail Analog/Benchmark:

CLEC Residence-Resale / BST Residence-Retail
CLEC Business- Resale / BST Business-Retail
CLEC Design-Resale / BST Design-Retail
CLEC PBX, Centrex and ISDN Resale / BST PBX, Centrex and ISDN Retail
CLEC Trunking-Resale / BST Trunking-Retail
UNEs – (See Appendix D)

Revision date: 02/22/00 (see)

MANTENANCE & REPAIR

Report/Measurement:

M&R-5. Out of Service (OOS) > 24 Hours

Definition:

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

Exclusions:

- Trouble Reports canceled at the CLEC request
- BST Trouble Reports associated with administrative service
- Customer Provided Equipment (CPE) Troubles or CLEC Equipment Troubles.

Business Rules:

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

Calculation:

Out of Service (OOS) > 24 hours = (Total Troubles OOS > 24 Hours) / Total OOS Troubles in Reporting Period) X 100

Report Structure:

- CLEC Specific
- BST Aggregate
- CLEC Aggregate

Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report Month • Total Tickets • CLEC Company Name • Ticket Submission Date & Time (TICKET_ID) • Ticket Completion Date (CMPLTN_DT • Percentage of Customer Troubles out of • Service > 24 Hours (OOS>24_FLAG) • Service type (CLASS_SVC_DESC) • Disposition and Cause (CAUSE_CD & CAUSE-DESC) • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • Total Tickets • BST Company Code • Ticket Submission Date • Ticket Submission time • Ticket Completion Date • Ticket Completion Time • Percent of Customer Troubles out of Service > 24 Hours • Service type • Disposition and Cause (Non – Design/Non-Special only) • Trouble Code (Design and Trunking Services) • Geographic Scope

Retail Analog/Benchmark:

CLEC Residence-Resale / BST Residence- Retail
CLEC Business- Resale / BST Business-Retail
CLEC Design-Resale / BST Design-Retail
CLEC PBX, Centrex and ISDN Resale / BST PBX, Centrex and ISDN Retail
CLEC Trunking-Resale /BST Trunking- Retail
UNEs – (See Appendix D)

Revision Date: 02/22/00 (see)

MAINTENANCE & REPAIR

Report/Measurement:	
M&R-6. Average Answer Time – Repair Centers	
Definition:	
This measures the average time a customers is in Que.	
Exclusions:	
None	
Business Rules:	
This measure is designed to measure the time required for CLEC & BST from the time of the ACD choice to the time of being answered. The clock starts when the CLEC Rep makes a choice to be put in queue for the next repair attendant and the clock stops when the repair attendant answers the call. (NOTE: The Column is a combined BST Residence and Business number)	
Level of Disaggregation:	
Region. CLEC/BST Service Centers and BST Repair Centers are regional.	
Calculation:	
Average Answer Time for BST's Repair Centers = (Time BST Repair Attendant Answers Call) – (Time of entry into queue until ACD Selection) / (Total number of calls by reporting period)	
Report Structure:	
• CLEC Aggregate • BST Aggregate	
Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• CLEC Average Answer Time	• BST Average Answer Time
Retail Analog/Benchmark:	
For CLEC, Average Answer Times in UNE Center and BRMC are comparable to the Average Answer Times in the BST Repair Centers.	

Revision Date: 02/22/00 (see)

BILLING

Report/Measurement:	
B-1. Invoice Accuracy	
Definition:	
This measure provides the percentage of accuracy of the billing invoices rendered to CLECs during the current month.	
Exclusions:	
Adjustments not related to billing errors (e.g., credits for service outage, special promotion credits, adjustments to satisfy the customer)	
Business Rules:	
The accuracy of billing invoices delivered by BST to the CLEC must enable them to provide a degree of billing accuracy comparative to BST bills rendered to retail customers BST. CLECs request adjustments on bills determined to be incorrect. The BellSouth Billing verification process includes manually analyzing a sample of local bills from each bill period. The bill verification process draws from a mix of different customer billing options and types of service. An end-to-end auditing process is performed for new products and services. Internal measurements and controls are maintained on all billing processes.	
Calculation:	
Invoice Accuracy = (Total Billed Revenues during current month) – (Billing Related Adjustments during current month) / Total Billed Revenues during current month X 100	
Report Structure:	
• CLEC Specific • CLEC Aggregate • BST Aggregate	
Level of Disaggregation :	
• Product / Invoice Type ➢ Resale ➢ UNE ➢ Interconnection • Geographic Scope ➢ Region	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Invoice Type • Total Billed Revenue • Billing Related Adjustments	• Report Month • Retail Type ➢ CRIS ➢ CABS • Total Billed Revenue • Billing Related Adjustments
Retail Analog/Benchmark	
CLEC Invoice Accuracy is comparable to BST Invoice Accuracy See Appendix D	

Revision Date: 02/28/00 (dg)

BILLING

Report/Measurement:

B-2. Mean Time to Deliver Invoices

Definition:

This measure provides the mean interval for billing invoices

Exclusions:

Any invoices rejected due to formatting or content errors.

Business Rules:

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

Calculation:

Mean Time To Deliver Invoices = Σ_[(Invoice Transmission Date)– (Close Date of Scheduled Bill Cycle)] / (Count of Invoices Transmitted in Reporting Period)

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Level of Disaggregation:

- Product / Invoice Type
  - Resale
  - UNE
  - Interconnection
- Geographic Scope
  - Region

Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**

• Report Month
• Invoice Type
• Invoice Transmission Count
• Date of Scheduled Bill Close
	• Report Month
	• Retail Type
	  ➢ CRIS
	  ➢ CABS
	• Invoice Transmission Count
	• Date of Scheduled Bill Close

Retail Analog/Benchmark:

CRIS-based invoices will be released for delivery within six (6) business days
CABS-based invoices will be released for delivery within eight (8) calendar days.
CLEC Average Delivery Intervals for both CRIS and CABS Invoices are comparable to BST Average delivery for both systems.
See Appendix D

Revision Date: 02/28/00 (dg)

BILLING

Report/Measurement:

B-3. Usage Data Delivery Accuracy

Definition:

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

Exclusions:

None

Business Rules:

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

Calculations:

Usage Data Delivery Accuracy = Σ[(Total number of usage data packs sent during current month) – (Total number of usage data packs requiring retransmission during current month)] / (Total number of usage data packs sent during current month) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Level of Disaggregation:

- Geographic Scope
  - Region

Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Record Type ➢ BellSouth Recorded ➢ Non BellSouth Recorded	• Report Month • Record Type

Retail Analog/Benchmark:

CLEC Usage Data Delivery Accuracy is comparable to BST Usage Data Delivery Accuracy
See Appendix D

Revision Date: 02/28/00 (dg)

BILLING

Report/Measurement:	
B-4. Usage Data Delivery Completeness	
Definition:	
This measurement provides percentage of complete and accurately recorded usage data (usage recorded by BellSouth and usage recorded by other companies and sent to BST for billing) that is processed and transmitted to the CLEC within thirty (30) days of the message recording date. A parity measure is also provided showing completeness of BST messages processed and transmitted via CMDS. BellSouth delivers its own retail usage from recording location to billing location via CMDS as well as delivering billing data to other companies. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.	
Exclusions:	
None	
Business Rules:	
The purpose of these measurements is to demonstrate the level of quality of usage data delivered to the appropriate CLEC. Method of delivery is at the option of the CLEC.	
Calculation:	
Usage Data Delivery Completeness = Σ(Total number of Recorded usage records delivered during the current month that are within thirty (30) days of the message recording date) / Σ(Total number of Recorded usage records delivered during the current month) X 100	
Report Structure	
• CLEC Specific • CLEC Aggregate • BST Aggregate	
Level of Disaggregation:	
• Geographic Scope ➢ Region	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Record Type ➢ BellSouth Recorded ➢ Non BellSouth Recorded	• Report Monthly • Record Type
Retail Analog/Benchmark:	
CLEC Usage Delivery Completeness is comparable to BST Usage Delivery Completeness See Appendix D	

Revision Date: 02/28/00 (dg)

BILLING

Report/Measurement:	
B-5. Usage Data Delivery Timeliness	
Definition:	
This measurement provides a percentage of recorded usage data (usage recorded by BST and usage recorded by other companies and sent to BST for billing) that is delivered to the appropriate CLEC within six (6) calendar days from the receipt of the initial recording. A parity measure is also provided showing timeliness of BST messages processed and transmitted via CMDS. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.	
Exclusions:	
None	
Business Rules:	
The purpose of this measurement is to demonstrate the level of timeliness for processing and transmission of usage data delivered to the appropriate CLEC. The usage data will be mechanically transmitted or mailed to the CLEC data processing center once daily. The Timeliness interval of usage recorded by other companies is measured from the date BST receives the records to the date BST distributes to the CLEC. Method of delivery is at the option of the CLEC.	
Calculation:	
Usage Data Delivery Timeliness = Σ(Total number of usage records sent within six (6) calendar days from initial recording/receipt) / Σ(Total number of usage records sent) X 100	
Report Structure:	
• CLEC Aggregate • CLEC Specific • BST Aggregate	
Level of Disaggregation:	
• Geographic Scope ➢ Region	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Record Type ➢ BellSouth Recorded ➢ Non-BellSouth Recorded	• Report Monthly • Record Type
Retail Analog/Benchmark:	
CLEC Usage Data Delivery Timeliness is comparable to BST Usage Data Delivery Timeliness See Appendix D	

Revision date: 02/28/00 (dg)

BILLING

Report/Measurement	
B-6. Mean Time to Deliver Usage	
Definition:	
This measurement provides the average time it takes to deliver Usage Records to a CLEC. A parity measure is also provided showing timeliness of BST messages processed and transmitted via CMDS. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.	
Exclusions:	
None	
Business Rules:	
The purpose of this measurement is to demonstrate the average number of days it takes BST to deliver Usage data to the appropriate CLEC. Usage data is mechanically transmitted or mailed to the CLEC data processing center once daily. Method of delivery is at the option of the CLEC.	
Calculation:	
Mean Time to Deliver Usage = Σ_(Record volume X estimated number of days to deliver the Usage Record) / total record volume	
Report Structure:	
• CLEC Aggregate • CLEC Specific • BST Aggregate	
Level of Disaggregation:	
• Geographic Scope ➢ Region	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Record Type ➢ BellSouth Recorded ➢ Non-BellSouth Recorded	• Report Monthly • Record Type
Retail Analog/Benchmark:	
Mean Time to Deliver Usage to CLEC is comparable to Mean Time to Deliver Usage to BST See Appendix D	

Revision Date: 02/28/00 (dg)

OPERATOR SERVICES AND DIRECTORY ASSISTANCE

Report/Measurement:
OS-1. Speed to Answer Performance/Average Speed to Answer – Toll
Definition:
Measurement of the average time in seconds calls wait before answered by a toll operator.
Exclusions:
Calls abandoned by customers are not reflected in the average speed to answer but are reflected in the conversion tables where the percent answered within "X" seconds is determined.
Business Rules:
The call waiting measurement scan starts when the customer enters the queue and ends when a BST representative answers the call. The average speed to answer is determined by measuring and accumulating the seconds of wait time from the entry of a customer into the BST call management system queue until the customer is transferred to a BST representative. No distinction is made between CLEC customers and BST customers.
Calculation:
The Average Speed to Answer for toll is calculated by using data from monthly system measurement reports taken from the centralized call routing switches. The "total call waiting seconds" is a sub-component of this measure which BST systems calculate by monitoring the number of calls in queue throughout the day multiplied by the time (in seconds) between monitoring events. The "total calls served" is the other sub-component of this measure, which BST systems record as the total number of calls handled by Operator Services toll centers. Since calls abandoned are not reflected in the calculation, the percent answered within the required timeframe is determined by using conversion tables with input for the abandonment rate.
Report Structure:
• Reported for the aggregate of BST and CLECs ➢ State
Level of Disaggregation:
None
Data Retained (on Aggregate Basis)
• For the items below, BST's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP • Month • Call Type (Toll) • Average Speed of Answer
Retail Analog/Benchmark
Parity by Design See Appendix D

Revision Date: 02/28/00 (tg)

OPERATOR SERVICES AND DIRECTORY ASSISTANCE

Report/Measurement:
OS-2. Speed to Answer Performance/Percent Answered within "X" Seconds – Toll
Definition:
Measurement of the percent of toll calls that are answered in less than "X" seconds. The number of seconds represented by "X" is thirty, except where a different regulatory benchmark has been set against the Average Speed to Answer by a State Commission.
Exclusions:
Calls abandoned by customers are not reflected in the average speed to answer but are reflected in the conversion tables where the percent answered within "X" seconds is determined.
Business Rules:
The call waiting measurement scan starts when the customer enters the queue and ends when a BST representative answers the call. The average speed to answer is determined by measuring and accumulating the seconds of wait time from the entry of a customer into the BST call management system queue until the customer is transferred to a BST representative. No distinction is made between CLEC customers and BST customers.
Calculation:
The Percent Answered within "X" Seconds measurement for toll is derived by using the BellCore Statistical Answer Conversion Tables, to convert the Average Speed to Answer measure into a percent of calls answered within "X" seconds. The BellCore Conversion Tables are specific to the defined parameters of work time, number of operators, max queue size and call abandonment rates.
Report Structure:
• Reported for the aggregate of BST and CLECs ➢ State
Level of Disaggregation:
None
Data Retained (on Aggregate Basis)
• For the items below, BST's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP • Month • Call Type (Toll) • Average Speed of Answer
Retail Analog/Benchmark
Parity by Design See Appendix D

Revision Date: 02/28/00 (tg)

OPERATOR SERVICES AND DIRECTORY ASSISTANCE

Report/Measurement:
DA-2. Speed to Answer Performance/Average Speed to Answer – Directory Assistance (DA)
Definition:
Measurement of the average time in seconds calls wait before answer by a DA operator.
Exclusions:
Calls abandoned by customers are not reflected in the average speed to answer but are reflected in the conversion tables where the percent answered within "X" seconds is determined.
Business Rules:
The call waiting measurement scan starts when the customer enters the queue and ends when a BST representative answers the call. The average speed to answer is determined by measuring and accumulating the seconds of wait time from the entry of a customer into the BST call management system queue until the customer is transferred to a BST representative. No distinction is made between CLEC customers and BST customers.
Calculation:
The Average Speed to Answer for DA is calculated by using data from monthly system measurement reports taken from the centralized call routing switches. The "total call waiting seconds" is a sub-component of this measure which BST systems calculate by monitoring the number of calls in queue throughout the day multiplied by the time (in seconds) between monitoring events. The "total calls served" is the other sub-component of this measure, which BST systems record as the total number of calls handled by Operator Services DA centers. Since calls abandoned are not reflected in the calculation, the percent answered within the required timeframe is determined by using conversion tables with input for the abandonment rate.
Report Structure:
• Reported for the aggregate of BST and CLECs ➢ State
Level of Disaggregation:
None
Data Retained (on Aggregate Basis)
• For the items below, BST's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP • Month • Call Type (DA) • Average Speed of Answer
Retail Analog/Benchmark
Parity by Design See Appendix D

Revision Date: 02/28/00 (tg)

OPERATOR SERVICES AND DIRECTORY ASSISTANCE

Report/Measurement:
DA-2. Speed to Answer Performance/Percent Answered within "X" Seconds – Directory Assistance (DA)
Definition:
Measurement of the percent of DA calls that are answered in less than "X" seconds. The number of seconds represented by "X" is twenty, except where a different regulatory benchmark has been set against the Average Speed to Answer by a State Commission.
Exclusions:
Calls abandoned by customers are not reflected in the average speed to answer but are reflected in the conversion tables where the percent answered within "X" seconds is determined.
Business Rules:
The call waiting measurement scan starts when the customer enters the queue and ends when a BST representative answers the call. The average speed to answer is determined by measuring and accumulating the seconds of wait time from the entry of a customer into the BST call management system queue until the customer is transferred to a BST representative. No distinction is made between CLEC customers and BST customers.
Calculation:
The Percent Answered within "X" Seconds measurement for DA is derived by using the BellCore Statistical Answer Conversion Tables, to convert the Average Speed to Answer measure into a percent of calls answered within "X" seconds. The BellCore Conversion Tables are specific to the defined parameters of work time, number of operators, max queue size and call abandonment rates.
Report Structure:
• Reported for the aggregate of BST and CLECs ➢ State
Level of Disaggregation:
None
Data Retained (on Aggregate Basis)
• For the items below, BST's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP. • Month • Call Type (DA) • Average Speed of Answer
Retail Analog/Benchmark
Parity by Design See Appendix D

Revision Date: 02/28/00 (tg)

E911

Report/Measurement:
E-1. Timeliness
Definition:
Measures the percentage of batch orders for E911 database updates (to CLEC resale and BST retail records) processed successfully within a 24-hour period.
Exclusions:
• Any resale order canceled by a CLEC • Facilities-based CLEC orders
Business Rules:
The 24-hour processing period is calculated based on the date and time processing starts on the batch orders and the date and time processing stops on the batch orders. Mechanical processing starts when SCC (BST's E911 vendor) receives E911 files containing batch orders extracted from BST's Service Order Communication System (SOCS). Processing stops when SCC loads the individual records to the E911 database. No distinctions are made between CLEC resale records and BST retail records.
Calculation:
E911 Timeliness = Σ (Number of batch orders processed within 24 hours ÷ Total number of batch orders submitted) X 100
Report Structure:
• Reported for the aggregate of CLEC resale updates and BST retail updates ➢ State ➢ Region
Levels of Disaggregation:
None
Data Retained
• Report month • Aggregate data
Retail Analog/Benchmark
Parity by Design See Appendix D

Revision Date: 02/28/00 (tg)

E911

Report/Measurement:
E-2. Accuracy
Definition:
Measures the individual E911 telephone number (TN) record updates (to CLEC resale and BST retail records) processed successfully for E911 with no errors.
Exclusions:
• Any resale order canceled by a CLEC • Facilities-based CLEC orders
Business Rules:
Accuracy is based on the number of records processed without error at the conclusion of the processing cycle. Mechanical processing starts when SCC (BST's E911 vendor) receives E911 files containing telephone number (TN) records extracted from BST's Service Order Communication System (SOCS). No distinctions are made between CLEC resale records and BST retail records.
Calculation:
E911 Accuracy = Σ(Number of record individual updates processed with no errors ÷ Total number of individual record updates) X 100
Report Structure:
• Reported for the aggregate of CLEC resale updates and BST retail updates ➢ State ➢ Region
Level of Disaggregation:
None
Data Retained
• Report month • Aggregate data
Retail Analog/Benchmark
Parity by Design See Appendix D

Revision Date: 02/28/00 (tg)

E911

Report/Measurement:
E-3. Mean Interval
Definition:
Measures the mean interval processing of E911 batch orders (to update CLEC resale and BST retail records).
Exclusions:
• Any resale order canceled by a CLEC • Facilities-based CLEC orders
Business Rules:
The processing period is calculated based on the date and time processing starts on the batch orders and the date and time processing stops on the batch orders. Data is posted in 4-hour increments up to and beyond 24 hours. No distinctions are made between CLEC resale records and BST retail records.
Calculation:
E911 Mean Interval = Σ (Date and time of batch order completion – Date and time of batch order submission) ÷ (Number of batch orders completed)
Report Structure:
• Reported for the aggregate of CLEC resale updates and BST retail updates ➢ State ➢ Region
Level of Disaggregation:
None
Data Retained (on Aggregate Basis)
• Report month • Aggregate data
Retail Analog/Benchmark
Parity by Design See Appendix D

Revision Date: 02/28/00 (tg)

TRUNK GROUP PERFORMANCE

Report/Measurement:

TGP-1. Trunk Group Performance-Aggregate

Definition:

A report of aggregate blocking information for CLEC trunk groups and BellSouth trunk groups.

Exclusions:

- Trunk Groups for which valid data is not available for an entire study period
- Duplicate trunk group information

Business Rules:

- Aggregate blocking results are created using the statistical analysis package and are output into Excel with separate table for each geographic area.

- For each geographic area, plots are generated for: a) the monthly blocking by hour for each affecting group (BellSouth or CLEC), and b) the difference between BellSouth blocking data and CLEC blocking data is calculated and plotted.

- The TCBH blocking is calculated by determining the monthly averaging blocking for each hour for each trunk. The hour with the highest usage is selected as the TCBH and the blocking for that hour is reported.

- Trunk Categorization: This report displays, over a reporting cycle, aggregate, weighted 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 to 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 Category:

	Point A	Point B
Category 9:	BellSouth End Office	BellSouth End Office

TRUNK GROUP PERFORMANCE - (Trunk Group Performance-Aggregate – Continued)

Calculation:

Monthly Weighted Average Blocking:

(Blocking data for each hour X number of valid measurement days within each week) / Σ (Total number of valid measurement days within each week)

Example: Hour		Week 1	Week 2	Week 3	Week 4	Monthly
1	Blocking	1%	0.5%	2%	1.5%	1.8%
	# Days	7	7	5	6	
2	Blocking	0%	0%	0.2%	0.3%	.1%
	# Days	7	5	5	7	
3	Blocking	1%	1%	0.5%	2%	1.1%
	# Days	7	7	7	7	
24	Blocking	1%	0.5%	2%	1.5%	1.2%
	# Days	7	7	5	6	

The monthly weighted average blocking for hour 1 for a particular trunk group is calculated as follows:

$$\frac{(1x5)+(0.5x5)+(2x4)+(1.5x4)}{(5+5+4+4)} = 1.2\%$$

Aggregate Monthly Blocking:

(Monthly weighted average blocking value for each trunk group) X (number of trunks within each trunk group) / Σ (number of trunks in the aggregate group)

Example: Trunk Group	Trunks in Service	Blocking Hour 1	Blocking Hour 2	Blocking Hour 3	Blocking Hour 4	..... Blocking Hour 24
A	24	3%	0%	1%	0%	0%
B	144	2%	0%	1%	0.5%	0.5%
C	528	0%	0.5%	1%	1%	1%
D	316	1%	0%	1%	0.1%	0%
E	940	1%	1%	4%	0%	0%
Aggregate		0.8%	0.6%	2.4%	0.3%	0.3%

The aggregate weighted monthly blocking for hour 1 is calculated as follows:

$$\frac{(3x24)+(2x144)+(0x528)+(1x316)+(1x940)}{(24+144+528+316+940)} = 0.8\%$$

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

Report Structure:

- CLEC Aggregate
  - State

Level of Disaggregation:

Trunk Group

Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report Month • Total Trunk Groups • Number of Trunk Groups by CLEC • Hourly average blocking per trunk group	• Report Month • Total Trunk Groups • Aggregate Hourly average blocking

Retail Analog/Benchmark:

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

Revision Date: 02/28/00 (tm)

TRUNK GROUP PERFORMANCE

Report/Measurement:

TGP-2. Trunk Group Performance-CLEC Specific

Definition:

A report of blocking information for CLEC trunk groups.

Exclusions:

- Trunk Groups for which valid data is not available for an entire study period
- Duplicate trunk group information

Business Rules:

- Aggregate blocking results are created using the statistical analysis package and are output into Excel with separate table for each geographic area.

- For each geographic area, plots are generated for the monthly blocking by hour

- The TCBH blocking is calculated by determining the monthly averaging blocking for each hour for each trunk. The hour with the highest usage is selected as the TCBH and the blocking for that hour is reported.

- Trunk Categorization: This report displays, over a reporting cycle, aggregate, weighted average blocking data for each hour of a day. Therefore, for each reporting cycle, 24 blocking data points are generated for CLEC trunk groups. In order to assign trunk groups to the CLEC 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 to 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

TRUNK GROUP PERFORMANCE - (Trunk Group Performance-CLEC Specific – Continued)

Calculation:

Monthly Weighted Average Blocking:
(Blocking data for each hour X number of valid measurement days within each week) / Σ (Total number of valid measurement days within each week)

Example: Hour		Week 1	Week 2	Week 3	Week 4	Monthly
1	Blocking	1%	0.5%	2%	1.5%	1.8%
	# Days	7	7	5	6	
2	Blocking	0%	0%	0.2%	0.3%	.1%
	# Days	7	5	5	7	
3	Blocking	1%	1%	0.5%	2%	1.1%
	# Days	7	7	7	7	5
24	Blocking	1%	0.5%	2%	1.5%	1.2%
	# Days	7	7	5	6	

The monthly weighted average blocking for hour 1 for a particular trunk group is calculated as follows:
$\frac{(1x5)+(0.5x5)+(2x4)+(1.5x4)}{(5+5+4+4)} = 1.2\%$

Aggregate Monthly Blocking:
(Monthly weighted average blocking value for each trunk group) X (number of trunks within each trunk group) / Σ (number of trunks in the aggregate group)

Example: Trunk Group	Trunks in Service	Blocking Hour 1	Blocking Hour 2	Blocking Hour 3	Blocking Hour 4	..... Blocking Hour 24
A	24	3%	0%	1%	0%	0%
B	144	2%	0%	1%	0.5%	0.5%
C	528	0%	0.5%	1%	1%	1%
D	316	1%	0%	1%	0.1%	0%
E	940	1%	1%	4%	0%	0%
Aggregate		0.8%	0.6%	2.4%	0.3%	0.3%

The aggregate weighted monthly blocking for hour 1 is calculated as follows:
$\frac{(3x24)+(2x144)+(0x528)+(1x316)+(1x940)}{(24+144+528+316+940)} = 0.8\%$

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

Report Structure:

- CLEC Specific
- Trunk Group

Level of Disaggregation:

Trunk Group

Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report Month • Total Trunk Groups • Number of Trunk Groups by CLEC • Hourly average blocking per trunk group	• Report Month • Total Trunk Groups • Aggregate Hourly average blocking

Retail Analog/Benchmark:

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

Revision Date: 02/28/00 (tm)

TRUNK GROUP PERFORMANCE

Report/Measurement:

TGP-3. Trunk Group Service Report

Definition:

A report of the percent blocking above the Measured Blocking Threshold (MBT) on all final trunk groups between CLEC Points of Termination and BST end offices or tandems.

Exclusions:

- Trunk groups for which valid traffic data is not available
- High use trunk groups

Business Rules:

Traffic trunking data measurements are validated and processed by the Total Network Data System/Trunking (TNDS/TK), a Telcordia (BellCore) supported application, on an hourly basis for Average Business Days (Monday through Friday). The traffic load sets, including offered load and observed blocking ratio (calls blocked divided by calls attempted), are averaged for a 20 day period, and the busy hour is selected. The busy hour average data for each trunk group is captured for reporting purposes. Although all trunk groups are available for reporting, the report highlight those trunk groups with blocking greater than the Measured Blocking Threshold (MBT) and the number of consecutive monthly reports that the trunk group blocking has exceeded the MBT. The MBT for CTTG is 2% and the MBT for all other trunk groups is 3%.

Calculation:

Measured blocking = (Total number of blocked calls) / (Total number of attempted calls) X 100

Report Structure:

- BST Aggregate
  - CTTG
  - Local
- CLEC Aggregate
  - BST Administered CLEC Trunk
  - CLEC Administered CLEC Trunk
- CLEC Specific
  - BST Administered CLEC Trunk
  - CLEC Administered CLEC Trunk

Level of Disaggregation:

State

Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report month • Total trunk groups • Total trunk groups for which data is available • Trunk groups with blocking greater than the MBT • Percent of trunk groups with blocking greater than the MBT	• Report month • Total trunk groups • Total trunk groups for which data is available • Trunk groups with blocking greater than the MBT • Percent of trunk groups with blocking greater than the MBT

Retail Analog/Benchmark:

CLEC Trunk Blockage/BST Trunk Blockage
See Appendix D

Revision Date: 02/28/00 (tm)

TRUNK GROUP PERFORMANCE

Report/Measurement:

TGP-4. Trunk Group Service Detail

Definition:

A detailed list of all final trunk groups between CLEC Points of Presence and BST end offices or tandems, and the actual blocking performance when the blocking exceeds the Measured Blocking Threshold (MBT) for the trunk groups.

Exclusions:

- Trunk groups for which valid traffic data is not available
- High use trunk groups

Business Rules:

Traffic trunking data measurements are validated and processed by the Total Network Data System/Trunking (TNDS/TK), a Telcordia (Bellcore) supported application, on an hourly basis for Average Business Days (Monday through Friday). The traffic load sets, including offered load and observed blocking ratio (calls blocked divided by calls attempted), are averaged for a 20 day period, and the busy hour is selected. The busy hour average data for each trunk group is captured for reporting purposes. Although all trunk groups are available for reporting, the report highlight those trunk groups with blocking greater than the Measured Blocking Threshold (MBT) and the number of consecutive monthly reports that the trunk group blocking has exceeded the MBT. The MBT for CTTG is 2% and the MBT for all other trunk groups is 3%.

Calculation:

Measured Blocking = (Total number of blocked calls) / (Total number of attempted calls) X 100

Report Structure:

- BST Specific
  - Traffic Identity
  - TGSN
  - Tandem
  - End Office
  - Description
  - Observed Blocking
  - Busy Hour
  - Number Trunks
  - Valid study days
  - Number reports
  - Remarks
- CLEC Specific
  - Traffic Identity
  - TGSN
  - Tandem
  - CLEC POT
  - Description
  - Observed Blocking
  - Busy Hour
  - Number Trunks
  - Valid study days
  - Number reports
  - Remarks

Level of Disaggregation:

State

Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report month • Total trunk groups • Total trunk groups for which data is available • Trunk groups with blocking greater than the MBT • Percent of trunk groups with blocking greater than the MBT • Traffic identity, TGSN, end points, description, busy hour, valid study days, number reports	• Report month • Total trunk groups • Total trunk groups for which data is available • Trunk groups with blocking greater than the MBT • Percent of trunk groups with blocking greater than the MBT • Traffic identity, TGSN, end points, description, busy hour, valid study days, number reports

Retail Analog/Benchmark:

CLEC Trunk Blockage/BST Blockage
See Appendix D

Revision Date: 02/28/00 (tm)

COLLOCATION

Report/Measurement:
C-1. Average Response Time
Definition:
Measures the average time (counted in business days) from the receipt of a complete and accurate collocation application (including receipt of application fees) to the date BellSouth responds in writing.
Exclusions:
• Requests to augment previously completed arrangements • Any application cancelled by the CLEC
Business Rules:
The clock starts on the date that BST receives a complete and accurate collocation application accompanied by the appropriate application fee. The clock stops on the date that BST returns a response. The clock will restart upon receipt of changes to the original application request.
Calculation:
Average Response Time = Σ(Request Response Date) – (Request Submission Date) / Count of Responses Returned within Reporting Period.
Report Structure:
• Individual CLEC (alias) aggregate • Aggregate of all CLECs
Level of Disaggregation:
• State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area – MSA) • Virtual • Physical
Data Retained:
• Report period • Aggregate data
Retail Analog/Benchmark:
See Appendix D

Revision Date: 01/27/00 (tg)

COLLOCATION

Report/Measurement:
C-2. Average Arrangement Time
Definition:
Measures the average time from the receipt of a complete and accurate Bona Fide firm order (including receipt of appropriate fee) to the date BST completes the collocation arrangement.
Exclusions:
• Any Bona Fide firm order cancelled by the CLEC • Bona Fide firm orders to augment previously completed arrangements • Time for BST to obtain permits • Time during which the collocation contract is being negotiated
Business Rules:
The clock starts on the date that BST receives a complete and accurate Bona Fide firm order accompanied by the appropriate fee. The clock stops upon submission of the permit request and restarts upon receipt of the approved permit. Changes (affecting the provisioning interval or capital expenditures) that are submitted while provisioning is in progress may alter the completion date. The clock stops on the date that BST completes the collocation arrangement.
Calculation:
Average Arrangement Time = Σ(Date Collocation Arrangement is Complete) – (Date Order for Collocation Arrangement Submitted) / Total Number of Collocation Arrangements Completed during Reporting Period.
Report Structure:
• Individual CLEC (alias) aggregate • Aggregate of all CLECs
Level of Disaggregation:
• State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area – MSA) • Virtual • Physical
Data Retained:
• Report period • Aggregate data
Retail Analog/Benchmark:
See Appendix D

Revision Date: 01/27/00 (tg)

COLLOCATION

Report/Measurement:
C-3. Percent of Due Dates Missed
Definition:
Measures the percent of missed due dates for collocation arrangements.
Exclusions:
• Any Bona Fide firm order cancelled by the CLEC • Bona Fide firm orders to augment previously completed arrangements • Time for BST to obtain permits • Time during which the collocation contract is being negotiated
Business Rules:
The clock starts on the date that BST receives a complete and accurate Bona Fide firm order accompanied by the appropriate fee. The clock stops on the date that BST completes the collocation arrangement.
Calculation:
% of Due Dates Missed = Σ (Number of Orders not completed w/i ILEC Committed Due Date during Reporting Period) / Number of Orders Completed in Reporting Period) X 100
Report Structure:
• Individual CLEC (alias) aggregate • Aggregate of all CLECs
Level of Disaggregation:
• State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area-MSA) • Virtual • Physical
Data Retained:
• Report period • Aggregate data
Retail Analog/Benchmark:
See Appendix D < 10% Missed Due Dates

Revision Date: 01/27/00 (tg)

Appendix A: Reporting Scope*

Standard Service Groupings	*Pre-Order, Ordering* ➢ Resale Residence ➢ Resale Business ➢ Resale Special ➢ Local Interconnection Trunks ➢ UNE ➢ UNE - Loops w/LNP *Provisioning* ➢ UNE Non-Design ➢ UNE Design ➢ Local Interconnection Trunks ➢ Resale Residence ➢ Resale Business ➢ Resale Design ➢ BST Trunks ➢ BST Residence Retail ➢ BST Business Retail ➢ BST Design Retail *Maintenance and Repair* ➢ Local Interconnection Trunks ➢ UNE Non-Design ➢ UNE Design ➢ Resale Residence ➢ Resale Business ➢ Resale Design ➢ BST Interconnection Trunks ➢ BST Residence Retail ➢ BST Business Retail ➢ BST Design Retail Local Interconnection Trunk Group Blockage ➢ BST CTTG Trunk Groups ➢ CLEC Trunk Groups

Appendix A: Reporting Scope*

Standard Service Order Activities *These are the generic BST/CLEC service order activities which are included in the Pre-Ordering, Ordering, and Provisioning sections of this document. It is not meant to indicate specific reporting categories.*	➢ New Service Installations ➢ Service Migrations Without Changes ➢ Service Migrations With Changes ➢ Move and Change Activities ➢ Service Disconnects (Unless noted otherwise)
Pre-Ordering Query Types: **Maintenance Query Types:**	➢ Address ➢ Telephone Number ➢ Appointment Scheduling ➢ Customer Service Record ➢ Feature Availability
Report Levels	➢ CLEC RESH ➢ CLEC MSA ➢ CLEC State ➢ CLEC Region ➢ Aggregate CLEC State ➢ Aggregate CLEC Region ➢ BST State ➢ BST Region

* Scope is report, data source and system dependent, and, therefore, will differ with each report.

Appendix B: Glossary of Acronyms and Terms

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 like category, e.g. CLEC aggregate equals the sum total of all CLECs' data for a given reporting level.
	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.
	ATLASTN	ATLAS software contract for Telephone Number
	AUTO CLARIFICATION	The number of LSRs that were 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 - A front-end presentation manager used by BellSouth organizations to access the CRIS database.
	BRC	Business Repair Center – The BellSouth Business Systems trouble receipt center which serves large business and CLEC customers.
	BST	BellSouth Telecommunications, Inc.
C	**CKTID**	A unique identifier for elements combined in a service configuration
	CLEC	Competitive Local Exchange Carrier
	CMDS	Centralized Message Distribution System - BellCore administered national system used to transfer specially formatted messages among companies.
	COFFI	Central Office Feature File Interface - A BellSouth Operations System database which maintains Universal Service Order Code (USOC) information based on current tariffs.

Appendix B: Glossary of Acronyms and Terms – Continued

C	**COFIUSOC**	COFFI software contract for feature/service information
	CRIS	Customer Record Information System - The BellSouth proprietary corporate database and billing system for non-access customers and services.
	CRSACCTS	CRIS software contract for CSR information
	CSR	Customer Service Record
	CTTG	Common Transport Trunk Group - Final trunk groups between BST & Independent end offices and the BST access tandems.
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, Central Office Equipment, Customer Premises Equipment, etc.
	DLETH	Display Lengthy Trouble History - A history report that gives all activity on a line record for trouble reports in LMOS
	DLR	Detail Line Record - All the basic information maintained on a line record in LMOS, e.g. name, address, facilities, features etc.
	DOE	Direct Order Entry System - An internal BellSouth service order entry system used by BellSouth Service Representatives to input business service orders in BellSouth format.
	DSAP	DOE (Direct Order Entry) Support Application - The BellSouth Operations System which assists a Service Representative or similar carrier agent in negotiating service provisioning commitments for non-designed services and UNEs.
	DSAPDDI	DSAP software contract for schedule information
E	**E911**	Provides callers access to the applicable emergency services bureau by dialing a 3-digit universal telephone number.
	EDI	Electronic Data Interchange - The computer-to-computer exchange of inter and/or intra company business documents in a public standard format.
F	**FATAL REJECT**	The number of LSRs that were electronically rejected from LEO, which checks to see of the LSR has all the required fields correctly populated
	FLOW-THROUGH	In the context of this document, LSRs submitted electronically via the CLEC mechanized ordering process that flow through to the BST OSS without manual or human intervention.
	FOC	Firm Order Confirmation - A notification returned to the CLEC confirming that the LSR has been received and accepted, including the specified commitment date.

Appendix B: Glossary of Acronyms and Terms - Continued

G		
H	**HAL**	"Hands Off" Assignment Logic - Front end access and error resolution logic used in interfacing BellSouth Operations Systems such as ATLAS, BOCRIS, LMOS, PSIMS, RSAG and SOCS.
	HALCRIS	HAL software contract for CSR information
I	**ISDN**	Integrated Services Digital Network
K		
L	**LCSC**	Local Carrier Service Center - The BellSouth center which is dedicated to handling CLEC LSRs, ASRs, and Preordering transactions along with associated expedite requests and escalations.
	LEGACY SYSTEM	Term used to refer to BellSouth Operations Support Systems (see OSS)
	LENS	Local Exchange Negotiation System - The BellSouth LAN/web server/OS 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 EDI, applies edit and formatting checks, and reformats the Local Service Requests in BellSouth Service Order format.
	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.
	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	LMOS host computer
	LMOSupd	LMOS updates
	LNP	Local Number Portability - In the context of this document, the capability for a subscriber to retain his current telephone number as he transfers to a different local service provider.
	LOOPS	Transmission paths from the central office to the customer premises.
	LSR	Local Service Request – A request for local resale service or unbundled network elements from a CLEC.
M	**MAINTENANCE & REPAIR**	The process and function by which trouble reports are passed to BellSouth and by which the related service problems are resolved.
	MARCH	A BellSouth Operations System which accepts service orders, 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.

Appendix B: Glossary of Acronyms and Terms – Continued

N	NC	"No Circuits" - All circuits busy announcement
O	**OASIS**	Obtain Availability Services Information System - A BellSouth front-end processor, which acts as an interface between COFFI and RNS. This system takes the USOCs in COFFI and translates them to English for display in RNS.
	OASISBSN	OASIS software contract for feature/service
	OASISCAR	OASIS software contract for feature/service
	OASISLPC	OASIS software contract for feature/service
	OASISMTN	OASIS software contract for feature/service
	OASISNET	OASIS software contract for feature/service
	OASISOCP	OASIS software contract for feature/service
	ORDERING	The process and functions by which 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.
	OSPCM	Outside Plant Contract Management System - Provides Scheduling Information.
	OSS	Operations Support System - A support system or database which is used to mechanize the flow or performance of work. The term is used to refer to the overall system consisting of hardware complex, computer operating system(s), and application which is used to provide the support functions.
	OUT OF SERVICE	Customer has no dial tone and cannot call out.
P	**POTS**	Plain Old Telephone Service
	PREDICTOR	The BellSouth Operations system which is used to administer proactive maintenance and rehabilitation activities on outside plant facilities, provide access to selected work groups (e.g. RRC & BRC) to Mechanized Loop Testing and switching system I/O ports, and provide certain information regarding the attributes and capabilities of outside plant facilities.
	PREORDERING	The process and functions by which vital information is obtained, verified, or validated prior to placing a service request.
	PROVISIONING	The process and functions by which necessary work is performed to activate a service requested via an LSR or ASR and to initiate the proper billing and accounting functions.
	PSIMS	Product/Service Inventory Management System - A BellSouth database Operations System which contains availability information on switching system features and capabilities and on BellSouth service availability. This database is used to verify the availability of a feature or service in an NXX prior to making a commitment to the customer.
	PSIMSORB	PSIMS software contract for feature/service

Appendix B: Glossary of Acronyms and Terms – Continued

Q		
R	**RNS**	Regional Negotiation System - An internal BellSouth service order entry system used by BellSouth Consumer Services to input service orders in BellSouth format.
	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 validated to be accurate with state and local governments.
	RSAGADDR	RSAG software contract for address search
	RSAGTN	RSAG software contract for telephone number search
S	**SOCS**	Service Order Control System - The BellSouth Operations System which routes service order images among BellSouth drop points and BellSouth Operations Systems during the service provisioning process.
	SOIR	Service Order Interface Record - any change effecting activity to a customer account by service order that impacts 911/E911.
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.
	TN	Telephone Number
	TOTAL MANUAL FALLOUT	The number of LSRs which are entered electronically but require manual entering into a service order generator.
U	**UNE**	Unbundled Network Element
V		
W	**WTN**	A unique identifier for elements combined in a service configuration
X		
Y		
Z		
Σ		Sum of:

Appendix C

BELLSOUTH'S AUDIT POLICY:

BellSouth currently provides many CLECs with certain audit rights as a part of their individual interconnection agreements. However, it is not reasonable for BellSouth to undergo an audit of the SQM for every CLEC with which it has a contract. BellSouth has developed a proposed Audit Plan for use by the parties to an audit. If requested by a Public Service Commission or by a CLEC exercising contractual audit rights, BellSouth will agree to undergo a comprehensive audit of the aggregate level reports for both BellSouth and the CLEC(s) for each of the next five (5) years (2000 – 2005), to be conducted by an independent third party. The results of that audit will be made available to all the parties subject to proper safeguards to protect proprietary information. This aggregate level audit includes the following specifications:

1. The cost shall be borne 50% by BellSouth and 50% by the CLEC or CLECs.

2. The independent third party auditor shall be selected with input from BellSouth, the PSC, if applicable, and the CLEC(s).

3. BellSouth, the PSC and the CLEC(s) shall jointly determine the scope of the audit.

BellSouth reserves the right to make changes to this audit policy as growth and changes in the industry dictate.

APPENDIX D Analogs and Benchmarks				
BST SQM Category	**MEASURES AND SUB-METRICS**	**RESALE** Retail Analogue	**UNEs** Retail Analogue	Benchmark*
Pre-Ordering	**Percent Response Received within "X" seconds**	Parity w/ retail where applicable.		
	OSS Interface Availability			99.5%
Ordering	**Percent Flow-Through Service Request** • Residence • Business • UNE			 90% 80% 80%
	Percent Rejected Service Request	Diagnostic		Diagnostic.
	Reject Interval (Mechanized)			95% within 1 hrs
	• Reject Interval (Non-Mechanized and Partially Mechanized)			85% < 48 hrs
	Firm Order Confirmation Timeliness (Mechanized) (Non-Mechanized and Partially Mechanized)			95% within 4 hrs 85% <48 Hrs
	Speed of Answer in Ordering Center	X	X	
Provisioning	**Mean Held Order Interval**			
	• Resale Residence	X		
	• Resale Business	X		
	• Resale Design	X		
	• Resale PBX	X		
	• Resale Centrex	X		
	• Resale IDSN	X		
	• UNE Loop and Port Combos		Retail Residence and Business	
	• UNE 2w Loop with NP – Non-Design		Retail Residence and Business	
	• UNE 2w Loop without NP – Non-Design		Retail Residence and Business	
	• UNE Loop Other with NP Non-Design		Retail Residence and Business	
	• UNE Loop Other without NP Non-Design		Retail Residence and Business	
	• UNE Other Non Design		Retail Residence and Business	
	• UNE 2w Loop with NP – Design		Retail Residence and Business	
	• UNE 2w Loop without NP – Design		Retail Residence and Business	
	• UNE Loop Other with NP – Design		Retail Design	

APPENDIX D Analogs and Benchmarks				
BST SQM Category	**MEASURES AND SUB-METRICS**	**RESALE** Retail Analogue	**UNEs** Retail Analogue	Benchmark*
	• UNE Loop Other without NP - Design		Retail Design	
	• UNE Other Design		Retail Design	
	• Local Interconnection Trunks	X		
	Average Jeopardy Notice Interval (Mechanized)			
	• Resale Residence			95% >=24 Hrs.
	• Resale Business			95% >=24 Hrs.
	• Resale Design			95% >=24 Hrs.
	• Resale PBX			95% >=24 Hrs.
	• Resale Centrex			95% >=24 Hrs.
	• Resale IDSN			95% >=24 Hrs.
	• UNE Loop and Port Combos			95% >=24 Hrs.
	• UNE 2w Loop with NP – Non-Design			95% >=24 Hrs.
	• UNE 2w Loop without NP – Non-Design			95% >=24 Hrs.
	• UNE Loop Other with NP Non-Design			95% >=24 Hrs.
	• UNE Loop Other without NP Non-Design			95% >=24 Hrs.
	• UNE Other Non Design			95% >=24 Hrs.
	• UNE 2w Loop with NP – Design			95% >=24 Hrs.
	• UNE 2w Loop without NP – Design			95% >=24 Hrs.
	• UNE Loop Other with NP – Design			95% >=24 Hrs.
	• UNE Loop Other without NP - Design			95% >=24 Hrs.
	• UNE Other Design			95% >=24 Hrs.
	• Local Interconnection Trunks			95% >=24 Hrs.
	% of Orders given jeopardy notice (Mechanized)			
	• Resale Residence	X		
	• Resale Business	X		
	• Resale Design	X		
	• Resale PBX	X		
	• Resale Centrex	X		
	• Resale IDSN	X		
	• UNE Loop and Port Combos		Retail Residence and Business	
	• UNE 2w Loop with NP – Non-Design		Retail Residence and Business	
	• UNE 2w Loop without NP – Non-Design		Retail Residence and Business	
	• UNE Loop Other with NP Non-Design		Retail Residence and Business	
	• UNE Loop Other without NP Non-Design		Retail Residence and Business	

APPENDIX D Analogs and Benchmarks				
BST SQM Category	**MEASURES AND SUB-METRICS**	**RESALE** Retail Analogue	**UNEs** Retail Analogue	Benchmark*
	• UNE Other Non Design		Retail Residence and Business	
	• UNE 2w Loop with NP – Design		Retail Residence and Business	
	• UNE 2w Loop without NP – Design		Retail Residence and Business	
	• UNE Loop Other with NP – Design		Retail Design	
	• UNE Loop Other without NP - Design		Retail Design	
	• UNE Other Design		Retail Design	
	• Local Interconnection Trunks	X		
	Percent Missed Installation Appointments			
	• Resale Residence	X		
	• Resale Business	X		
	• Resale Design	X		
	• Resale PBX	X		
	• Resale Centrex	X		
	• Resale IDSN	X		
	• UNE Loop and Port Combos		Retail Residence and Business	
	• UNE 2w Loop with NP – Non-Design		Retail Residence and Business	
	• UNE 2w Loop without NP – Non-Design		Retail Residence and Business	
	• UNE Loop Other with NP Non-Design		Retail Residence and Business	
	• UNE Loop Other without NP Non-Design		Retail Residence and Business	
	• UNE Other Non Design		Retail Residence and Business	
	• UNE 2w Loop with NP – Design		Retail Residence and Business	
	• UNE 2w Loop without NP – Design		Retail Residence and Business	
	• UNE Loop Other with NP – Design		Retail Design	
	• UNE Loop Other without NP – Design		Retail Design	
	• UNE Other Design		Retail Design	
	• Local Interconnection Trunks	X		
	Order Completion Interval			
	• Resale Residence	X		
	• Resale Business	X		
	• Resale Design	X		
	• Resale PBX	X		
	• Resale Centrex	X		
	• Resale IDSN	X		
	• UNE Loop and Port Combos		Retail Residence and Business	

APPENDIX D Analogs and Benchmarks				
BST SQM Category	**MEASURES AND SUB-METRICS**	**RESALE** Retail Analogue	**UNEs** Retail Analogue	Benchmark*
	• UNE 2w Loop with NP – Non-Design		Retail Residence and Business	
	• UNE 2w Loop without NP – Non-Design		Retail Residence and Business	
	• UNE Loop Other with NP Non-Design		Retail Residence and Business	
	• UNE Loop Other without NP Non-Design		Retail Residence and Business	
	• UNE Other Non Design		Retail Residence and Business	
	• UNE 2w Loop with NP – Design		Retail Residence and Business	
	• UNE 2w Loop without NP – Design		Retail Residence and Business	
	• UNE Loop Other with NP – Design		Retail Design	
	• UNE Loop Other without NP - Design		Retail Design	
	• UNE Other Design		Retail Design	
	• Local Interconnection Trunks	X		
	Average Completion Notice Interval – Resale POTS (Mech)			
	• Resale Residence	X		
	• Resale Business	X		
	• Resale Design	X		
	• Resale PBX	X		
	• Resale Centrex	X		
	• Resale IDSN	X		
	• UNE Loop and Port Combos		Retail Residence and Business	
	• UNE 2w Loop with NP – Non-Design		Retail Residence and Business	
	• UNE 2w Loop without NP – Non-Design		Retail Residence and Business	
	• UNE Loop Other with NP Non-Design		Retail Residence and Business	
	• UNE Loop Other without NP Non-Design		Retail Residence and Business	
	• UNE Other Non Design		Retail Residence and Business	
	• UNE 2w Loop with NP – Design		Retail Residence and Business	
	• UNE 2w Loop without NP – Design		Retail Residence and Business	
	• UNE Loop Other with NP – Design		Retail Design	
	• UNE Loop Other without NP - Design		Retail Design	
	• UNE Other Design		Retail Design	
	• Local Interconnection Trunks	X		
	Percent Provisioning Troubles within 30 Days			
	• Resale Residence	X		
	• Resale Business	X		
	• Resale Design	X		

APPENDIX D Analogs and Benchmarks				
BST SQM Category	**MEASURES AND SUB-METRICS**	**RESALE** Retail Analogue	**UNEs** Retail Analogue	Benchmark*
	• Resale PBX	X		
	• Resale Centrex	X		
	• Resale IDSN	X		
	• UNE Loop and Port Combos		Retail Residence and Business	
	• UNE 2w Loop with NP – Non-Design		Retail Residence and Business	
	• UNE 2w Loop without NP – Non-Design		Retail Residence and Business	
	• UNE Loop Other with NP Non-Design		Retail Residence and Business	
	• UNE Loop Other without NP Non-Design		Retail Residence and Business	
	• UNE Other Non Design		Retail Residence and Business	
	• UNE 2w Loop with NP – Design		Retail Residence and Business	
	• UNE 2w Loop without NP – Design		Retail Residence and Business	
	• UNE Loop Other with NP – Design		Retail Design	
	• UNE Loop Other without NP - Design		Retail Design	
	• UNE Other Design		Retail Design	
	• Local Interconnection Trunks	X		
	Total Service Order Cycle Time	Diag.	Diagnostic	Diagnostic
Maintenance	**Customer Trouble Report Rate**			
	• Resale Residence	X		
	• Resale Business	X		
	• Resale Design	X		
	• Resale PBX	X		
	• Resale Centrex	X		
	• Resale IDSN	X		
	• UNE Loop and Port Combos		Retail Residence and Business	
	• UNE 2w Loop – Non-Design		Retail Residence and Business	
	• UNE Loop Other - Non-Design		Retail Residence and Business	
	• UNE Other Non Design		Retail Residence and Business	
	• UNE 2w Loop – Design		Retail Residence and Business	
	• UNE Loop Other – Design		Retail Design	
	• UNE Other Design		Retail Design	
	• Local Interconnection Trunks	X		
	Percent Missed Repair Appointments			
	• Resale Residence	X		
	• Resale Business	X		

APPENDIX D Analogs and Benchmarks				
BST SQM Category	**MEASURES AND SUB-METRICS**	**RESALE** Retail Analogue	**UNEs** Retail Analogue	Benchmark*
	• Resale Design	X		
	• Resale PBX	X		
	• Resale Centrex	X		
	• Resale IDSN	X		
	• UNE Loop and Port Combos		Retail Residence and Business	
	• UNE 2w Loop – Non-Design		Retail Residence and Business	
	• UNE Loop Other - Non-Design		Retail Residence and Business	
	• UNE Other Non Design		Retail Residence and Business	
	• UNE 2w Loop – Design		Retail Residence and Business	
	• UNE Loop Other – Design		Retail Design	
	• UNE Other Design		Retail Design	
	• Local Interconnection Trunks	X		
	Maintenance Average Duration			
	• Resale Residence	X		
	• Resale Business	X		
	• Resale Design	X		
	• Resale PBX	X		
	• Resale Centrex	X		
	• Resale IDSN	X		
	• UNE Loop and Port Combos		Retail Residence and Business	
	• UNE 2w Loop – Non-Design		Retail Residence and Business	
	• UNE Loop Other - Non-Design		Retail Residence and Business	
	• UNE Other Non Design		Retail Residence and Business	
	• UNE 2w Loop – Design		Retail Residence and Business	
	• UNE Loop Other – Design		Retail Design	
	• UNE Other Design		Retail Design	
	• Local Interconnection Trunks	X		
	Percent Repeat Troubles within 30 Days			
	• Resale Residence	X		
	• Resale Business	X		
	• Resale Design	X		
	• Resale PBX	X		
	• Resale Centrex	X		
	• Resale IDSN	X		

APPENDIX D Analogs and Benchmarks				
BST SQM Category	**MEASURES AND SUB-METRICS**	**RESALE** Retail Analogue	**UNEs** Retail Analogue	Benchmark*
	• UNE Loop and Port Combos		Retail Residence and Business	
	• UNE 2w Loop – Non-Design		Retail Residence and Business	
	• UNE Loop Other - Non-Design		Retail Residence and Business	
	• UNE Other Non Design		Retail Residence and Business	
	• UNE 2w Loop – Design		Retail Residence and Business	
	• UNE Loop Other – Design		Retail Design	
	• UNE Other Design		Retail Design	
	• Local Interconnection Trunks	X		
	Out of Service > 24hrs			
	• Resale Residence	X		
	• Resale Business	X		
	• Resale Design	X		
	• Resale PBX	X		
	• Resale Centrex	X		
	• Resale IDSN	X		
	• UNE Loop and Port Combos		Retail Residence and Business	
	• UNE 2w Loop – Non-Design		Retail Residence and Business	
	• UNE Loop Other - Non-Design		Retail Residence and Business	
	• UNE Other Non Design		Retail Residence and Business	
	• UNE 2w Loop – Design		Retail Residence and Business	
	• UNE Loop Other – Design		Retail Design	
	• UNE Other Design		Retail Design	
	• Local Interconnection Trunks	X		
	OSS Interface Availability • All systems except ECTA	X		
	• ECTA			99.5%
	OSS Response Interval and % • TAFI (Front End) • CRIS, DLETH, DLR, OSPCM, LMOS, LMOSUP, MARCH, Predictor, SOCS, LNP (Parity by Design)	X PBD		
	Average Answer Time – Repair Center	X		
Billing	**Invoice Accuracy**	X		
	Mean Time To Deliver Invoices	X		

APPENDIX D Analogs and Benchmarks				
BST SQM Category	**MEASURES AND SUB-METRICS**	**RESALE** Retail Analogue	**UNEs** Retail Analogue	Benchmark*
	Usage Data Delivery Accuracy	X		
	Usage Data Delivery Timeliness	X		
	Usage Data Delivery Completeness	X		
	Mean Time to Deliver Usage	X		
Operator Services (Toll)	**Average Speed to Answer**	PBD		
	% Answered in "X" Seconds	PBD		
Directory Assistance	**Average Speed to Answer**	PBD		
	% Answered in "X" Seconds	PBD		
E911	**Timelinesss**	PBD		
	Accuracy	PBD		
	Mean Interval	PBD		
Trunk Group Performance (Blockage)	**Trunk Group Service Report (Percent Trunk Blockage)** Any 2 hour period in 24 hours where CLEC blockage exceeds BST blockage by more than 0.5% = a miss using trunk groups 1, 3, 4, 5, 10, 16 for CLECs and 9 for BST.	X		
	Trunk Group Service Report (Percent Trunk Blockage)	X		
LNP	**Average Disconnect Timeliness Interval**			
	Percent Missed Installation Appointments		Retail Residence and Business	
	FOC Mechanized			95% ≤4 hours
	% Reject Service Request **Average Reject Interval Mechanized**		Diagnostic	95% ≤1 hour
	TSOC		Diagnostic	
	% Flow Through			80%
Customer Coordinated Conversions	**Coordinated Customer Conversions – UNE Loop**			95% ≤ 15min
	Coordinated Customer Conversions – LNP			95% ≤ 15 min

APPENDIX D Analogs and Benchmarks				
BST SQM Category	**MEASURES AND SUB-METRICS**	**RESALE** Retail Analogue	**UNEs** Retail Analogue	Benchmark*
Collocation +	**% of Due Dates Missed**			90% ≤ Commit Date
	Average Response Time		FL PSC is addressing this in generic docket	
+A contract with each CLEC required.	**Average Arrangement Time**		FL PSC is addressing this in generic docket	

Note 1: PBD = Parity by Design.

Note2: The retail analog for UNE Non-Design and UNE 2w Loops – Design is the average of Retail Residence Dispatch and Retail Business Dispatch transactions for the particular month. The retail analog for other UNE Design is Retail Design Dispatch.

Note3: Analogs and Benchmarks will be re-evaluated periodically, at least once a year, to validate applicability.

EXHIBIT B

ENFORCEMENT MEASUREMENTS
TABLE OF CONTENTS

* These reports are subject to change due to regulatory requirements, corrections, clarifications, etc.

PRE-ORDERING - OSS

Report/Measurement :	
Percent Response Received within '6" seconds	
Definition:	
Proportion of requests responded to within "6" seconds for accessing legacy data associated with appointment scheduling, service & feature availability, address verification, request for Telephone Numbers (TNs), and Customer Service Records (CSRs).	
Exclusions:	
None	
Business Rules:	
The response interval starts when the client application (LENS or TAG for CLECs) submits a request to the legacy system and ends when the appropriate response is returned to the client application. The number of legacy accesses during the reporting period which take less than "6" seconds are captured.	
Level of Disaggregation:	
• Region	
Calculation:	
Σ[(Date & Time of Legacy Response) – (Date & Time of Request to Legacy)] / (Number of Legacy Requests During the Reporting Period) X 100	
Report Structure:	
• CLEC Aggregate	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Response Interval • Regional Scope	
Retail Analog/Benchmark	
Benchmark	

PRE-ORDERING

Report/Measurement:	
OSS Interface Availability	
Definition:	
Percent of time OSS interface is functionally available compared to scheduled availability. Availability percentages for CLEC interface systems and for all Legacy systems accessed by them are captured	
Exclusions:	
None	
Business Rules:	
This measurement captures the availability percentages for the BST systems, which are used by CLECs during Pre-Ordering functions.	
Level of Disaggregation:	
• Region	
Calculation:	
(Functional Availability) / (Scheduled Availability) X 100	
Report Structure:	
• CLEC Aggregate	
Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report Month • Regional Scope	
Retail Analog/Benchmark:	
Benchmark	

ORDERING

Report/Measurement:
Percent Flow Through Service Requests (Summary)
Definition:
The percentage of Local Service Requests (LSR) submitted electronically via the CLEC mechanized ordering process that flow through to SOCS without manual intervention
Exclusions:
• Fatal Rejects • Auto Clarification • Manual Fallout • CLEC System Fallout • Supplements (Subsequent versions) to cancel LSRs that are not LESOG eligible (under development)
Business Rules:
The CLEC mechanized ordering process includes all LSRs, including supplements which are submitted through one of the three gateway interfaces (TAG, EDI, and LENS), and flow through to SOCS without manual intervention. The CLEC mechanized ordering process does not include LSRs, which are, submitted manually (e.g., fax, and courier), or are not designed to flow through, i.e., Manual Fallout. **Definitions:** **Fatal Rejects:** Errors that prevent an LSR, submitted by the CLEC, from being processed further. When an LSR is submitted by a CLEC, LEO will perform edit checks to ensure the data received is correctly formatted and complete. For example, if the PON field contains an invalid character, LEO will reject the LSR and the CLEC will receive a Fatal Reject. **Auto-Clarification**: errors that occur due to invalid data within the LSR. LESOG will perform data validity checks to ensure the data within the LSR is correct and valid. For example, if the address on the LSR is not valid according to RSAG, the CLEC will receive an Auto-Clarification. **Manual Fallout**: errors that occur by design. Certain LSRs are designed to fallout of the Mechanized Order Process due to their complexity. These LSRs are manually processed by the LCSC. When a CLEC submits an LSR, LESOG will determine if the LSR should be forwarded to LCSC for manual handling. Following are the categories for Manual Fallout. 1. Complex services* 2. Expedites (requested by the CLEC) 3. Special pricing plans 4. Denials-restore and conversion, or disconnect and conversion orders 5. Partial migrations 6. Class of service invalid in certain states with some types of service 7. New telephone number not yet posted to BOCRIS 8. Low volume such as activity type "T" (move) 9. Pending order review required 10. More than 25 business lines 11. Restore or suspend for UNE combos 12. Transfer of calls option for the CLEC's end users 13. CSR inaccuracies such as invalid or missing CSR data in CRIS * Attached is 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 system functionality. If it is determined the error is caused by the CLEC, the LSR will be sent back to the CLEC as clarification. If it is determined the error is BST caused, the LCSC representative will correct the error.

ORDERING – (Percent Flow Through Service Requests (Summary) – Continued)

Calculation:	
Percent Flow Through = (The total number of LSRs that flow through LESOG to SOCS) / (the number of LSRs passed from LEO to LESOG) – Σ[(the number of LSRs that fall out for manual processing) + (the number of LSRs that are returned to the CLEC for clarification) + (the number of LSRs that contain errors made by CLECs)] X 100.	
Report Structure:	
• CLEC Aggregate	
Level of Disaggregation:	
• Region	
Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report month ➢ Total number of LSRs received • Total number of errors by type: ➢ Fatal rejects ➢ Total fallout for manual processing ➢ Auto clarification ➢ CLEC caused system fallout • Total number of errors by error code	
Retail Analog/Benchmark:	
Benchmark	

ORDERING

ATTACHMENT 2
Flowthrough – OSS99

BellSouth Flow-through Analysis
For CLECs LSRs placed via EDI or TAG

	BellSouth Service Offered to CLEC via resale or UNE	Flow-through if no BST or CLEC Errors (Yes/No)	Complex Service (Yes/No)	Complex Order (Yes/No)	Design Service (Yes/No)	Can ordering this service cause fall out for a reason other than errors or complex? If so, what reason?
1	Flat Rate/Residence	Yes	No	No	no	
2	Flat Rate/Business	Yes	No	No	no	
3	Pay Phone Provider	No	No	No	no	
4	Measured Rate/Res.	Yes	No	No	no	
5	Measured Rate/Bus.	Yes	No	No	no	
6	Area Plus	Yes	No	No	no	
7	Package/Complete Choice and area plus	Yes	No	No	no	
8	Optional Calling Plan	Yes	No	No	no	
9	Ga. Community Calling	Yes	No	No	no	
10	Call Waiting Deluxe	Yes	No	No	no	
11	Call Waiting	Yes	No	No	no	
12	Caller ID	Yes	No	No	no	
13	Speed Calling	Yes	No	No	no	
14	3 Way Calling	Yes	No	No	no	
15	Call Forwarding-Variable	Yes	No	No	no	
16	Remote Access to CF	Yes	No	No	no	
17	Enhanced Caller ID	Yes	No	No	no	
18	Memory Call	Yes	No	No	no	
19	Memory Call Ans. Svc.	Yes	No	No	no	
20	MTS	Yes	No	No	no	
21	RCF	Yes	No	No	no	
22	Ringmaster	Yes	No	No	no	
23	Call Tracing	Yes	No	No	no	
24	Call Block	Yes	No	No	no	
25	Repeat Dialing	Yes	No	No	no	
26	Call Selector	Yes	No	No	no	
27	Call Return	Yes	No	No	no	
28	Preferred Call Forward	Yes	No	No	no	
29	Touchtone	Yes	No	No	no	
30	Visual Director	Yes	No	No	no	
31	INP (all types?)	Yes	UNE	No	no	
32	Unbundled Loop-Analog 2W, SL1, SL2	Yes	UNE	No	Yes-designed, no-non-designed	
33	2 wire analog port	Yes	UNE	No	no	
34	Local Number Portability (always?)	Yes	UNE	No	no	
35	Accupulse	No	Yes	Yes	yes	See note at bottom of matrix.
36	Basic Rate ISDN	No*	Yes	Yes	yes	LSR electronically submitted; no flow through

	BellSouth Service Offered to CLEC via resale or UNE	Flow-through if no BST or CLEC Errors (Yes/No)	Complex Service (Yes/No)	Complex Order (Yes/No)	Design Service (Yes/No)	Can ordering this service cause fall out for a reason other than errors or complex? If so, what reason?
37	DID	No*	Yes	Yes	Yes	*LSR electronically submitted: no flow through.*
38	Frame Relay	No	Yes	Yes	yes	
39	Megalink	No	Yes	Yes	yes	
40	Megalink-T1	No	Yes	Yes	yes	
41	Native Mode LAN Interconnection (NMLI)	No	Yes	Yes	yes	
42	Pathlink Primary Rate ISDN	No	Yes	Yes	yes	
43	Synchronet	No	Yes	Yes	yes	LSR electronically submitted; no flow through
44	PBX Trunks	No	Yes	Yes	Yes	LSR electronically submitted; no flow through
45	LightGate	No	Yes	Yes	yes	
46	Smartpath	No	Yes	Yes	yes	
47*a*	Hunting *(Multiline)*	No*	Yes	no	no	LSR electronically submitted; no flow through
47b	*Hunting (Series Completion)*	**Yes**	**Yes**	**No**	**No**	
48	CENTREX	No	Yes	Yes	no	
49	FLEXSERV	No	Yes	Yes	yes	
50	Multiserv	No	Yes	Yes	yes	
51	Off-Prem Stations	No	Yes	Yes	yes	
52	SmartRING	No	Yes	Yes	yes	
53	FX	No	Yes	Yes	yes	
54	Tie Lines	No	Yes	Yes	Yes	
55	WATS	No	Yes	Yes	yes	
56	4 wire analog voice grade loop	No	UNE	Yes	yes-designed, no-non-designed	
57	*4 wire DS1 and DS0 digital loop*	No*	UNE	Yes	yes	*LSR electronically submitted: no flow through*
58	2 wire ISDN digital loop	No	UNE	Yes	yes	
59	4 wire DS1 & PRI digital loop	No	UNE	Yes	yes	
60	ADSL	**No**	UNE	Yes	yes	
61	HDSL	No	UNE	Yes	yes	
62	2 wire analog DID trunk port	No	UNE	Yes	Yes	

	BellSouth Service Offered to CLEC via resale or UNE	Flow-through if no BST or CLEC Errors (Yes/No)	Complex Service (Yes/No)	Complex Order (Yes/No)	Design Service (Yes/No)	Can ordering this service cause fall out for a reason other than errors or complex? If so, what reason?
63	2 wire ISDN digital line side port	No	UNE	Yes	yes	
64	4 wire ISDN DSI digital trunk ports	No	UNE	Yes	yes	
65	UNE Combinations	y-loop+port	UNE	Yes	yes	
66	Directory Listings (simple)	**Yes**	UNE	Yes	no	
	BellSouth Service Offered to CLEC via resale or UNE	Flow-through if no BST or CLEC Errors (Yes/No)	Complex Service (Yes/No)	Complex Order (Yes/No)	Design Service (Yes/No)	Can ordering this service cause fall out for a reason other than errors or complex? If so, what reason?
67	Directory Listings (complex)	No*	UNE	yes	no	*LSR submitted electronically; no flow through*
68	ESSX	No	Yes	Yes	no	

Note for last column: For all services that indicate 'No' for flow-through, the following reasons, in addition to errors or complex services, also prompt manual handling: Expedites from CLECs, special pricing plans, for denials – restore and conversion or disconnect and conversion both required, partial migrations (although conversions-as-is flow through), class of service invalid in certain states with some TOS – e.g. gov't, or cannot be changed when changing main TN on C activity, low volume – e.g. activity type T=move, pending order review required, more than 25 business lines, restore or suspend for UNE combos, transfer of calls option for CLEC end user – fixed with release 6.0, new TN not yet posted to BOCRIS. All but the last one are unique to the CLEC environment.

ORDERING

Report/Measurement:	
Reject Interval	
Definition:	
Reject Interval is the average reject time from receipt of an LSR to the issuance of a Reject. An LSR is considered valid when it is electronically submitted by the CLEC and passes LEO edit checks to insure the data received is correctly formatted and complete.	
Exclusions:	
Service Requests canceled by CLEC	
Business Rules:	
Fully Mechanized: The elapsed time from receipt of a valid LSR (date and time stamp in EDI, TAG) until the LSR is rejected (date and time stamp of reject in LEO). Fatal Rejects and Auto Clarifications are considered in the Fully Mechanized category.	
Calculation:	
Reject Interval = Σ[(Date and Time of Service Request Rejection) – (Date and Time of Service Request Receipt)] / (Number of Service Requests Rejected in Reporting Period)	
Report Structure:	
• CLEC Specific	
Level of Disaggregation:	
• State	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Reject Interval • Total Number of LSRs • Total number of Errors • State	
Retail Analog/Benchmark:	
Benchmark; Retail Analog is underdevelopment	

ORDERING

Report/Measurement:	
Firm Order Confirmation Timeliness	
Definition:	
Interval for Return of a Firm Order Confirmation (FOC Interval) is the average response time from receipt of valid LSR to issuance of a firm order confirmation.	
Exclusions:	
• Rejected LSRs • Partially Mechanized or Non-Mechanized LSRs received and/or FOCd outside of normal business hours.	
Business Rules:	
• **Mechanized** - The elapsed time from receipt of a valid LSR (date and time stamp in LENS, EDI, TAG) until the LSR is processed and appropriate service orders are generated in SOCS.	
Calculation:	
Firm Order Confirmation Timeliness = Σ[(Date and Time of Firm Order Confirmation) – (Date and Time of Service Request Receipt)] / (Number of Service Requests Confirmed in Reporting Period)	
Report Structure:	
• CLEC Specific	
Level of Disaggregation:	
• State	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Interval for FOC • Total number of LSRs • State	
Retail Analog/Benchmark:	
Benchmark; Retail Analog is underdevelopment	

PROVISIONING

Report/Measurement:
Percent Missed Installation Appointments
Definition:
"Percent missed installation appointments" monitors the reliability of BST commitments with respect to committed due dates to assure that CLECs can reliably quote expected due dates to their retail customer as compared to BST.
Exclusions:
• Canceled Service Orders • Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.) • Disconnect (D) & From (F) orders
Business Rules:
Percent Missed Installation Appointments (MA) is the percentage of total orders processed for which BST is unable to complete the service orders on the committed due dates. Missed Appointments caused by end-user reasons will be included and reported separately. A business day is any time period within the same date frame, which means there cannot be a cutoff time for commitments as certain types of orders are, requested to be worked after standard business hours. Also, during Daylight Savings Time, field technicians are scheduled until 9PM in some areas and the customer is offered a greater range of intervals from which to select.
Calculation:
Percent Missed Installation Appointments = (Number of Orders Not Complete by Committed Due Date in Reporting Period) / (Number of Orders Completed in Reporting Period) X 100
Report Structure:
• CLEC Specific • CLEC Aggregate • BST Aggregate **Report explanation:** The difference between End User MA and Total MA is the result of BST caused misses. Here, Total MA is the total % of orders missed either by BST or CLEC end user and End User MA represents the percentage of orders missed by the end user
Level of Disaggregation:
• Product Reporting Levels ➢ Resale POTS ➢ Resale Design ➢ UNE Loop & Port Combination ➢ UNE Loops • Geographic Scope ➢ State

PROVISIONING (Percent Missed Installation Appointments – Continued)

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Order Number and PON • Committed Due Date • Completion Date • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope	• Report Month • BST Order Number • Committed Due Date • Completion Date • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope
Retail Analog/Benchmark:	
Retail Analog	

PROVISIONING

Report/Measurement :
Order Completion Interval (OCI)
Definition:
The "order completion interval" measure monitors the average time it takes BST to provide service for the CLEC or its' own customers.
Exclusions:
• Canceled Service Orders • Order Activities of BST or the CLEC associated with internal or administrative use of local services • (Record Orders, Test Orders, etc.) • D (Disconnect) and F (From) orders. (From is the disconnect side of a move order when the customer moves to a new address). • "L" Appointment coded orders (where the customer has requested a later than offered interval)
Business Rules:
The actual completion interval is determined for each order processed during the reporting period. The completion interval is the elapsed time from when the order is electronically entered into SOCS after the FOC on a CLEC order, or the date time stamp receipt into SOCS by BST on retail orders to the order completion date. The clock starts when a valid order number is assigned by SOCS and stops when the technician or system completes the order in SOCS. Elapsed time for each order is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the associated total number of orders completed
Calculation:
Average Completion Interval: Σ [(Completion Date & Time) - (Order Issue Date & Time)] / (Count of Orders Completed in Reporting Period)
Report Structure:
• CLEC Specific • CLEC Aggregate • BST Aggregate

PROVISIONING –
(Average Completion Interval (OCI) – Continued)

<table>
<tr><td colspan="2">Level of Disaggregation:</td></tr>
<tr><td colspan="2">• Product Reporting Levels
➢ Resale POTS (Dispatch)
➢ Resale Design (Dispatch)
➢ UNE Loop & Port Combination (No Dispatch)
➢ UNE Loops (Dispatch – W Coded Orders Only)
➢ IC Trunks (Dispatch)
• Geographic Scope
➢ State
A W-code indicates orders where the CLEC accepts the offered interval</td></tr>
<tr><td>Data Retained Relating to CLEC Experience</td><td>Data Retained Relating to BST Experience</td></tr>
<tr><td>• Report Month
• CLEC Company Name
• Order Number
• Submission Date & Time
• Completion Date
• Service Type
• Geographic Scope</td><td>• Report Month
• BST Order Number
• Order Submission Date & Time
• Order Completion Date & Time
• Service Type
• Geographic Scope</td></tr>
<tr><td colspan="2">Retail Analog/Benchmark</td></tr>
<tr><td colspan="2">Retail Analog</td></tr>
</table>

PROVISIONING

Report/Measurement:
Coordinated Customer Conversions
Definition:
This category measures the average time it takes BST to disconnect an unbundled loop from the BST switch and cross connect it to a CLEC's equipment. This measurement applies to service orders with and without INP, and where the CLEC has requested BST to provide a coordinated cutover.
Exclusions:
• Any order canceled by the CLEC will be excluded from this measurement. • Delays due to CLEC following disconnection of the unbundled loop • Unbundled Loops where there is no existing subscriber loop
Business Rules:
Where the service order includes INP, the interval includes the total time for the cutover including the translation time to place the line back in service on the ported line. The interval is calculated for the entire cutover time for the service order and then divided by items worked in that time to give the average per item interval for each service order.
Calculation:
[(Completion Date and Time for Cross Connection of an Unbundled Loop)- (Disconnection Date and Time of an Unbundled Loop)] / Total Number of Unbundled Loop Items for the reporting period.
Report Structure:
• CLEC Specific • CLEC Aggregate
Level of Disaggregation:
• Product Reporting Levels ➢ UNE Loops without INP • Geographic Scope ➢ State

Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report Month • CLEC Order Number • Committed Due Date • Service Type • Cutover Start Time • Cutover Completion time • Portability start and completion times (INP Orders) • Total Items	

Retail Analog/Benchmark:
Benchmark

PROVISIONING

Report/Measurement:

% Provisioning Troubles within 4 days of Service Order Activity

Definition:

Percent Provisioning Troubles within 4 days of Installation measures the quality and accuracy of installation activities.

Exclusions:

- Canceled Service Orders
- Order Activities of BST or the CLEC associated with internal or administrative use of local services (R Orders, Test Orders, etc.)
- Disconnect & From orders

Business Rules:

Measures the quality and accuracy of completed orders. The first trouble report from a service order after completion is counted in this measure. Subsequent trouble reports are measured in Repeat Report Rate. Reports are calculated by searching in the prior report period for completed service orders and following 4 days after completion for a trouble report.
Disconnect & From orders are excluded as there is no subsequent activity following a disconnect.

Calculation:

% Provisioning Troubles within 4 days of Service Order Activity = □ (Trouble reports on all completed orders □ 4 days following service order(s) completion) / (All Service Orders completed in the report calendar month) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Level of Disaggregation:

- Product Reporting Levels
  - ➢ Resale POTS
  - ➢ Resale Design
  - ➢ UNE Loop & Port Combination
  - ➢ UNE Loops
- Geographic Scope
  - ➢ State

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Order Number and PON • Order Submission Date • Order Submission Time • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope	• Report Month • BST Order Number • Order Submission Date • Order Submission Time • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope

Retail Analog/Benchmark:

Retail Analog

MAINTENANCE & REPAIR

Report/Measurement:

Missed Repair Appointments

Definition:

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

Exclusions:

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

Business Rules:

The negotiated commitment date and time is established when the repair report is received. The cleared time is the date and time that BST personnel clear the trouble and closes the trouble report in his/her Computer Access Terminal (CAT) or workstation. If this is after the Commitment time, the report is flagged as a "Missed Commitment" or a missed repair appointment. When the data for this measure is collected for BST and a CLEC, it can be used to compare the percentage of the time repair appointments are missed due to BST reasons. Note: Appointment intervals vary with force availability in the POTS environment. Specials and Trunk intervals are standard interval appointments of no greater than 24 hours.

Calculation:

Percentage of Missed Repair Appointments =Σ (Count of Customer Troubles Not Cleared by the Quoted Commitment Date and Time) / Σ (Total Trouble reports closed in Reporting Period) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Level of Disaggregation:

- Product Reporting Levels
  - Resale POTS
  - Resale DESIGN
  - UNE Loop & Port Combination
  - UNE Loops
- Geographic Scope
  - State

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Company Name • Submission Date & Time • Completion Date • Service Type • Disposition and Cause • Geographic Scope	• Report Month • BST Company Code • Submission Date & Time • Completion Date • Service Type • Disposition and Cause (Non-Design / Non-Special Only) • Trouble Code (Design and Trunking Services) • Geographic Scope

Retail Analog/Benchmark

Retail Analog

MAINTENANCE & REPAIR

Report/Measurement:

Customer Trouble Report Rate

Definition:

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

Exclusions:

- Trouble tickets canceled at the CLEC request.
- BST trouble reports associated with administrative service.
- Customer provided Equipment (CPE) troubles or CLEC equipment troubles.

Business Rules:

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

Calculation:

Customer Trouble Report Rate = (Total Count of Initial and Repeated Trouble Reports in the Current Period) / (Total Number of Service Access Lines in service at End of the Report Period) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate.

Level of Disaggregation:

- Product Reporting Levels
  - Resale POTS
  - Resale DESIGN
  - UNE Loop & Port Combination
  - UNE Loops
- Geographic Scope
  - State

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Company Name • Ticket Submission Date & Time • Ticket Completion Date • Service Type • Disposition and Cause • # Service Access Lines in Service at the end of period • Geographic Scope	• Report Month • BST Company Code • Ticket Submission Date & Time • Ticket Completion Date • Service Type • Disposition and Cause (Non-Design / Non-Special Only) • Trouble Code (Design and Trunking Services) • # Service Access Lines in Service at the end of period • Geographic Scope

Retail Analog/Benchmark:

Retail Analog

MAINTENANCE & REPAIR

Report/Measurement:

Maintenance Average Duration

Definition:

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

Exclusions:

- Trouble reports canceled at the CLEC request
- BST trouble reports associated with administrative service
- Customer Provided Equipment (CPE) troubles or CLEC Equipment Troubles.
- Trouble reports greater than 10 days

Business Rules:

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

Calculation:

Maintenance Average Duration = Σ[(Date and Time of Service Restoration) – (Date and Time Trouble Ticket was Opened)] / (Total Closed Troubles in the reporting period)

Report Structure:

- CLEC Specific
- BST Aggregate
- CLEC Aggregate

Level of Disaggregation:

- Product Reporting Levels
  - Resale POTS
  - Resale DESIGN
  - UNE Loop & Port Combination
  - UNE Loops
  - IC Trunks
- Geographic Scope
  - State

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • Total Tickets • CLEC Company Name • Ticket Submission Date & Time • Ticket Completion Date • Service Type • Disposition and Cause • Geographic Scope	• Report Month • Total Tickets • BST Company Code • Ticket Submission Date • Ticket submission Time • Ticket completion Date • Ticket Completion Time • Total Duration Time • Service Type • Disposition and Cause (Non – Design / Non-Special Only) • Trouble Code (Design and Trunking Services) • Geographic Scope

Retail Analog/Benchmark:

Retail Analog

MAINTENANCE & REPAIR

Report/Measurement:

Percent Repeat Troubles within 30 Days

Definition:

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

Exclusions:

- Trouble Reports canceled at the CLEC request
- BST Trouble Reports associated with administrative service
- Customer Provided Equipment (CPE) Troubles or CLEC Equipment Troubles.

Business Rules:

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

Calculation:

Percentage of Missed Repair Appointments = (Count of Customer Troubles where more than one trouble report was logged for the same service line within a continuous 30 days) / (Total Trouble Reports Closed in Reporting Period) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Level of Disaggregation:

- Product Reporting Levels
  - Resale POTS
  - Resale DESIGN
  - UNE Loop & Port Combination
  - UNE Loops
- Geographic Scope
  - State

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • Total Tickets • CLEC Company Name • Ticket Submission Date & Time • Ticket Completion Date • Total and Percent Repeat Trouble Reports within 30 Days • Service Type • Disposition and Cause • Geographic Scope	• Report Month • Total Tickets • BST Company Code • Ticket Submission Date • Ticket Submission Time • Ticket Completion Date • Ticket Completion Time • Total and Percent Repeat Trouble Reports within 30 days • Service Type • Disposition and Cause (Non – Design/ Non-Special only) • Trouble Code (Design and Trunking Services) • Geographic Scope

Retail Analog/Benchmark:

Retail Analog

BILLING

Report/Measurement:	
Invoice Accuracy (Billing Accuracy)	
Definition:	
This measure provides the percentage of accuracy of the billing invoices rendered to CLECs during the current month.	
Exclusions:	
• Adjustments not related to billing errors (e.g., credits for service outage, special promotion credits, adjustments to satisfy the customer)	
Business Rules:	
The accuracy of billing invoices delivered by BST to the CLEC must enable them to provide a degree of billing accuracy comparative to BST bills rendered to retail customers. The BellSouth Billing verification process includes manually analyzing a sample of local bills from each bill period. The bill verification process draws from a mix of different customer billing options and types of service. An end-to-end auditing process is performed for new products and services. Internal measurements and controls are maintained on all billing processes.	
Calculation:	
Invoice Accuracy = (Total Billed Revenues during current month) – (Billing Related Adjustments during current month) / Total Billed Revenues during current month X 100	
Report Structure:	
• CLEC Aggregate • BST Aggregate	
Level of Disaggregation :	
• Geographic Scope ➢ State	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Invoice Type • Total Billed Revenue • Billing Related Adjustments	• Report Month • Retail Type ➢ CRIS ➢ CABS • Total Billed Revenue • Billing Related Adjustments
Retail Analog/Benchmark	
Retail Analog	

BILLING

Report/Measurement:	
Mean Time to Deliver Invoices (Billing Timeliness)	
Definition:	
This measure provides the mean interval for the delivery of billing invoices	
Exclusions:	
Any invoices rejected due to formatting or content errors.	
Business Rules:	
Measures the mean interval for timeliness of billing records delivered to CLECs in an agreed upon format. CRIS-based invoices are measured in business days, and CABS-based invoices in calendar days.	
Calculation:	
Mean Time To Deliver Invoices = Σ [(Invoice Transmission Date)– (Close Date of Scheduled Bill Cycle)] / (Count of Invoices Transmitted in Reporting Period)	
Report Structure:	
• CLEC Aggregate • BST Aggregate	
Level of Disaggregation:	
• Geographic Scope ➢ Region	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Invoice Type • Invoice Transmission Count • Date of Scheduled Bill Close	• Report Month • Retail Type ➢ CRIS ➢ CABS • Invoice Transmission Count • Date of Scheduled Bill Close
Retail Analog/Benchmark:	
Retail Analog	

BILLING

Report/Measurement:	
Usage Data Delivery Accuracy	
Definition:	
This measurement captures the percentage of recorded usage that is delivered error free and in an acceptable format to the appropriate CLEC. These percentages will provide the necessary data for use as a comparative measurement for BellSouth performance. This measurement captures Data Delivery Accuracy rather than the accuracy of the individual usage recording.	
Exclusions:	
None	
Business Rules:	
The accuracy of the data delivery of usage records delivered by BST to the CLEC must enable them to provide a degree of accuracy comparative to BST bills rendered to their retail customers. If errors are detected in the delivery process, they are investigated, evaluated and documented. Errors are corrected and the data retransmitted to the CLEC.	
Calculations:	
Usage Data Delivery Accuracy = Σ [(Total number of usage data packs sent during current month) – (Total number of usage data packs requiring retransmission during current month)] / (Total number of usage data packs sent during current month) X 100	
Report Structure:	
• CLEC Aggregate • BST Aggregate	
Level of Disaggregation:	
• Geographic Scope ➢ Region	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Record Type ➢ BellSouth Recorded ➢ Non BellSouth Recorded	• Report Month • Record Type
Retail Analog/Benchmark:	
Retail Analog	

BILLING

Report/Measurement:	
Usage Data Delivery Timeliness	
Definition:	
This measurement provides a percentage of recorded usage data (usage recorded by BST and usage recorded by other companies and sent to BST for billing) that is delivered to the appropriate CLEC within six (6) calendar days from the receipt of the initial recording. A comparative measure is also provided showing timeliness of BST messages processed and transmitted via CMDS. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.	
Exclusions:	
None	
Business Rules:	
The purpose of this measurement is to demonstrate the level of timeliness for processing and transmission of usage data delivered to the appropriate CLEC. The usage data will be mechanically transmitted or mailed to the CLEC data processing center once daily. The Timeliness interval of usage recorded by other companies is measured from the date BST receives the records to the date BST distributes to the CLEC. Method of delivery is at the option of the CLEC.	
Calculation:	
Usage Data Delivery Timeliness = (Total number of usage records sent within six (6) calendar days from initial recording/receipt) / (Total number of usage records sent) X 100	
Report Structure:	
• CLEC Aggregate • BST Aggregate	
Level of Disaggregation:	
• Geographic Scope ➢ State	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Record Type ➢ BellSouth Recorded ➢ Non-BellSouth Recorded	• Report Monthly • Record Type
Retail Analog/Benchmark:	
Retail Analog	

TRUNK GROUP PERFORMANCE

Report/Measurement:

TGP-1. Trunk Group Performance-Aggregate

Definition:

A report of aggregate blocking information for CLEC trunk groups and BellSouth trunk groups.

Exclusions:

- Trunk Groups for which valid data is not available for an entire study period
- Duplicate trunk group information

Business Rules:

- Aggregate blocking results are created using the statistical analysis package and are output into Excel with separate table for each geographic area.

- For each geographic area, plots are generated for: a) the monthly blocking by hour for each affecting group (BellSouth or CLEC), and b) the difference between BellSouth blocking data and CLEC blocking data is calculated and plotted.

- The TCBH blocking is calculated by determining the monthly averaging blocking for each hour for each trunk. The hour with the highest usage is selected as the TCBH and the blocking for that hour is reported.

- Trunk Categorization: This report displays, over a reporting cycle, aggregate, weighted 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 to 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 Category:

	Point A	Point B
Category 9:	BellSouth End Office	BellSouth End Office

TRUNK GROUP PERFORMANCE - (Trunk Group Performance-Aggregate – Continued)

Calculation:

Monthly Weighted Average Blocking:

(Blocking data for each hour X number of valid measurement days within each week) / Σ (Total number of valid measurement days within each week)

Example: Hour		Week 1	Week 2	Week 3	Week 4	Monthly
1	Blocking	1%	0.5%	2%	1.5%	1.8%
	# Days	7	7	5	6	
2	Blocking	0%	0%	0.2%	0.3%	.1%
	# Days	7	5	5	7	
3	Blocking	1%	1%	0.5%	2%	1.1%
	# Days	7	7	7	7	
24	Blocking	1%	0.5%	2%	1.5%	1.2%
	# Days	7	7	5	6	

The monthly weighted average blocking for hour 1 for a particular trunk group is calculated as follows:

$$\frac{(1x5)+(0.5x5)+(2x4)+(1.5x4)}{(5+5+4+4)} = 1.2\%$$

Aggregate Monthly Blocking:

(Monthly weighted average blocking value for each trunk group) X (number of trunks within each trunk group) / Σ (number of trunks in the aggregate group)

Example: Trunk Group	Trunks in Service	Blocking Hour 1	Blocking Hour 2	Blocking Hour 3	Blocking Hour 4	..... Blocking Hour 24
A	24	3%	0%	1%	0%	0%
B	144	2%	0%	1%	0.5%	0.5%
C	528	0%	0.5%	1%	1%	1%
D	316	1%	0%	1%	0.1%	0%
E	940	1%	1%	4%	0%	0%
Aggregate		0.8%	0.6%	2.4%	0.3%	0.3%

The aggregate weighted monthly blocking for hour 1 is calculated as follows:

$$\frac{(3x24)+(2x144)+(0x528)+(1x316)+(1x940)}{(24+144+528+316+940)} = 0.8\%$$

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

Report Structure:

- CLEC Aggregate
- BST Aggregrate
- State

Level of Disaggregation:

Trunk Group

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • Total Trunk Groups • Number of Trunk Groups by CLEC • Hourly average blocking per trunk group	• Report Month • Total Trunk Groups • Aggregate Hourly average blocking

Retail Analog/Benchmark:

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

TRUNK GROUP PERFORMANCE

Report/Measurement:

TGP-2. Trunk Group Performance-CLEC Specific

Definition:

A report of blocking information for CLEC trunk groups.

Exclusions:

- Trunk Groups for which valid data is not available for an entire study period
- Duplicate trunk group information

Business Rules:

- Aggregate blocking results are created using the statistical analysis package and are output into Excel with separate table for each geographic area.
- For each geographic area, plots are generated for the monthly blocking by hour
- The TCBH blocking is calculated by determining the monthly averaging blocking for each hour for each trunk. The hour with the highest usage is selected as the TCBH and the blocking for that hour is reported.
- Trunk Categorization: This report displays, over a reporting cycle, aggregate, weighted average blocking data for each hour of a day. Therefore, for each reporting cycle, 24 blocking data points are generated for CLEC trunk groups. In order to assign trunk groups to the CLEC 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 to 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

TRUNK GROUP PERFORMANCE - (Trunk Group Performance-CLEC Specific – Continued)

Calculation:

Monthly Weighted Average Blocking:

(Blocking data for each hour X number of valid measurement days within each week) / Σ (Total number of valid measurement days within each week)

Example:		Week 1	Week 2	Week 3	Week 4	Monthly
Hour						
1	Blocking	1%	0.5%	2%	1.5%	1.8%
	# Days	7	7	5	6	
2	Blocking	0%	0%	0.2%	0.3%	.1%
	# Days	7	5	5	7	
3	Blocking	1%	1%	0.5%	2%	1.1%
	# Days	7	7	7	7	5
24	Blocking	1%	0.5%	2%	1.5%	1.2%
	# Days	7	7	5	6	

The monthly weighted average blocking for hour 1 for a particular trunk group is calculated as follows:

$$\frac{(1x5)+(0.5x5)+(2x4)+(1.5x4)}{(5+5+4+4)} = 1.2\%$$

Aggregate Monthly Blocking:

(Monthly weighted average blocking value for each trunk group) X (number of trunks within each trunk group) / Σ (number of trunks in the aggregate group)

Example: Trunk Group	Trunks in Service	Blocking Hour 1	Blocking Hour 2	Blocking Hour 3	Blocking Hour 4	..... Hour 24
A	24	3%	0%	1%	0%	0%
B	144	2%	0%	1%	0.5%	0.5%
C	528	0%	0.5%	1%	1%	1%
D	316	1%	0%	1%	0.1%	0%
E	940	1%	1%	4%	0%	0%
Aggregate		0.8%	0.6%	2.4%	0.3%	0.3%

The aggregate weighted monthly blocking for hour 1 is calculated as follows:

$$\frac{(3x24)+(2x144)+(0x528)+(1x316)+(1x940)}{(24+144+528+316+940)} = 0.8\%$$

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

Report Structure:

- CLEC Specific
- BST Aggregate
- State

Level of Disaggregation:

Trunk Group

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • Total Trunk Groups • Number of Trunk Groups by CLEC • Hourly average blocking per trunk group	• Report Month • Total Trunk Groups • Aggregate Hourly average blocking

Retail Analog/Benchmark:

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

LNP

Report/Measurement :
Average Disconnect Timeliness Interval & Disconnect Timeliness Interval Distribution
Definition:
Disconnect Timeliness is defined as the interval between the time the LNP Gateway receives the 'Number Ported' message from NPAC (signifying the CLEC 'Activate') until the time that the Disconnect service order for an LSR is completed in SOCS. This interval effectively measures BST responsiveness by isolating it from impacts that are caused by CLEC related activities.
Exclusions:
• Canceled Service Orders • Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.) where identifiable. • "L" Appointment code orders (indicating the customer has requested a later than offered interval)
Business Rules:
The Disconnect Timeliness interval is determined for the last Disconnect service order processed on an LSR during the reporting period. The Disconnect Timeliness interval is the elapsed time from when BST receives the last 'Number Ported' message for an LSR from NPAC (signifying the CLEC 'Activate') until the last Disconnect service order is completed in SOCS. Elapsed time for each order is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the total number of selected disconnect orders which have been completed. Mechanized (service orders generated by LSRs submitted via EDI or TAG)
Calculation :
Average Disconnect Timeliness Interval: [(Disconnect Service Order Completion Date & Time) - ('Number Ported' Message Received Date & Time)] / Σ (Total Number of Disconnect Service Orders Completed in Reporting Period) **Disconnect Timeliness Interval Distribution:** [Σ (Disconnect Service Orders Completed in "X" days) / (Total Disonnect Service Orders Completed in Reporting Period)] X 100
Report Structure:
• CLEC Specific • CLEC Aggregate
Level of Disaggregation:
• Product Reporting Levels ➢ LNP • Geographic Scope ➢ State
Retail Analog/Benchmark:
Benchmark

LNP

Report/Measurement:
Percent Missed Installation Appointments
Definition:
Percent Missed Installation Appointments monitors the reliability of BST commitments with respect to committed due dates to assure that CLECs can reliably quote expected due dates to their retail customer as compared to BST.
Exclusions:
• Canceled Service Orders • Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.) where identifiable.
Business Rules:
Percent Missed Installation Appointments (PMI) is the percentage of total orders processed for which BST is unable to complete the service order on the committed due date. Missed Appointments caused by end-user reasons will be included and reported in a separate category. A business day is any time period within the same date frame, which means there cannot be a cutoff time for commitments as certain types of orders are requested to be worked after standard business hours. Also, during Daylight Savings Time, field technicians are scheduled until 9PM in some areas and the customer is offered a greater range of intervals from which to select.
Calculation:
Percent Missed Installation Appointments: [□ (Number of Orders Not Completed by Committed Due Date in Reporting Period) / (Number of Orders Completed in Reporting Period)] X 100
Report Structure:
• Mechanized (service orders generated by LSRs submitted via EDI or TAG) • CLEC Specific • CLEC Aggregate **Report explanation:** Total Missed Appointments is the total % of orders missed either by BST or the CLEC end user. End User MA represents the percentage of orders missed by the CLEC end user. The difference between End User Missed Appointments and Total Missed Appointments is the number of BST caused misses.
Level of Disaggregation:
• Product Reporting Levels ➢ LNP • Geographic Scope ➢ State
Retail Analog/Benchmark:
Retail Analog

COLLOCATION

Report/Measurement:
Collocation/Percent of Due Dates Missed
Definition:
Measures the percent of missed due dates for collocation arrangements.
Exclusions:
• Any Bona Fide firm order cancelled by the CLEC • Bona Fide firm orders to augment previously completed arrangements • Time for BST to obtain permits • Time during which the collocation contract is being negotiated
Business Rules:
The clock starts on the date that BST receives a complete and accurate Bona Fide firm order accompanied by the appropriate fee. The clock stops on the date that BST completes the collocation arrangement.
Calculation:
% of Due Dates Missed = Σ (Number of Orders not completed by the BST Committed Due Date during Reporting Period) / Number of Orders Completed in Reporting Period) X 100
Report Structure:
• CLEC Specific • CLEC Aggregate
Level of Disaggregation:
• State • Physical
Data Retained:
• Report period • Aggregate data
Retail Analog/Benchmark:
Benchmark

VSEEMIII TIER-1 SUBMETRICS

- FOC Timeliness (Mechanized only)
- Reject Interval (Mechanized only)
- Order Completion Interval (Dispatch only) – Resale POTS
- Order Completion Interval (Dispatch only) – Resale Design
- Order Completion Interval (Dispatch only) – UNE Loop and Port Combos
- Order Completion Interval ('w' code orders, Dispatch only) – UNE Loops
- Order Completion Interval (Dispatch only) – IC Trunks
- Percent Missed Installation Appointments – Resale POTS
- Percent Missed Installation Appointments – Resale Design
- Percent Missed Installation Appointments – UNE Loop and Port Combos
- Percent Missed Installation Appointments – UNE Loops
- Percent Provisioning Troubles within 4 Days - Resale POTS
- Percent Provisioning Troubles within 4 Days - Resale Design
- Percent Provisioning Troubles within 4 Days - UNE Loop and Port Combos
- Percent Provisioning Troubles within 4 Days - UNE Loops
- Customer Trouble Report Rate – Resale POTS
- Customer Trouble Report Rate – Resale Design
- Customer Trouble Report Rate – UNE Loop and Port Combos
- Customer Trouble Report Rate - UNE Loops
- Percent Missed Repair Appointments – Resale POTS
- Percent Missed Repair Appointments - Resale Design
- Percent Missed Repair Appointments - UNE Loop and Port Combos
- Percent Missed Repair Appointments - UNE Loops
- Maintenance Average Duration – Resale POTS
- Maintenance Average Duration – Resale Design
- Maintenance Average Duration - UNE Loop and Port Combos
- Maintenance Average Duration - UNE Loops
- Maintenance Average Duration – IC Trunks
- Percent Repeat Troubles within 30 Days – Resale POTS
- Percent Repeat Troubles within 30 Days – Resale Design
- Percent Repeat Troubles within 30 Days - UNE Loop and Port Combos
- Percent Repeat Troubles within 30 Days - UNE Loops
- Percent Trunk Blockage
- LNP Disconnect Timeliness
- LNP Percent Missed Installation Appointment
- Coordinated Customer Conversions for UNE Loops w/o INP
- Percent Missed Collocation Due Dates

VSEEMIII TIER-2 SUBMETRICS

- Percent Response Received within "6.3" seconds – Pre-Order OSS
- OSS Interface Availability
- Order Process Percent Flow-Through (Mechanized only)
- Order Completion Interval (Dispatch only) – Resale POTS
- Order Completion Interval (Dispatch only) – Resale Design
- Order Completion Interval (Dispatch only) – UNE Loop and Port Combos
- Order Completion Interval ('w' code orders, Dispatch only) – UNE Loops
- Order Completion Interval (Dispatch only) – IC Trunks
- Percent Missed Installation Appointments – Resale POTS
- Percent Missed Installation Appointments – Resale Design
- Percent Missed Installation Appointments – UNE Loop and Port Combos
- Percent Missed Installation Appointments – UNE Loops
- Percent Provisioning Troubles within 4 Days - Resale POTS
- Percent Provisioning Troubles within 4 Days - Resale Design
- Percent Provisioning Troubles within 4 Days - UNE Loop and Port Combos
- Percent Provisioning Troubles within 4 Days - UNE Loops
- Customer Trouble Report Rate – Resale POTS
- Customer Trouble Report Rate – Resale Design
- Customer Trouble Report Rate - UNE Loop and Port Combos
- Customer Trouble Report Rate - UNE Loops
- Percent Missed Repair Appointments – Resale POTS
- Percent Missed Repair Appointments - Resale Design
- Percent Missed Repair Appointments - UNE Loop and Port Combos
- Percent Missed Repair Appointments - UNE Loops
- Maintenance Average Duration – Resale POTS
- Maintenance Average Duration – Resale Design
- Maintenance Average Duration - UNE Loop and Port Combos
- Maintenance Average Duration - UNE Loops
- Maintenance Average Duration – IC Trunks
- Percent Repeat Troubles within 30 Days – Resale POTS
- Percent Repeat Troubles within 30 Days – Resale Design
- Percent Repeat Troubles within 30 Days - UNE Loop and Port Combos
- Percent Repeat Troubles within 30 Days - UNE Loops
- Billing Timeliness
- Billing Accuracy
- Usage Data Delivery Timeliness
- Usage Data Delivery Accuracy
- Percent Trunk Blockage
- LNP Disconnect Timeliness
- LNP Percent Missed Installation Appointment
- Coordinated Customer Conversions for UNE Loops without INP
- Percent Missed Collocation Due Dates

VSEEMIII TIER-3 SUBMETRICS

- Percent Missed Installation Appointments – Resale POTS
- Percent Missed Installation Appointments – Resale Design
- Percent Missed Installation Appointments – UNE Loop and Port Combos
- Percent Missed Installation Appointments – UNE Loops
- Percent Missed Repair Appointments – Resale POTS
- Percent Missed Repair Appointments - Resale Design
- Percent Missed Repair Appointments - UNE Loop and Port Combos
- Percent Missed Repair Appointments - UNE Loops
- Billing Timeliness
- Billing Accuracy
- Percent Trunk Blockage
- Percent Missed Collocation Due Dates

VSEEM III	*MEASURES AND SUB-METRICS*	**Retail Analogue** Resale and UNEs	**Benchmark**
Pre-Ordering	Percent Response Received within "6.3" seconds		≥ 95%
	OSS Interface Availability		99.5%
Ordering	Percent Flow-Through Service Request (Fully Mechanized only)		90%
	Firm Order Confirmation Timeliness (Mechanized only)		95% ≤ 4 hrs
	Reject Interval (Mechanized only)		95% ≤ 1 hrs
Provisioning	Order Completion Interval (Dispatch only) – Resale POTS	Parity with Retail POTS	
	Order Completion Interval (Dispatch only) – Resale Design	Parity with Retail Design	
	Order Completion Interval (Dispatch only) – UNE Loop & Port Combos	Retail Residence and Business [1]	
	Order Completion Interval (Dispatch only) – UNE Loops	Design: Retail Design Dispatch 'w' Orders [1] Non-Design: Retail Res, Bus Dispatch 'w' Orders [1]	
	Order Completion Interval (Dispatch only) – IC Trunks	Parity with Retail	
	Percent Missed Installation Appointments – Resale POTS	Parity with Retail POTS	
	Percent Missed Installation Appointments – Resale Design	Parity with Retail Design	
	Percent Missed Installation Appointments – UNE Loop and Port Combos	Retail Residence and Business [1]	
	Percent Missed Installation Appointments – UNE Loops	Design: Retail Design [1] Non-Design: Retail Res, Bus [1]	
	Percent Provisioning Troubles within 4 Days - Resale POTS	Parity with Retail POTS	
	Percent Provisioning Troubles within 4 Days - Resale Design	Parity with Retail Design	
	Percent Provisioning Troubles within 4 Days - UNE Loop and Port Combos	Retail Residence and Business [1]	
	Percent Provisioning Troubles within 4 Days - UNE Loops	Design: Retail Design [1] Non-Design: Retail Res, Bus [1]	
Maintenance	Customer Trouble Report Rate – Resale POTS	Parity with Retail POTS	
	Customer Trouble Report Rate – Resale Design	Parity with Retail Design	
	Customer Trouble Report Rate - UNE Loop and Port Combos	Retail Residence and Business [1]	
	Customer Trouble Report Rate - UNE Loops	Design: Retail Design [1] Non-Design: Retail Res, Bus [1]	
	Percent Missed Repair Appointments – Resale POTS	Parity with Retail POTS	
	Percent Missed Repair Appointments - Resale Design	Parity with Retail Design	
	Percent Missed Repair Appointments - UNE Loop and Port Combos	Retail Residence and Business [1]	
	Percent Missed Repair Appointments - UNE Loops	Design: Retail Design [1] Non-Design: Retail Res, Bus [1]	

NOTES: [1] The retail analog for UNE Non-Design is the average of all dispatch retail residence and dispatch retail business transactions for the particular month. The retail analog for UNE Design is calculated similarly using dispatch retail design results.

Maintenance Continued	Maintenance Average Duration – Resale POTS	Parity with Retail POTS	
	Maintenance Average Duration – Resale Design	Parity with Retail Design	
	Maintenance Average Duration - UNE Loop and Port Combos	Retail Residence and Business [1]	
	Maintenance Average Duration - UNE Loops	Design: Retail Design [1] Non-Design: Retail Res, Bus [1]	
	Maintenance Average Duration – IC Trunks	Parity with Retail	
	Percent Repeat Troubles within 30 Days – Resale POTS	Parity with Retail POTS	
	Percent Repeat Troubles within 30 Days – Resale Design	Parity with Retail Design	
	Percent Repeat Troubles within 30 Days - UNE Loop and Port Combos	Retail Residence and Business [1]	
	Percent Repeat Troubles within 30 Days - UNE Loops	Design: Retail Design [1] Non-Design: Retail Res, Bus [1]	
Billing	Invoice Accuracy	Parity with Retail	
	Mean Time To Deliver Invoices	Parity with Retail	
	Usage Data Delivery Accuracy	Parity with Retail	
	Usage Data Delivery Timeliness	Parity with Retail	
Trunk Blockage	Trunk Group Service Report (Percent Trunk Blockage)	Retail Trunk Group Category #9	
LNP	Average Disconnect Timeliness Interval		95% ≤ 24hrs
	Percent Missed Installation Appointments	Retail Residence and Business [1]	
CC Conversions	Coordinated Customer Conversions for UNE Loop w/o INP		95% ≤ 15min
Collocation	% of Due Dates Missed		≤ 10%

NOTES: [1] The retail analog for UNE Non-Design is the average of all dispatch retail residence and dispatch retail business transactions for the particular month. The retail analog for UNE Design is calculated similarly using dispatch retail design results.

EXHIBIT C

Statistical Methods for BellSouth Performance Measure Analysis

I. Necessary Properties for a Test Methodology

The statistical process for testing if competing local exchange carriers (CLECs) customers are being treat equally with BellSouth (BST) customers involves more than just a mathematical formula. Three key elements need to be considered before an appropriate decision process can be developed. These are

- the type of data,
- the type of comparison, and
- the type of performance measure.

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

- 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.
- Aggregate 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.
- Production Mode Process. The decision system must be developed so that it does not require intermediate manual intervention, i.e. the process must be a "black box."
  - 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.

- 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.

- Trimming. Trimming of extreme observations from BellSouth and CLEC distributions is needed in order to ensure that a fair comparison is made between performance measures. Three conditions are needed to accomplish this goal. These are:
  - Trimming should be based on a general rule that can be used in a production setting.
  - Trimmed observations should not simply be discarded; they need to be examined and possibly used in the final decision making process.
  - Trimming should only be used on performance measures that are sensitive to "outliers."

Measurement Types

The performance measures that will undergo testing are of four types:

1) means
2) proportions,
3) rates, and
4) ratio

While all four have similar characteristics, proportions and rates are derived from count data while means and ratios are derived from interval measurements. Table 2 classifies the performance measures by the type of measurement.

II. Testing Methodology – The Truncated Z

Many covariates are chosen in order to provide deep comparison levels. 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 weight depends on the volume of BST and CLEC orders in the cell. The weighted average is re-centered by the theoretical mean of a truncated distribution, and this is divided by the standard error of the weighted average. The standard error is computed assuming a fixed effects model.

Proportion Measures

For performance measures that are calculated as a proportion, in each adjustment cell, the truncated Z and the moments for the truncated 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, 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.

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 a rate measure, there are a fixed number of circuits or units for the CLEC, n_{2j} and a fixed number of units for BST, n_{1j}. Suppose that the performance measure is a "trouble rate." The modeling assumption is that the occurrence of a trouble is independent between units and the number of troubles in n circuits follows a Poisson distribution with mean λ n where λ is the probability of a trouble in 1 circuit and n is the number of circuits.

In an adjustment cell, if the number of CLEC troubles is greater than 15 and the number of BST troubles is greater than 15, then the Z test is calculated using the normal approximation to the Poisson. 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.

Mean Measures

For mean measures, an adjusted t statistic is calculated for each like-to-like cell which has at least 7 BST and 7 CLEC transactions. A permutation test is used when one or both of the BST and CLEC sample sizes is less than 6. Both the adjusted t statistic and the permutation calculation are described in the technical appendix.

Ratio Measures

Rules will be given for computing a cell test statistic for a ratio measure, however, the current plan for measures in this category, namely billing accuracy, does not call for the use of a Z parity statistic.

APPENDIX
TECHNICAL DESCRIPTION

We start by assuming that any necessary trimming[1] of the data is complete, and that the data are disaggregated so that comparisons are made within appropriate classes or adjustment cells that define "like" observations.

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; $k = 1,\ldots, n_{1j}$

X_{2jk} = individual CLEC transactions in cell j; $k = 1,\ldots, n_{2j}$

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

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

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

For Mean Performance Measures the following additional notation is needed.

$\overline{X}_{1j}$ = the ILEC sample mean of cell j

$\overline{X}_{2j}$ = the CLEC sample mean of cell j

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

---

[1] When it is determined that a measure should be trimmed, a trimming rule that is easy to implement in a production setting is:

> **Trim the ILEC observations to the largest CLEC value from all CLEC observations in the month under consideration.**

That is, no CLEC values are removed; all ILEC observations greater than the largest CLEC observation are trimmed.

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}, K, Y_{jn_j} ; $k = 1,\ldots,n_{2j}$

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 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; $b_{1j} + b_{2j}$

$\bar{p}_{1j}$ = the ILEC sample rate of cell j; n_{1j}/b_{1j}

$\bar{p}_{2j}$ = the CLEC 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

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

For Ratio Performance Measures the following additional notation is needed.

U_{1jk} = additional quantity of interest of an individual ILEC transaction in cell j; k = 1,..., n_{1j}

U_{2jk} = additional quantity of interest of an individual CLEC transaction in cell j; k = 1,..., n_{2j}

$\hat{R}_{ij}$ = the ILEC (i = 1) or CLEC (i = 2) ratio of the total additional quantity of interest to the base transaction total in cell j, i.e., $\sum_k U_{ijk} \Big/ \sum_k X_{ijk}$

Calculating the Truncated Z

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

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 formulae will depend on the type of measure.

Mean or Ratio 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 Measure

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

2. **In each cell, calculate a Z value**, Z_j. 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 determine by the following algorithm.

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

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

with $n_{1j} > n_{3q}$ for all values of j. n_{3q} is the 3 quartile of all values of n_{1j}.

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

a) $M_j \leq 1{,}000$ (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 all the sample sums.

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

b) $M_j > 1{,}000$

- Draw a random sample of 1,000 sample sums from the permutation distribution.
- Add the observed sample sum to the list. There is 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

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

Ratio Measure

$$Z_j = \frac{\hat{R}_{1j} - \hat{R}_{2j}}{\sqrt{V(\hat{R}_{1j})\left(\frac{1}{n_{1j}} + \frac{1}{n_{2j}}\right)}}$$

$$V(\hat{R}_{1j}) = \frac{\sum_k \left(U_{1jk} - \hat{R}_{1j}X_{1jk}\right)^2}{\bar{X}_{1j}^2(n_{1j}-1)} = \frac{\sum_k U_{1jk}^2 - 2\hat{R}_{1j}\sum_k \left(U_{1jk}X_{1jk}\right) + \hat{R}_{1j}^2\sum_k X_{1jk}^2}{\bar{X}_{1j}^2(n_{1j}-1)}$$

3. **Obtain a truncated Z value for each cell,** 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

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

4. **Calculate the theoretical mean and variance of the truncated statistic under the null hypothesis of parity,** $E(Z_j^* | H_0)$ and $Var(Z_j^* | H_0)$. In order to compensate for the truncation in step 3, an aggregated, weighted sum of the Z_j^* will need to be centered and scaled properly so that the final aggregate 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, $\min\left\{a_{1j}\left(1-\frac{a_{1j}}{n_{1j}}\right), a_{2j}\left(1-\frac{a_{2j}}{n_{2j}}\right)\right\} > 9$ for a proportion measure, $\min\left(n_{1j}, n_{2j}\right) > 15$ and $n_j q_j (1-q_j) > 9$ for a rate measure, or n_{1j} and n_{2j} are large for a ratio measure then

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

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

   - 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.

$$E(Z_j^* \mid H_0) = \sum_i \theta_{ji} z_{ji} \text{ ,and}$$

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

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

Mean Measure

$$N_j = \min(M_j, 1{,}000), \quad i = 1, K, N_j$$

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

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

Proportion Measure

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

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

Rate Measure

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

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

Ratio Measure

The performance measure that is in this class is billing accuracy. If a parity test were used, the sample sizes for this measure are quite large, so there is no need for a small sample technique. If one does need a small sample technique, then a resampling method can be used.

1. **Calculate the aggregate test statistic, Z^T.**

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

The Balancing Critical Value

There are four key elements of the statistical testing process:

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

The decision rule[2] is

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

There are two types of error 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.

The probabilities of each type of each 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.

[2] 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.

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

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:

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

$$H_a: \mu_{2j} = \mu_{1j} + \delta_j \cdot \sigma_{1j},\ \sigma_{2j}^2 = \lambda_j \cdot \sigma_{1j}^2 \qquad \delta_j > 0,\ \lambda_j \geq 1 \text{ and } j = 1,\ldots,L.$$

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

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

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

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:

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

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

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[3]

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

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

where

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

$$\pi_j^{(1)} = f_j^{(1)}\left(n_j^2 + f_j^{(2)} + f_j^{(3)} - f_j^{(4)}\right)$$
$$\pi_j^{(2)} = f_j^{(1)}\left(-n_j^2 - f_j^{(2)} + f_j^{(3)} + f_j^{(4)}\right)$$
$$\pi_j^{(3)} = f_j^{(1)}\left(-n_j^2 + f_j^{(2)} - f_j^{(3)} + f_j^{(4)}\right)$$
$$\pi_j^{(4)} = f_j^{(1)}\left(n_j^2\left(\tfrac{2}{\psi_j} - 1\right) - f_j^{(2)} - f_j^{(3)} - f_j^{(4)}\right)$$
$$f_j^{(1)} = \frac{1}{2n_j^2\left(\frac{1}{\psi_j} - 1\right)}$$
$$f_j^{(2)} = n_j n_{1j}\left(\tfrac{1}{\psi_j} - 1\right)$$
$$f_j^{(3)} = n_j a_j\left(\tfrac{1}{\psi_j} - 1\right)$$
$$f_j^{(4)} = \sqrt{n_j^2\left[4n_{1j}\left(n_j - a_j\right)\left(\tfrac{1}{\psi_j} - 1\right) + \left(n_j + \left(a_j - n_{1j}\right)\left(\tfrac{1}{\psi_j} - 1\right)\right)^2\right]}$$

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

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

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

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

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

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

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

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

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

Ratio Measure

As with mean measures, one is concerned with two parameters in each cell, the mean and

variance, when testing for parity of ratio measures. As long as sample sizes are large, as in the case of billing accuracy, the same method for finding m_j and se_j that is used for mean measures can be used for ratio measures.

Determining the Parameters of the Alternative Hypothesis

In this appendix we have indexed the alternative hypothesis of mean measures by two sets of parameters, λ_j and δ_j. Proportion and rate measures have been indexed by one set of parameters each, ψ_j and ε_j respectively. 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 currently in Louisiana 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 or rate 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 three parameters are related however. If a decision is made on the value of δ, it is possible to determine equivalent values of ψ and ε. The following equations, in conjunction with the definitions of ψ and ε, show the relationship with delta.

$$\delta = 2 \cdot \arcsin(\sqrt{\hat{p}_2}) - 2 \cdot \arcsin(\sqrt{\hat{p}_1})$$
$$\delta = 2\sqrt{\hat{r}_2} - 2\sqrt{\hat{r}_1}$$

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.

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.

This critical value changes as the ILEC and CLEC transaction volume change. One way to make this transparent to the decision maker, is to report the difference between the test statistic and the critical value, *diff* = Z^T - c_B. If favoritism is concluded when $Z^T < c_B$, then the *diff* < 0 indicates favoritism.

This make it very easy to determine favoritism: a positive *diff* suggests no favoritism, and a negative *diff* suggests favoritism.

EXHIBIT D

BST VSEEM REMEDY PROCEDURE

TIER-1 CALCULATION FOR RETAIL ANALOGUES:

1. Calculate the overall test statistic for each CLEC; z^{T}_{CLEC1} (See Exhibit C)
1. Calculate the balancing critical value($^{C}B_{CLEC1}$) that is associated with the alternative hypothesis (for fixed parameters δ, ψ or ε). (See Exhibit C)
3. If the overall test statistic is equal to or above the balancing critical value, stop here. Otherwise, go to step 4.
4. Calculate the Parity Gap by subtracting the value of step 2. from that of step 1.; $z^{T}_{CLEC1} - {}^{C}B_{CLEC1}$
5. Calculate the Volume Proportion using a linear distribution with slope of ¼. This can be accomplished by taking the absolute value of the Parity Gap from step 4. divided by 4; $ABS((z^{T}_{CLEC1} - {}^{C}B_{CLEC1}) / 4)$. All parity gaps equal or greater to 4 will result in a volume proportion of 100%.
6. Calculate the Affected Volume by multiplying the Volume Proportion from step 5. by the Total Impacted $CLEC_1$ Volume (I_c) in the negatively affected cell; where the cell value is negative. (See Exhibit C)
7. Calculate the payment to CLEC-1 by multiplying the result of step 6. by the appropriate dollar amount from the fee schedule.

So, CLEC-1 payment = Affected $Volume_{CLEC1}$ * $$ from Fee Schedule

Example: CLEC-1 Missed Installation Appointments (MIA) for Resale POTS

	n_I	n_C	I_c	MIA_I	MIA_C	z^{T}_{CLEC1}	C_B	**Parity Gap**	Volume Proportion	Affected Volume
State	50000	600	96	9%	16%	-1.92	-0.21	**1.71**	0.4275	
Cell						z_{CLEC1}				
1		150	17	0.091	0.113	-1.994				8
2		75	8	0.176	0.107	0.734				
3		10	4	0.128	0.400	-2.619				2
4		50	17	0.158	0.340	-2.878				8
5		15	2	0.245	0.133	1.345				
6		200	26	0.156	0.130	0.021				
7		30	7	0.166	0.233	-0.600				3
8		20	3	0.106	0.150	-0.065				2
9		40	9	0.193	0.225	-0.918				4
10		10	3	0.160	0.300	-0.660				2
										29

where n_I = ILEC observations and n_C = CLEC-1 observations

Payout for CLEC-1 is (29 units) * ($100/unit) = $2,900

Example: CLEC-1 Order Completion Interval (OCI) for Resale POTS

	n_I	n_C	I_c	OCI_I	OCI_C	z^T_{CLEC1}	C_B	**Parity Gap**	Volume Proportion	Affected Volume
State	50000	600	600	5days	7days	-1.92	-0.21	**1.71**	0.4275	
Cell						z_{CLEC1}				
1		150	150	5	7	-1.994				8
2		75	75	5	4	0.734				
3		10	10	2	3.8	-2.619				2
4		50	50	5	7	-2.878				8
5		15	15	4	2.6	1.345				
6		200	200	3.8	2.7	0.021				
7		30	30	6	7.2	-0.600				3
8		20	20	5.5	6	-0.065				2
9		40	40	8	10	-0.918				4
10		10	10	6	7.3	-0.660				2
										29

where n_I = ILEC observations and n_C = CLEC-1 observations

Payout for CLEC-1 is (29 units) * ($100/unit) = $2,900

TIER-2 CALCULATION for RETAIL ANALOGUES:

1. Tier-2 is triggered by three monthly failures of any VSEEM submetric in the same quarter. Therefore, calculate monthly statistical and remedy results as outlined in steps 2. through 8.

2. Calculate the overall test statistic for the CLEC Aggregate using all transactions from the calendar quarter; z^T_{CLECA}

3. Calculate the balancing critical value($^{C}B_{CLEC1}$) that is associated with the alternative hypothesis (for fixed parameters δ, ψ or ε). (See Exhibit C)

4. If the overall test statistic is equal to or above the balancing critical value for the calendar quarter, stop here. Otherwise, go to step 5.

5. Calculate the Parity Gap by subtracting the value of step 3. from that of step 2.; $z^T_{CLECA} - {}^{C}B_{CLECA}$

6. Calculate the Volume Proportion using a linear distribution with slope of ¼. This can be accomplished by dividing the Parity Gap from step 5. by 4; ABS(($z^T_{CLECA} - {}^{C}B_{CLECA}$) / 4). All parity gaps equal or greater to 4 will result in a volume proportion of 100%.

7. Calculate the Affected Volume by multiplying the Volume Proportion from step 6. by the Total Impacted $CLEC_A$ Volume (CLEC Aggregate) in the negatively affected cell; where the cell value is negative (See Exhibit C).

8. Calculate the payment to State Designated Agency by multiplying the result of step 7. by the appropriate dollar amount from the fee schedule.

   So, State Designated Agency payment = Affected Volume$_{CLECA}$ * $$ from Fee Schedule

Example: CLEC-A Missed Installation Appointments (MIA) for Resale POTS

State	n_I	n_C	I_c	MIA_I	MIA_C	Z^T_{CLECA}	C_B	**Parity Gap**	Volume Proportion	Affected Volume
Month1	180000	2100	336	9%	16%	-1.92	-0.21	**1.71**	0.4275	
Cell						Z_{CLECA}				
1.		500	56	0.091	0.112	-1.994				24
2		300	30	0.176	0.100	0.734				
3		80	27	0.128	0.338	-2.619				12
4		205	60	0.158	0.293	-2.878				26
5		45	4	0.245	0.089	1.345				
6		605	79	0.156	0.131	0.021				
7		80	19	0.166	0.238	-0.600				9
8		40	6	0.106	0.150	-0.065				3
9		165	36	0.193	0.218	-0.918				16
10		80	19	0.160	0.238	-0.660				9
										99

where n_I = ILEC observations and n_C = CLEC-A observations

Payout for CLEC-A is (99 units) * ($300/unit) = $29,700

If the above example represented performance for each of months 1 through 3 in a calendar quarter, then

Example: CLEC-A Missed Installation Appointments for 1Q00

State	Miss	Remedy Dollars
Month 1	x	$29,700
Month 2	x	$29,700
Month 3	x	$29,700
1Q00		**$89,100**

Tier-3

Tier-3 uses the monthly CLEC Aggregate results in a given State. Tier-3 is triggered when five of the twelve Tier-3 sub-metrics experience consecutive failures in a given calendar quarter. The table below displays a situation that would trigger a Tier-3 failure, and one that would not.

Tier-3 is effective immediately after quarter results, and can only be lifted when two of the five failed sub-metrics show compliance for two consecutive months in the following quarter.

All tiers standalone, such that triggering Tier-3 will not cease payout of any Tier-1 or Tier-2 failures.

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.

Table I **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%
14	78.57%	85.71%
15	73.33%	86.67%

Sample Size	Equivalent 90% Benchmark	Equivalent 95% Benchmark
16	75.00%	87.50%
17	76.47%	82.35%
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%
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, stop here. 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 Affected Volume by multiplying the Volume Proportion from step 4. by the Total Impacted $CLEC_1$ Volume.

6. Calculate the payment to CLEC-1 by multiplying the result of step 5. by the appropriate dollar amount from the fee schedule.

So, CLEC-1 payment = Affected $Volume_{CLEC1}$ * $$ from Fee Schedule

Example: CLEC-1 Percent Missed Due Dates for Collocations

	n_C	Benchmark	MIA_C	Volume Proportion	Affected Volume
State	600	10%	13%	.03	18

Payout for CLEC-1 is (18 units) * ($5000/unit) = $90,000

TIER-1 CALCULATION FOR BENCHMARKS (in the form of a target):

1. For each, with five or more observations, CLEC calculate monthly performance results for the State.

2. CLECs having observations (sample sizes) between 5 and 30 will use Table I 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, stop here. Otherwise, go to step 5.

5. Determine the Volume Proportion by taking the difference between benchmark and the actual performance result.

6. Calculate the Affected Volume by multiplying the Volume Proportion from step 5. by the Total $CLEC_1$ Volume.

7. Calculate the payment to CLEC-1 by multiplying the result of step 6. by the appropriate dollar amount from the fee schedule.

So, CLEC-1 payment = Affected $Volume_{CLEC1}$ * $$ from Fee Schedule

Example: CLEC-1 Reject Timeliness

	n_C	Benchmark	Reject $Timeliness_C$	Volume Proportion	Affected Volume
State	600	95% within 1 hour	93% within 1 hour	.02	12

Payout for CLEC-1 is (12 units) * ($100/unit) = $1,200

TIER-2 CALCULATIONS for BENCHMARKS:

Tier-2 calculations for benchmark measures are the same as the Tier-1 benchmark calculations except the CLEC Aggregate data having failed for three months in a given calendar quarter is being assessed.

EXHIBIT E

Table-1

LIQUIDATED DAMAGES TABLE FOR TIER-1 MEASURES

PER AFFECTED ITEM						
	Month 1	Month 2	Month3	Month4	Month 5	Month 6
Ordering	$40	$50	$60	$70	$80	$90
Provisioning	$100	$125	$175	$250	$325	$500
Provisioning UNE (Coordinated Customer Conversions)	$400	$450	$500	$550	$650	$800
Maintenance and Repair	$100	$125	$175	$250	$325	$500
Maintenance and Repair UNE	$400	$450	$500	$550	$650	$800
LNP	$150	$250	$500	$600	$700	$800
IC Trunks	$100	$125	$175	$250	$325	$500
Collocation	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000

Table-2

VOLUNTARY PAYMENTS FOR TIER-2 MEASURES

	Per Affected Item
OSS Pre-Ordering	$20
Ordering	$60
Provisioning	$300
UNE Provisioning (Coordinated Customer Conversions)	$875
Maintenance and Repair	$300
UNE Maintenance and Repair	$875
Billing	$1.00
LNP	$500
IC Trunks	$500
Collocation	$15,000