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October 2, 2000

VIA HAND DELIVERY

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

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

Dear Mr. Waddell:

Enclosed are the original and thirteen copies of BellSouth Telecommunications, Inc.'s Revised Final Best Offers. Copies of the enclosed are being provided to counsel of record for all parties.

Very truly yours,

Guy M. Hicks

GMH:ch
Enclosure

230679

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 REVISED FINAL BEST OFFERS

I. INTRODUCTION

Pursuant to the April 4, 2000 ruling and August 31, 2000 Order of the Tennessee Regulatory Authority ("Authority"), acting as Arbitrators, BellSouth Telecommunications, Inc. ("BellSouth") respectfully submits and requests approval of its Revised Final Best Offers to ITC^DeltaCom Communications, Inc. ("DeltaCom") on Issue 1(a). The specific contract language reflecting BellSouth's Revised 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.

BellSouth's Revised Final Best Offers address the concerns expressed by the Authority about BellSouth's initial proposal on this issue. First, BellSouth's Revised Final Best Offer incorporates the September 1999 version of BellSouth's Service Quality Measurements ("SQMs") that BellSouth originally proposed in the arbitration. Second, BellSouth has more clearly delineated the benchmarks and retail analogues to which the September 1999 SQMs will be applied. Finally, BellSouth is providing the timeframes by which BellSouth can reasonably be expected to incorporate the modifications to the SQMs ordered by the Authority (in the event the Authority denies BellSouth's motion for reconsideration on this issue).

One of the most contentious aspects of Issue 1(a) 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

[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.

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.

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. A good example is the Speed of Answer in the Ordering Center and Speed of Answer in the Maintenance Center, which 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]

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[2] While each piece of data could be manually loaded, this would be an incredibly time consuming and expensive process in which BellSouth should not be required to engage. 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.

One of the areas of disagreement with DeltaCom concerns whether DeltaCom should be permitted to obtain the underlying data for BellSouth's performance for its retail units. For the same reason that DeltaCom should not be permitted to review the performance data for another CLEC against whom DeltaCom competes, DeltaCom should not have access to such data for BellSouth, which is also a competitor of DeltaCom's. However, the fact that raw data is not available to DeltaCom (whether electronically or otherwise) 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 that will ensure that BellSouth is reporting its performance accurately – both for its retail operations and the CLEC industry. Coon Affidavit ¶ 70.

Another area of disagreement concerns the extent of BellSouth's obligation to notify DeltaCom of an error in the raw data records or performance reports. Although this was not an issue that the Authority was asked to arbitrate, BellSouth is willing to make any corrections to the raw data to ensure accurate performance reports and to notify affected CLECs that corrections have been made and corrected performance reports are available. DeltaCom's proposal that BellSouth should provide each affected CLEC with a corrected report is unreasonable, given the work involved in distributing such reports and given that relatively few CLECs have demonstrated any real interest to date in BellSouth's performance reporting.

With respect to the modifications to BellSouth's SQMs upon which BellSouth is seeking reconsideration, the Affidavit of David Coon provides estimates of when these modifications can reasonably be implemented (in the event BellSouth's motion for reconsideration is denied). Once implemented, BellSouth can provide an electronic version by e-mail for those

measurements ordered by the Arbitrators that must be produced manually. This would include the measurements relating to BellSouth's performance with respect to Bona Fide Requests. Coon Affidavit ¶ 71.

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 Sections 2 and 4 as well as Exhibits A, C, and D to Attachment 1.

2. BellSouth's rationale

The process to be utilized for determining BellSouth's compliance or noncompliance with applicable standards or benchmarks depends upon the reason such a determination is being made. For reporting purposes, a simple comparison of BellSouth's actual results to the standards or benchmarks will determine whether or not BellSouth is meeting those standards or benchmarks. For enforcement mechanism purposes, however, the process is somewhat more complicated.

As a preliminary matter, the process to be utilized in assessing BellSouth's performance for enforcement mechanism purposes 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 that are used for enforcement mechanism purposes, 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 for enforcement mechanism purposes by comparing BellSouth's performance for DeltaCom against a predefined benchmark.

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 standards and benchmarks are set forth in Exhibit F to Attachment 1. These standards and benchmarks relate to the September 1999 version of the SQMs adopted by the Authority in this arbitration.

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.[3]

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

[3] 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.

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 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.[4]

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

[4] 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.

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 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.[5]

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.

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[5] 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.

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 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 Revised 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 2nd day of October, 2000.

BELLSOUTH TELECOMMUNICATIONS, INC.

By: _____

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230724

CERTIFICATE OF SERVICE

I hereby certify that on October 2, 2000, a copy of the foregoing document was served on the parties of record, via the method indicated:

[ ] Hand
[X] Mail
[ ] Facsimile
[ ] Overnight

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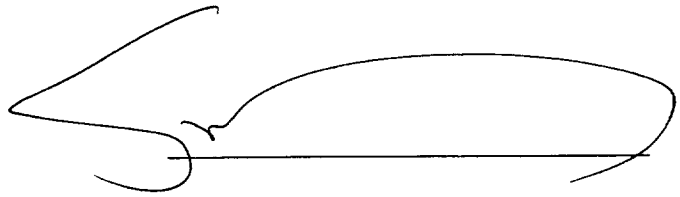

ATTACHMENT 1

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.

213521

EXHIBIT A

Service Quality Measurement Plan (SQM)

Measurement Descriptions

Version

September 15, 1999

I. INTRODUCTION

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

This plan results from the many divergent forces evolving from the 96 Act. The 96 Act, the Georgia Public Service Commission (GPSC) Order (Docket 7892-U 12/30/97), LCUG 1-7.0, the FCC's NPRM (CC Docket 98-56 RM9101 04/17/98), the Louisiana Public Service Commission (LPSC) Order (Docket U-22252 Subdocket C 04/19/98), numerous arbitration cases, LPSC sponsored collaborative workshops (10/98-02/00), and proceedings in Alabama, Mississippi, and North Carolina have and continue to influence the SQM. **The SQM must reflect the Orders by the GPSC, LPSC and other PSCs as the orders are issued.**

However, in addition, the SQM and the reports flowing from it must change to reflect the dynamic requirements of the industry. New measurements are added as new products systems and processes are developed and fielded. New products and services are added as the markets for them develop and the processes stabilize. The measurements are also changed to reflect changes in systems, to correct errors, to respond to 3rd Party audit requirements, and PSC and/or customer requests.

This document is intended for use by someone with a basic knowledge of telecommunications industry, information technologies and a functional knowledge of the subject areas covered by the BellSouth Performance Measurement reports.

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

PRE-ORDERING - OSS

Report/Measurement :	
Average OSS Response Time and Response Interval	
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 day 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 • RSAG – TN (Regional Street Address Guide- Telephone Number) – contains information about facilities available and telephone numbers working at a given address. • 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. • COFFI (Central Office Feature File Interface) – stores information about product and service offerings and availability. • DSAP (DOE Support Application) – provides due date information. • 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. • P/SIMS (Product/Services Inventory Management System) – provides information on capacity, tariffs, inventory and service availability. • OASIS (Obtain Available Services Information Systems) - Information on feature and rate availability.	
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	
CLEC Average Response Interval is comparable to BST Average Response Interval	

Revision date: 09/14/99 (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)

PRE-ORDERING - OSS

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. 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	• Report Month • Legacy contract type (per reporting dimension) • Regional Scope
Retail Analog/Benchmark:	
CLEC OSS Interface Availability is comparable to BST OSS Interface Availability	

Revision date: 09/14/99 (lg)

OSS Interface Availability

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

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 (subsequent versions) which are submitted through one of the three gateway interfaces (TAG, EDI, and LENS), and flow through to SOCS without manual intervention. These LSRs can be divided into two classes of service; Business and Residence, and three types of service; Resale, 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 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 Service Requests = Σ[(Total number of valid service requests that flow-through to SOCS)] / (Total number of valid service requests delivered to SOCS) X 100

Description:

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
  - Region

Level of Disaggregation:

- Geography
  - Region
- Product (Under Development)
  - Residence
  - Business
  - UNE
  - Special

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 ➢ Total fallout for manual processing ➢ Auto clarification ➢ CLEC caused system fallout • Total number of errors by error code	• Report month • Total number of errors by type: ➢ BST system error

Retail Analog/Benchmark:

CLEC Flow Through/benchmark comparison (Under Development)

Revision Date: 09/03/99 (tm)

ORDERING

Report/Measurement:

Percent Flow Through Service Requests (Detail)

Definition:

A detailed list by CLEC of the percentage of Local Service Requests (LSR) submitted electronically via the CLEC mechanized ordering process that flow through to SOCS without manual or human 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 (subsequent versions) which are submitted through one of the three gateway interfaces (TAG, EDI, and LENS), and flow through to SOCS without manual intervention. These LSRs can be divided into two classes of service; Business and Residence, and three types of service; Resale, 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 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 (Detail) – Continued)

Calculation:

Percent Flow Through Service Requests = (Total number of valid service requests that flow-through to SOCS) / (Total number of valid service requests delivered to SOCS) X 100

Description:

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:

- 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 (Under development)
  - Residence
  - Business
  - UNE
  - Special

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 ➢ Total fallout for manual processing ➢ Auto clarification ➢ CLEC errors • Total number of errors by error code	• Report month • Total number of errors by type: ➢ BST system error

Retail Analog/Benchmark:

CLEC Flow Through/benchmark comparison (Under development)

Revision Date: 09/03/99 (tm)

ORDERING

Report/Measurement:	
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 to SOCS.	
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), and flow through to provisioning SOCS 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). This measurement captures the total number of errors by type. 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: 09/03/99 (tm)

Attachment
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	* yes with OSS'99
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	Hunting	No	Yes	no	no	LSR electronically submitted; no flow through
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 & PRI digital loop	No	UNE	Yes	yes	
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	* yes as of OSS'99?
61	HDSL	No	UNE	Yes	yes	
62	2 wire analog DID trunk port	No	UNE	Yes	Yes	
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)	No*	UNE	Yes	no	* yes as of OSS'99

	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	* yes as of OSS'99, captions and indentions
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:

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 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 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. 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 not populated correctly and the request is returned to the CLEC before it is considered an LSR. Fatal Rejects are included in the calculation for regional reports only.
- An Auto Clarification is a valid LSR, which 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 or TAG), but 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.

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

LNP: Under Development

Calculation:

Percent Rejected Service Requests = (Total Number of Rejected Service Requests) / (Total Number of Service Requests Received) X 100 during the month.

Report Structure:

- Fully Mechanized, Partially Mechanized, Total Mechanized, Non-Mechanized
- State and Region
- CLEC Specific
- CLEC Aggregate

Level of Disaggregation:

- Resale Residence
- Resale Business
- Resale Specials
- UNE
- UNE Loop with NP
- Other
- Trunks

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	• Report Month • Total number of LSRs • Total number of Errors • Adjusted Error Volume • State and Region

Retail Analog/Benchmark:

Benchmark is under development. Retail Analog also under development

Revision date: 09/13/99 (lg)

ORDERING

Report/Measurement:

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 LEO edit checks to insure the data received is correctly formatted and complete.

Exclusions:

Service Requests canceled by CLEC prior to being rejected/clarified

Business Rules:

Fully Mechanized: The elapsed time from receipt of a valid LSR (date and time stamp in ED or 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.
Partially Mechanized: The elapsed time from receipt of a valid LSR (date and time stamp in EDI 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.
Non-Mechanized: The elapsed time from receipt of a valid LSR (date and time stamp from FAX stamp) until notice of the reject is returned to the CLEC via LON.
LNP: Under development.

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
  - Interconnection Trunks
  - Resale – Residence
  - Resale – Business
  - Resale – Design
  - UNE Design
  - UNE Non- Design
  - UNE Loop with and w/o NP
- 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 in Days.
- Trunks:

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 and Region	• Report Month • Reject Interval • Total number of LSRs • Total number of Errors • State and Region

Retail Analog/Benchmark:

Benchmark is under development. Retail Analog also under development

Revision date: 09/13/99 (lg)

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 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:

- **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 and appropriate service orders are generated in SOCS.
- **Partially Mechanized** – The elapsed time from receipt of a valid 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) to SOCS.
- **Total Mechanized** - Combination of Fully Mechanized and Partially Mechanized LSRs
- **Non-Mechanized** - The elapsed time from receipt of a valid LSR (fax receive date and time stamp) until appropriate service orders are issued by BST service representative via Direct Order Entry (DOE) or Service Order Negotiation Generation System (SONGS) to SOCS.
- **LNP**: Under development.

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
  - Interconnection Trunks
  - Resale – Residence
  - Resale – Business
  - Resale – Design
  - UNE Design
  - UNE Non- Design
  - UNE Loop with and w/o NP
  - 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	• Report Month • Interval for FOC • Total Number of LSRs • State and Region
Retail Analog/Benchmark:	
Benchmark is under development. Retail Analog also under development	

Revision date: 09/13/99 (lg)

ORDERING

Report/Measurement:	
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.	

Revision date: 09/13/99 (lg)

PROVISIONING

Report/Measurement:

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:

- Any order canceled by the CLEC will be excluded from this measurement.
- 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.

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:

- Product Reporting Levels
  - POTS – Residence
  - POTS – Business
  - DESIGN
  - PBX
  - CENTREX
  - ISDN
  - UNE 2 Wire Loop with NP (Design and Non-Design)
  - UNE 2 Wire Loop without NP (Design and Non-Design)
  - UNE Loop Other with NP (Design and Non-Design)
  - UNE Loop Other without NP (Design and Non-Design)
  - UNE Other (Design and Non-Design)
  - Switching (Under development)
  - Local Transport (Under development)
  - Combos (Under development)
  - NP (Under development as separate category)
  - Local Interconnection Trunks
- Geographic Scope
  - State, Region, and further geographic disaggregation (MSA) as required by State Commission Order

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 (under development) • 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 • Geographic Scope
Retail Analog/Benchmark:	
CLEC Residence Resale / BST Residence Retail CLEC Business Resale / BST Business Retail CLEC Design / BST Design CLEC PBX, CENTREX, ISDN/ BST PBX, CENTREX, ISDN Interconnection Trunks-CLEC / Interconnection Trunks –BST UNEs-Retail Analog (under development at this time)	

Revision date: 06/24/99 (taf)

PROVISIONING

Report/Measurement:
Average Jeopardy Notice Interval & Percentage of Orders Given Jeopardy Notice
Definition:
When BST can determine in advance that a committed due date is in jeopardy, it will provide advance notice to the CLEC.
Exclusions:
• Any order canceled by the CLEC will be excluded from this measurement • 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 and CLEC Aggregate • BST Aggregate (under development with estimated release date of 8/15/99 for June reporting)
Level of Disaggregation:
• Product Reporting Levels ➢ POTS – Residence ➢ POTS – Business ➢ DESIGN ➢ PBX ➢ CENTREX ➢ ISDN ➢ UNE 2 Wire Loop with NP (Design and Non-Design) ➢ UNE 2 Wire Loop without NP (Design and Non-Design) ➢ UNE Loop Other with NP (Design and Non-Design) ➢ UNE Loop Other without NP (Design and Non-Design) ➢ UNE Other (Design and Non-Design) ➢ Switching (Under development) ➢ Local Transport (Under development) ➢ Combos (Under development) ➢ NP (Under development as separate category) ➢ Local Interconnection Trunks ➢ Geographic Scope ➢ State, Region, and further geographic disaggregation (MSA) as required by State Commission Order

PROVISIONING –
(Average Jeopardy Notice Interval & Percentage of Orders Given Jeopardy Notice – Continued)

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 • 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.
Retail Analog/Benchmark:	
CLEC Residence Resale / BST Residence Retail CLEC Business Resale / BST Business Retail CLEC Design / BST Design CLEC PBX, CENTREX, ISDN/ BST PBX, CENTREX, ISDN Interconnection Trunks-CLEC / Interconnection Trunks –BST UNEs-Retail Analog (under development at this time)	

Revision date: 09/15/99 (taf)

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 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 = Σ (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

PROVISIONING – (Percent Missed Installation Appointments – Continued)

Level of Disaggregation:

- Reported in categories of <10 line/circuits; > 10 line/circuits
- Dispatch / No Dispatch
- Product Reporting Levels
  - POTS – Residence
  - POTS – Business
  - DESIGN
  - PBX
  - CENTREX
  - ISDN
  - UNE 2 Wire Loop with NP (Design and Non-Design)
  - UNE 2 Wire Loop without NP (Design and Non-Design)
  - UNE Loop Other with NP (Design and Non-Design)
  - UNE Loop Other without NP (Design and Non-Design)
  - UNE Other (Design and Non-Design)
  - Switching (Under development)
  - Local Transport (Under development)
  - Combos (Under development)
  - NP (Under development as separate category)
  - Local Interconnection Trunks
  - Geographic Scope
  - State, Region, and further geographic disaggregation (MSA) as required by State Commission Order

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 • Completion Date • 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 Design / BST Design
CLEC PBX, CENTREX, ISDN/ BST PBX, CENTREX, ISDN
Interconnection Trunks-CLEC / Interconnection Trunks –BST
UNEs-Retail Analog (under development at this time)

Revision date: 06/24/99 (taf)

PROVISIONING

Report/Measurement :
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 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)] / 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

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

Level of Disaggregation:

- 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
- Product Reporting Levels
  - POTS – Residence
  - POTS – Business
  - DESIGN
  - PBX
  - CENTREX
  - ISDN
  - UNE 2 Wire Loop with NP (Design and Non-Design)
  - UNE 2 Wire Loop without NP (Design and Non-Design)
  - UNE Loop Other with NP (Design and Non-Design)
  - UNE Loop Other without NP (Design and Non-Design)
  - UNE Other (Design and Non-Design)
  - Switching (Under development)
  - Local Transport (Under development)
  - Combos (Under development)
  - NP (Under development as separate category)
  - Local Interconnection Trunks
  - Geographic Scope
  - State, Region, and further geographic disaggregation (MSA) as required by State Commission Order

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 • CLEC 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
CLEC PBX, CENTREX, ISDN/ BST PBX, CENTREX, ISDN
Interconnection Trunks-CLEC / Interconnection Trunks-BST
UNEs-Retail Analog (under development at this time)

Revision date: 09/08/99 (taf)

PROVISIONING

Report/Measurement:

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 on the due date for non-dispatched orders; to the release of a notice to the CLEC/BST of the completion status. On all orders (mechanized and non-mechanized) the field technician notifies the CLEC by telephone the work was complete and then he enters the work order completion information and completion time 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.

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 (in development-expected release date 08/15/99 reporting)

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
- Product Reporting Levels
  - POTS – Residence
  - POTS – Business
  - DESIGN
  - PBX
  - CENTREX
  - ISDN
  - UNE 2 Wire Loop with NP (Design and Non-Design)
  - UNE 2 Wire Loop without NP (Design and Non-Design)
  - UNE Loop Other with NP (Design and Non-Design)
  - UNE Loop Other without NP (Design and Non-Design)
  - UNE Other (Design and Non-Design)
  - Switching (Under development)
  - Local Transport (Under development)
  - Combos (Under development)
  - NP (Under development as separate category)
  - Local Interconnection Trunks
  - Geographic Scope
  - State, Region, and further geographic disaggregation (MSA) as required by State Commission Order

PROVISIONING – (Average Completion Notice Interval – Continued)

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 • Service 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 CLEC PBX, CENTREX, ISDN/ BST PBX, CENTREX, ISDN Interconnection Trunks-CLEC / Interconnection Trunks-BST UNEs-Retail Analog (under development at this time)	

Revision date: 09/15/99 (taf)

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 NP, 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 NP, 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 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:

- Reported in intervals <=5 minutes; >5,<15 minutes; >15 minutes, plus Overall Average interval
- Product Reporting Levels
  - UNE Loops without NP
  - UNE Loops with NP
  - Geographic Scope
  - State, Region, and further geographic disaggregation as required by State Commission Order

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 (NP orders) • Total 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 under development.

Revision date: 09/09/99 (taf)

PROVISIONING

Report/Measurement:
% 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 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 • Product Reporting Levels ➢ POTS – Residence ➢ POTS – Business ➢ DESIGN ➢ PBX ➢ CENTREX ➢ ISDN ➢ UNE 2 Wire Loop with NP (Design and Non-Design) ➢ UNE 2 Wire Loop without NP (Design and Non-Design) ➢ UNE Loop Other with NP (Design and Non-Design) ➢ UNE Loop Other without NP (Design and Non-Design) ➢ UNE Other (Design and Non-Design) ➢ Switching (Under development) ➢ Local Transport (Under development) ➢ Combos (Under development) ➢ NP (Under development as separate category) ➢ Local Interconnection Trunks ➢ Geographic Scope ➢ State, Region, and further geographic disaggregation (MSA) as required by State Commission Order

PROVISIONING – (% Provisioning Troubles within 30 days of Service Order Activity – Continued)

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 Design / BST Design CLEC PBX, CENTREX, ISDN/ BST PBX, CENTREX, ISDN Interconnection Trunks-CLEC / Interconnection Trunks –BST UNEs-Retail Analog (Under Development at this time)	

Revision date: 09/09/99 (taf)

PROVISIONING

Report/Measurement :

Total Service Order Cycle Time (TSOCT) (under development 3Q99)

Definition:

This is a new measurement under development to measure 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
(under development)

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.
- Intervals under development
- Product Reporting Levels
  - Interconnection Trunks
  - POTS – Residence
  - POTS – Business
  - DESIGN
  - PBX
  - CENTREX
  - ISDN
  - UNE 2 Wire Loop with NP (Design and Non-Design)
  - UNE 2 Wire Loop without NP (Design and Non-Design)
  - UNE Loop Other with NP (Design and Non-Design)
  - UNE Loop Other without NP (Design and Non-Design)
  - UNE Other (Design and Non-Design)
  - Switching (Under development)
  - Local Transport (Under development)
  - Combos (Under development)
  - NP (Under development as separate category)
  - Local Interconnection Trunks
- Geographic Scope
  - State, Region and further geographic disaggregation as required by State Commission Order

PROVISIONING – (Total Service Order Cycle Time (TSOCT) – Continued)

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 • CLEC Order Number • Order Submission Date & Time • Order Completion Date & Time • Service Type • Geographic Scope
Retail Analog/Benchmark	
Under development (BST retail analog available at this time would be Average Completion Interval)	

Revision date: 09/08/99 (taf)

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 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:

ISDN Troubles included in Non-Design – GA ONLY

- Product Reporting Levels
  - POTS – Residence, Business
  - Design
  - PBX, CENTREX and ISDN
  - UNE 2 Wire Loop (Design and Non – Design)
  - UNE Loop Other (Design and Non Design)
  - UNE Other (Design and Non – Design)
  - Switching, Local Transport and Combos (under development)
  - 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)

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

MAINTENANCE & REPAIR – (Missed Repair Appointments – Continued)

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 - Retail Analog (under development at this time.)

Revision date: 06/09/99 (see)

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 or combination of existing 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

Level of Disaggregation:

ISDN Troubles included in Non Design – GA Only

- Product Reporting Levels
  - POTS Residence and Business
  - Design
  - PBX, CENTREX, and ISDN
  - UNE 2 Wire Loop (Design and Non – Design)
  - UNE Loop Other (Design and Non – Design)
  - UNE Other (Design and Non – Design)
  - Switching , Local Transport, and Combos (under development)
  - 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)

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

MAINTENANCE & REPAIR – (Customer Trouble Report Rate – Continued)

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 - Retail Analog (under development at this time)

Revision date: 06/09/99 (see)

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) / Σ(Total Closed Troubles in the reporting period)

Report Structure:

- CLEC Specific
- BST Aggregate
- CLEC Aggregate

Level of Disaggregation:

ISDN Troubles included in Non Design – GA Only

- Product Reporting Levels
  - POTS– Residence and Business
  - Design
  - PBX, CENTREX, and ISDN
  - UNE 2 Wire Loop (Design Non – Design)
  - UNE Loop Other (Design Non – Design)
  - UNE Other (Design Non – Design)
  - Switching, Local Transport and Combos (under development)
  - 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 – (Maintenance Average Duration – Continued)

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 - Retail Analog (under development at this time)	

Revision date: 06/09/99 (see)

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:

ISDN Troubles included in Non Design – GA Only

- Product Reporting Levels
  - POTS Residence and Business
  - Design
  - PBX, CENTREX and ISDN
  - UNE 2 Wire Loop (Design and Non – Design)
  - UNE Loop Other (Design and Non – Design)
  - UNE Other (Design Non – Design)
  - Switching, Local Transport and Combos (under development)
  - 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)

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

MAINTENANCE & REPAIR – (Percent Repeat Troubles within 30 Days - Continued)

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 - Retail Analog (under development at this time)

Revision date: 06/09/99 (see)

MANTENANCE & REPAIR

Report/Measurement:

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

Level of Disaggregation:

ISDN Troubles included in Non Design – GA Only

- Product Reporting Levels
  - POTS Residence and Business
  - Design
  - PBX and CENTREX and ISDN
  - UNE 2 Wire Loop (Design and Non – Design)
  - UNE Loop Other (Design and Non – Design)
  - UNE Other (Design and Non – Design)
  - Switching, Local Transport and Combos (under development)
  - 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)

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

MANTENANCE & REPAIR – (Out of Service (OOS) > 24 Hours – Continued)

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 Retail Analog (under development at this time.)

Revision date: 06/09/99 (see)

MAINTENANCE & REPAIR

Report/Measurement:	
OSS Interface Availability	
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 and SOCS • CRIS, PREDICTOR, LNP, and OSPCM (under development at this time)	• Availability of BST TAFI • Availability of LMOS HOST, MARCH and SOCS
Retail Analog/Benchmark:	
Parity by design; Retail Analog	

Revision date: 06/09/99 (see)

MAINTENANCE & REPAIR

Report/Measurement:	
OSS Response Interval and Percentages	
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:	
Queries received during scheduled system maintenance time.	
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.	
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 (BST Total is under development at this time) by interface for each legacy system and function as appropriate.	
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:	
Retail Analog Audit Verification	

Revision date: 06/09/99 (see)

MAINTENANCE & REPAIR

Report/Measurement:	
Average Answer Time – Repair Centers	
Definition:	
This measure demonstrates an average response time for the CLEC representative to contact a BST representative. The average time a CLEC Rep is in queue waiting for the LCSC or UNE Center Rep to answer.	
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.	
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 • CLEC Aggregate	
Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• CLEC Average Answer Time	• BST Average Answer Time
Retail Analog/Benchmark:	
Retail Analog Audit Verification	

Revision date: 06/09/99 (see)

BILLING

Report/Measurement:	
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	

Revision date: 09/15/99 (lg)

BILLING

Report/Measurement:	
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 time for both systems.	

Revision date: 09/15/99 (lg)

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 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	

Revision date: 09/15/99 (lg)

BILLING

Report/Measurement:	
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	

Revision date: 09/15/99 (lg)

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 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	

Revision date: 09/15/99 (lg)

BILLING

Report/Measurement:	
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	

Revision date: 09/15/99 (lg)

OPERATOR SERVICES AND DIRECTORY ASSISTANCE

Report/Measurement:
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

Revision Date: 06/29/99 (tg)

OPERATOR SERVICES AND DIRECTORY ASSISTANCE

Report/Measurement:
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

Revision Date: 06/29/99 (tg)

OPERATOR SERVICES AND DIRECTORY ASSISTANCE

Report/Measurement:
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

Revision Date: 06/29/99 (tg)

OPERATOR SERVICES AND DIRECTORY ASSISTANCE

Report/Measurement:
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

Revision Date: 06/29/99 (tg)

E911

Report/Measurement:
E911/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

Revision Date: 06/29/99 (tg)

E911

Report/Measurement:
E911/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

Revision Date: 06/29/99 (tg)

E911

Report/Measurement:
E911/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

Revision Date: 06/29/99 (tg)

TRUNK GROUP PERFORMANCE

Report/Measurement:

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

Revision Date: 09/15/99 (tm)

TRUNK GROUP PERFORMANCE

Report/Measurement:

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 Trunk Blockage

Revision Date: 09/15/99 (tm)

COLLOCATION

Report/Measurement:
Collocation/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 • Virtual • Physical
Data Retained:
• Report period • Aggregate data
Retail Analog/Benchmark:
Under development

Revision Date: 06/29/99 (tg)

COLLOCATION

Report/Measurement:
Collocation/Average Arrangement Time
Definition:
Measures the average time (counted in business days) 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 • Virtual • Physical
Data Retained:
• Report period • Aggregate data
Retail Analog/Benchmark:
Under development

Revision Date: 06/29/99 (tg)

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 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 • Virtual • Physical
Data Retained:
• Report period • Aggregate data
Retail Analog/Benchmark:
Under development

Revision Date: 06/29/99 (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 • UNE Loops w/LNP • Local Interconnection Trunks • Resale Residence • Resale Business • Resale Design • BST Trunks • BST Residence Retail • BST Business Retail *Maintenance and Repair* • Local Interconnection Trunks • UNE Non-Design • UNE Design • Resale Residence • Resale Business • BST Interconnection Trunks • BST Residence Retail • BST Business 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 audit rights as a part of their individual interconnection agreements. However, it is not reasonable for BellSouth to undergo an audit for every CLEC with which it has a contract. As of June, 1999, that would equate to over 732 audits per year and that number is continually growing. BellSouth has developed a proposed Audit Plan for use by the parties to an audit. If requested by a Public Service Commission, BellSouth will agree to undergo a comprehensive audit of the aggregate level reports for both BellSouth and the CLECs for each of the next five (5) years (1999 – 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 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 CLECs 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.

EXHIBIT B

VSEEMIII TIER-1 SUBMETRICS

- FOC Timeliness (Fully Mechanized only)
- Reject Interval (Fully 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 (Fully Mechanized only)		95% ≤ 4 hrs
	Reject Interval (Fully 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 + 5%	
	Mean Time To Deliver Invoices	Parity with Retail + 1 day	
	Usage Data Delivery Accuracy	Parity with Retail + 1%	
	Usage Data Delivery Timeliness	Parity with Retail + 5%	
Trunk Blockage	Trunk Group Service Report (Percent Trunk Blockage)	Retail Trunk Group Category #9 + 0.5%	
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.

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 '6.3" seconds	
Definition:	
Proportion of requests responded to within "6.3" 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 "6.3" 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. ("Functional Availability" is the amount of time in hours during the reporting period that the legacy systems are available to users. The planned System Scheduled Availability is the time in hours per day that the legacy system is scheduled to be available.) Scheduled availability is posted on the ICS Operations internet site: (www.interconnection.bellsouth.com/oss/osshour.html)	
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 allows conclusions as to whether an equal opportunity exists for the CLEC to deliver a comparable customer experience. Note: Only full outages are used in the calculation of Application Availability. A full outage is incurred when any of the following circumstances exist: • The application or system is down. • The application or system is inaccessible, for any reason, by the customers who normally access the application or system. • More than one work center cannot access the application or system for any reason. • When only one work center accesses an application or system and 40% or more of the clients in that work center cannot access the application. • When 40% of the functions the clients normally perform or 40% of the functionality that is normally provided by an application or system is unavailable.	
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) 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
- 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 (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. 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 electronically by the CLEC, from being processed further. When an LSR is submitted by a CLEC, LEO/LNP Gateway will perform edit checks to ensure the data received is correctly formatted and complete. For example, if the PON field contains an invalid character, LEO/LNP Gateway will reject the LSR and the CLEC will receive a Fatal Reject.

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

*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 LSCS 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 for 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	
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:	
• **Fully Mechanized**: The elapsed time from receipt of a valid electronically submitted LSR (date and time stamp in EDI, LENS or TAG) until the LSR is processed, appropriate service orders are generated and a Firm Order Confirmation is returned to the CLEC. •	
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. This measure is the percentage of total orders processed for which BST is unable to complete the service orders on the committed due dates and reported for both BST and End User Misses.
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 (PMI) is the percentage of orders with completion dates in the reporting period that are past the original committed due date. Missed Appointments caused by end-user reasons will be included and reported separately. The "due date" is any time on the confirmed due date. Which means there cannot be a cutoff time for commitments, as certain types of orders are requested to be worked after standard business hours. Also, during Daylight Savings Time, field technicians are scheduled until 9PM in some areas and the customer is offered a greater range of intervals from which to select.
Calculation:
Percent Missed Installation Appointments = Σ (Number of Orders with Completion date in Reporting Period past the Original Committed Due Date) / (Number of Orders Confirmed in Reporting) 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 :
Average (Order) Completion Interval (OCI)
Definition:
The "average (order) completion interval" measure monitors the interval of time it takes BST to provide service for the CLEC or its' own customers. This report measures how well BellSouth meets the interval offered to customers on service orders.
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 BST issues a FOC or SOCS date time stamp receipt of an order from the CLEC to BST's actual order completion date. This includes all delays for BST's CLEC/End Users. 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. Orders that are worked on zero due dates are calculated with a .33 day interval (8 hours) in order to report a portion of a day interval. These orders are issued and worked/completed on the same day. They can be either flow through orders (no field work-non-dispatched) or field orders (dispatched).
Calculation:
Average (Order) Completion Interval: Σ[(Completion Date) – (Order Issue Date)]/ Σ (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 (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 Interval	
Definition:	
This report 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 LNP, 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 LNP, 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:	
• 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 Completion

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. (No access reports are part of this measure because they are not a missed appointment.)

Note: Appointment intervals vary with force availability in the POTS environment. Specials and Trunk intervals are standard interval appointments of no greater than 24 hours.

Calculation:

Percentage of Missed Repair Appointments =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 CLECs 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.

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:

Closed 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 of 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) – (Absolute Value of 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	
Where BST Billing Accuracy exceeds CLEC Accuracy by more than 5%	

BILLING

Report/Measurement:	
Mean Time to Deliver Invoices (Billing Timeliness)	
Definition:	
Bill Distribution is calculated as follows: CRIS BILLS-The number of workdays is reported for CRIS bills. This is calculated by counting the Bill Period date as the first work day. Weekends and holidays are excluded when counting workdays. J/N Bills are counted in the CRIS work day category for the purposes of the measurement since their billing account number (Q account) is provided from the CRIS system. CABS BILLS-The number of calendar days is reported for CABS bills. This is calculated by counting the day following the Bill Period date as the first calendar day. Weekends and holidays are included when counting the calendar days.	
Exclusions:	
Any invoices rejected due to formatting or content errors.	
Business Rules:	
This report measures the mean interval for timeliness of billing records delivered to CLECs in an agreed upon format. CRIS-based invoices are measured in business days, and CABS-based invoices in calendar days.	
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:	
Where CLEC Billing Timeliness exceeds BST Billing Timeliness by more than 1 day	

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:	
Where BST Usage Data Delivery Accuracy exceeds CLEC Usage Data Delivery Accuracy by more than 1%	

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:	
Where the percent of BST Usage records exceeds the percent of CLEC Usage records by more than 5%	

TRUNK GROUP PERFORMANCE

Report/Measurement:

TGP-1. Trunk Group Performance

Definition:

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

Exclusions:

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

Business Rules:

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.

Monthly Weighted Average Blocking:

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

Aggregate Monthly Blocking:

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

Trunk Categorization:

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

CLEC Affecting Categories:

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

BellSouth Affecting Category:

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

TRUNK GROUP PERFORMANCE - (Trunk Group Performance – Continued)

Calculation:

Monthly Average Blocking:

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

Aggregate Monthly Blocking:

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

The difference between the CLEC and BellSouth affecting trunk groups are also calculated for each hour.

Report Structure:

- CLEC Aggregate
- 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.

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 Disconnect 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. This measure is the percentage of total orders processed for which BST is unable to complete the service orders on the committed due dates and reported for both BST and End User Misses.
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. The "due date" is any time on the confirmed due date, which means there cannot be a cutoff time for commitments as certain types of orders are requested to be worked after standard business hours. Also, during Daylight Savings Time, field technicians are scheduled until 9PM in some areas and the customer is offered a greater range of intervals from which to select.
Calculation:
Percent Missed Installation Appointments: LNP Percent Missed Installation Appointments = Σ (Number of Orders with Completion date in Reporting Period past the Original Committed Due Date) / (Number of Orders Confirmed in Reporting) 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:
Percent Due Dates Missed is the percent of total collocation arrangements which BST is unable to complete by end of the ILEC committed due date. The clock starts on the date that BST receives a complete and accurate Bona Fide firm order accompanied by the appropriate fee. The arrangement is considered a missed due date if it is not completed on or before the committed due date.
Calculation:
% of Due Dates Missed = Σ (Number of Completed Orders that were not completed w/I ILEC 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

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 = $1,\ldots,L$; 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^2_{1j} = 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,…,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 = $1,\ldots, n_{1j}$

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

$\hat{R}_{ij}$ = 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

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

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

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

Proportion Measure

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

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

Rate Measure

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

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

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.**

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

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

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

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

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

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

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. That is, if $^{C}B_{CLEC1} < z^{T}_{CLEC1}$, 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				64
2		75	75	5	4	0.734				
3		10	10	2	3.8	-2.619				4
4		50	50	5	7	-2.878				21
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				13
8		20	20	5.5	6	-0.065				9
9		40	40	8	10	-0.918				17
10		10	10	6	7.3	-0.660				4
										133

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

Payout for CLEC-1 is (133 units) * ($100/unit) = $13,300

TIER-2 CALCULATION for RETAIL ANALOGUES:

1. Tier-2 is triggered by three consecutive monthly failures of any VSEEM submetric in the same quarter.

2. Therefore, calculate monthly statistical results and affected volumes as outlined in steps 2. through 6. for the CLEC Aggregate performance.

3. Calculate the payment to State Designated Agency by sum totaling each months affected volume and multiplying the result by the appropriate dollar amount from the Tier-2 fee schedule.

   So, State Designated Agency payment
   = Σ (Affected Volume$_{CLECA}$ for each month in quarter) * $$ 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

EXHIBIT F

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Analogs and Benchmarks

BST SQM Category	Measures and Sub-Metrics		Retail Analogue	Benchmark*
Pre-Ordering	Percent Response Received within "X" seconds		Parity + 4 seconds	
	OSS Interface Availability			99.5%
Ordering	**Percent Flow-Through Service Request** • Residence • Business • UNE			 90% 80% 80%
	Percent Rejected Service Request		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 & Partially Mechanized)			95% within 4 hrs. 85% < 48 hrs.
	Speed of Answer in Ordering Center		Retail – Speed of Ans	
Provisioning	**Mean Held Order Interval**			
	• Resale Residence		Retail Residence	
	• Resale Business		Retail Business	
	• Resale Design		Retail Design	
	• Resale PBX		Retail PBX	
	• Resale Centrex		Retail Centrex	
	• Resale ISDN		Retail ISDN	
	• UNE 2w loop with NP (Non – Design)		Retail Res and Bus Dispatch	
	• UNE 2w Loop without NP (Non – Design)		Retail Res and Bus Dispatch	
	• UNE Loop Other with NP (Non-Design)		Retail Res and Bus Dispatch	
	• UNE Loop Other without NP (Non – Design)		Retail Res and Bus Dispatch	
	• UNE Other (Non-Design)		Retail Res and Bus Dispatch	
	• UNE 2w Loop with NP (Design)		Retail Design Dispatch	
	• UNE 2w Loop without NP (Design)		Retail Design Dispatch	
	• UNE Loop Other with NP (Design)		Retail Design Dispatch	
	• UNE Loop Other without NP (Design)		Retail Design Dispatch	

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Analogs and Benchmarks

BST SQM Category	Measures and Sub-Metrics		Retail Analogue	Benchmark*
	• UNE Other (Design)		Retail Design Dispatch	
	• Switching - Dispatch • Switching – Non Dispatch		Retail Res and Bus Dispatch Retail Res and Bus Non Dispatch	
	• Local Transport		Retail DS1 / DS3 – Interoffice	
	• Combos – Dispatch • Combos –Non Dispatch		Retail Res and Bus Dispatch Retail Res and Bus Non Dispatch	
	• Local Interconnection Trunks		Parity with Retail	
Provisioning	**Average Jeopardy Notice Interval**			
	• 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 ISDN			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.
	• Switching			95% > = 24 hrs
	• Local Transport			95% > = 24 hrs
	• Combos – Dispatch • Combos –Non Dispatch			95% > = 24 hrs
	• Local Interconnection Trunks			95% > = 24 hrs
Provisioning	**% of Orders given jeopardy notice**			
	• Resale Residence		Retail Residence	
	• Resale Business		Retail Business	

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Analogs and Benchmarks

BST SQM Category	Measures and Sub-Metrics		Retail Analogue	Benchmark*
	• Resale Design		Retail Design	
	• Resale PBX		Retail PBX	
	• Resale Centrex		Retail Centrex	
	• Resale ISDN		Retail ISDN	
	• UNE 2w Loop with NP (Non- Design)		Retail Res and Bus Dispatch	
	• UNE 2w Loop without NP (Non – Design)		Retail Res and Bus Dispatch	
	• UNE Loop Other with NP (Non – Design)		Retail Res and Bus Dispatch	
	• UNE Loop Other without NP (Non – Design)		Retail Res and Bus Dispatch	
	• UNE Other (Non-Design)		Retail Res and Bus Dispatch	
	• UNE 2w Loop with NP (Design)		Retail Design Dispatch	
	• UNE 2w Loop without NP (Design)		Retail Design Dispatch	
	• UNE Loop Other with NP (Design)		Retail Design Dispatch	
	• UNE Loop Other without NP (Design)		Retail Design Dispatch	
	• UNE Other (Design)		Retail Design Dispatch	
	• Switching - Dispatch • Switching – Non Dispatch		Retail Res and Bus Dispatch Retail Res and Bus Non Dispatch	
	• Local Transport		Retail DS1 / DS3 – Interoffice	
	• Combos - Dispatch • Combos –Non Dispatch		Retail Res and Bus Dispatch Retail Res and Bus Non Dispatch	
	• Interconnection Trunks		Parity with Retail	
Provisioning	**Percent Missed Installation Appointments**			
	• Resale Residence		Retail Residence	
	• Resale Business		Retail Business	
	• Resale Design		Retail Design	
	• Resale PBX		Retail PBX	
	• Resale Centrex		Retail Centrex	
	• Resale ISDN		Retail ISDN	
	• UNE 2w Loop with NP (Non – Design)		Retail Res and Bus Dispatch	
	• UNE 2w Loop without NP (Non – Design)		Retail Res and Bus Dispatch	
	• UNE Loop Other with NP (Non – Design)		Retail Res and Bus Dispatch	
	• UNE Loop Other without NP (Non – Design)		Retail Res and Bus Dispatch	
	• UNE Other (Non-Design)		Retail Res and Bus Dispatch	

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Analogs and Benchmarks

BST SQM Category	Measures and Sub-Metrics		Retail Analogue	Benchmark*
	• UNE 2w Loop with NP (Design)		Retail Design Dispatch	
	• UNE 2w Loop without NP (Design)		Retail Design Dispatch	
	• UNE Loop Other with NP (Design)		Retail Design Dispatch	
	• UNE Loop Other without NP (Design)		Retail Design Dispatch	
	• UNE Other (Design)		Retail Design Dispatch	
	• Switching - Dispatch • Switching – Non Dispatch		Retail Res and Bus Dispatch Retail Res and Bus Non Dispatch	
	• Local Transport		Retail DS1 / DS3 – Interoffice	
	• Combos –Dispatch • Combos –Non Dispatch		Retail Res and Bus Dispatch Retail Res and Bus Non Dispatch	
	• Local Interconnection Trunks		Parity with Retail	
Provisioning	**Order Completion Interval**			
	• Resale Residence		Retail Residence	
	• Resale Business		Retail Business	
	• Resale Design		Retail Design	
	• Resale PBX		Retail PBX	
	• Resale Centrex		Retail Centrex	
	• Resale ISDN		Retail ISDN	
	• UNE 2w Loop with NP (Non – Design)		Retail Res and Bus Dispatch	
	• UNE 2w Loop without NP (Non – Design)		Retail Res and Bus Dispatch	
	• UNE Loop Other with NP (Non – Design)		Retail Res and Bus Dispatch	
	• UNE Loop Other without NP (Non – Design)		Retail Res and Bus Dispatch	
	• UNE Other (Non-Design)		Retail Res and Bus Dispatch	
	• UNE 2w Loop with NP (Design)		Retail Design Dispatch	
	• UNE 2w Loop without NP (Design)		Retail Design Dispatch	
	• UNE Loop Other with NP (Design)		Retail Design Dispatch	
	• UNE Loop Other without NP (Design)		Retail Design Dispatch	
	• UNE Other (Design)		Retail Design Dispatch	
	• Switching - Dispatch • Switching – Non Dispatch		Retail Res and Bus Dispatch Retail Res and Bus Non Dispatch	
	• Local Transport		Retail DS1 / DS3 – Interoffice	
	• Combos –Dispatch		Retail Res and Bus Dispatch	

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Analogs and Benchmarks

BST SQM Category	Measures and Sub-Metrics		Retail Analogue	Benchmark*
	• Combos Non Dispatch		Retail Res and Bus Non Dispatch	
	• Local Interconnection Trunks		Parity with Retail	
Provisioning	**Average Completion Notice Interval – Resale POTS (Mech)**			
	• Resale Residence		Retail Residence	
	• Resale Business		Retail Business	
	• Resale Design		Retail Design	
	• Resale PBX		Retail PBX	
	• Resale Centrex		Retail Centrex	
	• Resale ISDN		Retail ISDN	
	• UNE 2w Loop with NP (Non – Design)		Retail Res and Bus Dispatch	
	• UNE 2w Loop without NP (Non – Design)		Retail Res and Bus Dispatch	
	• UNE Loop Other with NP (Non – Design)		Retail Res and Bus Dispatch	
	• UNE Loop Other without NP (Non – Design)		Retail Res and Bus Dispatch	
	• UNE Other (Non-Design)		Retail Res and Bus Dispatch	
	• UNE 2w Loop with NP (Design)		Retail Design Dispatch	
	• UNE 2w Loop without NP (Design)		Retail Design Dispatch	
	• UNE Loop Other with NP (Design)		Retail Design Dispatch	
	• UNE Loop Other without NP (Design)		Retail Design Dispatch	
	• UNE Other (Design)		Retail Design Dispatch	
	• Switching - Dispatch • Switching – Non Dispatch		Retail Res and Bus Dispatch Retail Res and Bus Non Dispatch	
	• Local Transport		Retail DS1 / DS3 – Interoffice	
	• Combos –Dispatch • Combos –Non Dispatch		Retail Res and Bus Dispatch Retail Res and Bus Non Dispatch	
	• Local Interconnection Trunks		Parity with Retail	
Provisioning	**Percent Provisioning Troubles within 30 Days**			
	• Resale Residence		Retail Residence	
	• Resale Business		Retail Business	
	• Resale Design		Retail Design	
	• Resale PBX		Retail PBX	
	• Resale Centrex		Retail Centrex	
	• Resale ISDN		Retail ISDN	

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Analogs and Benchmarks

BST SQM Category	Measures and Sub-Metrics		Retail Analogue	Benchmark*
	• UNE 2w Loop with NP (Non – Design)		Retail Res and Bus Dispatch	
	• UNE 2w Loop without NP (Non – Design)		Retail Res and Bus Dispatch	
	• UNE Loop Other with NP (Non – Design)		Retail Res and Bus Dispatch	
	• UNE Loop Other without NP (Non – Design)		Retail Res and Bus Dispatch	
	• UNE Other (Non-Design)		Retail Res and Bus Dispatch	
	• UNE 2w Loop with NP (Design)		Retail Design Dispatch	
	• UNE 2w Loop without NP (Design)		Retail Design Dispatch	
	• UNE Loop Other with NP (Design)		Retail Design Dispatch	
	• UNE Loop Other without NP (Design)		Retail Design Dispatch	
	• UNE Other (Design)		Retail Design Dispatch	
	• Switching - Dispatch • Switching – Non Dispatch		Retail Res and Bus Dispatch Retail Res and Bus Non Dispatch	
	• Local Transport		Retail DS1 / DS3 – Interoffice	
	• Combos –Dispatch • Combos –Non Dispatch		Retail Res and Bus Dispatch Retail Res and Bus Non Dispatch	
	• Local Interconnection Trunks		Parity with Retail	
Provisioning	**Total Service Order Cycle Time**			
	• Resale Residence		Diagnostic	
	• Resale Business		Diagnostic	
	• Resale Design		Diagnostic	
	• Resale PBX		Diagnostic	
	• Resale Centrex		Diagnostic	
	• Resale ISDN		Diagnostic	
	• UNE 2w Loop with NP (Non – Design)		Diagnostic	
	• UNE 2w Loop without NP (Non – Design)		Diagnostic	
	• UNE Loop Other with NP (Non – Design)		Diagnostic	
	• UNE Loop Other without NP (Non – Design)		Diagnostic	
	• UNE Other (Non-Design)		Diagnostic	
	• UNE 2w Loop with NP (Design)		Diagnostic	
	• UNE 2w Loop without NP (Design)		Diagnostic	
	• UNE Loop Other with NP (Design)		Diagnostic	
	• UNE Loop Other without NP (Design)		Diagnostic	

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Analogs and Benchmarks

BST SQM Category	Measures and Sub-Metrics		Retail Analogue	Benchmark*
	• UNE Other (Design)		Diagnostic	
	• Switching		Diagnostic	
	• Local Transport		Diagnostic	
	• Combos –Dispatch • Combos –Non Dispatch		Diagnostic	
	• Local Interconnection Trunks		Diagnostic	
Customer Coordinated Conversions	**Coordinated Customer Conversions** Coordinated Customer Conversions – LNP			95% ≤ 15 mins. 95% ≤ 15 mins.
Maintenance	**Customer Trouble Report Rate**			
	• Resale Residence		Retail Residence	
	• Resale Business		Retail Business	
	• Resale Design		Retail Design	
	• Resale PBX		Retail PBX	
	• Resale Centrex		Retail Centrex	
	• Resale ISDN		Retail ISDN	
	• UNE 2w Loop (Non – Design)		Retail Res and Bus Dispatch	
	• UNE Loop Other (Non – Design)		Retail Res and Bus Dispatch	
	• UNE Other (Non – Design)		Retail Res and Bus Dispatch	
	• UNE 2w Loop Design)		Retail Res and Bus Dispatch	
	• UNE Loop Other (Design)		Retail Design Dispatch	
	• UNE Other (Design)		Retail Design Dispatch	
	• Switching - Dispatch • Switching – Non Dispatch		Retail Res and Bus Dispatch Retail Res and Bus Non Dispatch	
	• Local Transport		Retail DS1 / DS3 – Interoffice	
	• Combos –Dispatch • Combos –Non Dispatch		Retail Res and Bus Dispatch Retail Res and Bus Non Dispatch	
	• Local Interconnection Trunks		Parity with Retail	
Maintenance	**Percent Missed Repair Appointments**			
	• Resale Residence		Retail Residence	
	• Resale Business		Retail Business	

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Analogs and Benchmarks

BST SQM Category	Measures and Sub-Metrics		Retail Analogue	Benchmark*
	• Resale Design		Retail Design	
	• Resale PBX		Retail PBX	
	• Resale Centrex		Retail Centrex	
	• Resale ISDN		Retail ISDN	
	• UNE 2w Loop (Non – Design)		Retail Res and Bus Dispatch	
	• UNE Loop Other (Non – Design)		Retail Res and Bus Dispatch	
	• UNE Other (Non – Design)		Retail Res and Bus Dispatch	
	• UNE 2w Loop Design)		Retail Res and Bus Dispatch	
	• UNE Loop Other (Design)		Retail Design Dispatch	
	• UNE Other (Design)		Retail Design Dispatch	
	• Switching - Dispatch • Switching – Non Dispatch		Retail Res and Bus Dispatch Retail Res and Bus Non Dispatch	
	• Local Transport		Retail DS1 / DS3 – Interoffice	
	• Combos – Dispatch • Combos – Non Dispatch		Retail Res and Bus Dispatch Retail Res and Bus Non Dispatch	
	• Local Interconnection Trunks		Parity with Retail	
Maintenance	**Maintenance Average Duration**			
	• Resale Residence		Retail Residence	
	• Resale Business		Retail Business	
	• Resale Design		Retail Design	
	• Resale PBX		Retail PBX	
	• Resale Centrex		Retail Centrex	
	• Resale ISDN		Retail ISDN	
	• UNE 2w Loop (Non – Design)		Retail Res and Bus Dispatch	
	• UNE Loop Other (Non – Design)		Retail Res and Bus Dispatch	
	• UNE Other (Non – Design)		Retail Res and Bus Dispatch	
	• UNE 2w Loop Design)		Retail Res and Bus Dispatch	
	• UNE Loop Other (Design)		Retail Design Dispatch	
	• UNE Other (Design)		Retail Design Dispatch	
	• Switching - Dispatch • Switching – Non Dispatch		Retail Res and Bus Dispatch Retail Res and Bus Non Dispatch	
	• Local Transport		Retail DS1 / DS3 – Interoffice	

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Analogs and Benchmarks

BST SQM Category	Measures and Sub-Metrics		Retail Analogue	Benchmark*
	• Combos Dispatch • Combos Non Dispatch		Retail Res and Bus Dispatch Retail Res and Bus Non Dispatch	
	• Local Interconnection Trunks		Parity with Retail	
Maintenance	**Percent Repeat Troubles within 30 Days**			
	• Resale Residence		Retail Residence	
	• Resale Business		Retail Business	
	• Resale Design		Retail Design	
	• Resale PBX		Retail PBX	
	• Resale Centrex		Retail Centrex	
	• Resale ISDN		Retail ISDN	
	• UNE 2w Loop (Non – Design)		Retail Res and Bus Dispatch	
	• UNE Loop Other (Non – Design)		Retail Res and Bus Dispatch	
	• UNE Other (Non – Design)		Retail Res and Bus Dispatch	
	• UNE 2w Loop Design)		Retail Res and Bus Dispatch	
	• UNE Loop Other (Design)		Retail Design Dispatch	
	• UNE Other (Design)		Retail Design Dispatch	
	• Switching - Dispatch • Switching – Non Dispatch		Retail Res and Bus Dispatch Retail Res and Bus Non Dispatch	
	• Local Transport		Retail DS1 / DS3 – Interoffice	
	• Combos –Dispatch • Combos –Non Dispatch		Retail Res and Bus Dispatch Retail Res and Bus Non Dispatch	
	• Local Interconnection Trunks		Parity with Retail	
Maintenance	**Out of Service > 24 hours**			
	• Resale Residence		Retail Residence	
	• Resale Business		Retail Business	
	• Resale Design		Retail Design	
	• Resale PBX		Retail PBX	
	• Resale Centrex		Retail Centrex	
	• Resale ISDN		Retail ISDN	
	• UNE 2w Loop (Non – Design)		Retail Res and Bus Dispatch	
	• UNE Loop Other (Non – Design)		Retail Res and Bus Dispatch	
	• UNE Other (Non – Design)		Retail Res and Bus Dispatch	

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Analogs and Benchmarks

BST SQM Category	Measures and Sub-Metrics		Retail Analogue	Benchmark*
	• UNE 2w Loop Design)		Retail Res and Bus Dispatch	
	• UNE Loop Other (Design)		Retail Design Dispatch	
	• UNE Other (Design)		Retail Design Dispatch	
	• Switching - Dispatch • Switching – Non Dispatch		Retail Res and Bus Dispatch Retail Res and Bus Non Dispatch	
	• Local Transport		Retail DS1 / DS3 – Interoffice	
	• Combos - Dispatch • Combos –Non Dispatch		Retail Res and Bus Dispatch Retail Res and Bus Non Dispatch	
	• Local Interconnection Trunks		Parity with Retail	
	OSS Interface Availability			
	• All systems except ECTA		Retail Analog	
	• ECTA			99.5%
	OSS Response Interval and %			
	• TAFI (Front End) • CRIS, DLETH, DLR, OSPCM, LMOS, LMOSUP, MARCH, Predictor, SOCS, LNP (Parity by Design)		Retail Analog PBD	
	Average Answer Time – Repair Center		Parity with Retail	
Billing	**Invoice Accuracy**			
	Mean Time To Deliver Invoices		Parity with Retail	
	Usage Data Delivery Accuracy		Parity with Retail	
	Usage Data Delivery Timeliness		Parity with Retail	
	Usage Data Delivery Completeness		Parity with Retail	
	Mean Time to Deliver Usage		Parity with Retail	
Operator Services (Toll)	**Average Speed to Answer**		PBD	
	% Answered in "X" Seconds		PBD	
Directory Assistance	**Average Speed to Answer**		PBD	

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Analogs and Benchmarks

BST SQM Category	Measures and Sub-Metrics		Retail Analogue	Benchmark*
E911	**Timeliness**		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.		Retail Analog	
	Trunk Group Service Report (Percent Trunk Blockage)		Parity with Retail	
Collocation+	% of Due Dates Missed			< 10% Missed Due Dates
	Average Response Time			30 Days
+A contract with each CLEC required	**Average Arrangement Time** Ordinary Extraordinary			120 Days 180 Days

Note 1: PBD = Parity by Design.

Note 2: The retail analog for UNE Non-Design 2w Loops 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.

Note 3: Analogs and Benchmarks will be re-evaluated periodically to validate applicability.