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RECORDS AND
REPORTING

August 25, 2000

Mrs. Blanca S. Bayó
Director, Division of Records and Reporting
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: Docket No. 000121-TP (OSS)

Dear Ms. Bayó:

Enclosed is an original and 15 copies of BellSouth Telecommunications, Inc.'s Comments, which we ask that you file in the captioned matter.

A copy of this letter is enclosed. Please mark it to indicate that the original was filed and return the copy to me. Copies have been served to the parties shown on the attached Certificate of Service.

Sincerely,

J. Phillip Carver
J. Phillip Carver
(cc)

Enclosures

APP	_____	
CAF	_____	cc: All parties of record
CMP	_____	Marshall M. Criser, III
COM	_____	Nancy B. White
CTR	_____	
ECR	_____	R. Douglas Lackey
LEG	_____	
OPC	_____	
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FPSC-RECORDS/REPORTING

**CERTIFICATE OF SERVICE
Docket No. 000121-TP**

I HEREBY CERTIFY that a true and correct copy of the foregoing was served via

U.S. Mail this 25th day of August, 2000 to the following:

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ORIGINAL

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Investigation into the) Docket No. 000121-TP
Establishment of Operations Support)
Systems Permanent Performance)
Measures for Incumbent Local Exchange)
Telecommunications Companies) Filed: August 25, 2000

BELLSOUTH TELECOMMUNICATION, INC.'S COMMENTS

BellSouth Telecommunications, Inc. ("BellSouth") hereby files its Comments, pursuant to the notice given at the workshop held on August 8, 2000, by the Staff of the Florida Public Service Commission ("Commission"), and states the following:

At the time of the above-described workshop, Staff directed all parties having a set of proposed performance measures to submit them on this date. Accordingly, BellSouth is submitting its VSEEM III plan, which is attached hereto as Exhibit A. BellSouth also provides below its Comments on each of the issues discussed at the workshop.

Issue 1: Does the Commission have the authority to establish, in advance, a generic enforcement mechanism provision which would be inserted in interconnection agreements in the event negotiations on this provision fail?

Issue 2: Does the adoption of an enforcement mechanism provision by the Commission constitute the awarding of damages?

The ultimate answers to the above-listed issues are, respectively, that the Commission does not have the authority to establish an enforcement mechanism

of the type contemplated in a generic proceeding, and that this mechanism does constitute an award of damages. BellSouth will address the second of these issues first because it is the simpler of the two.

Issue II

Historically, the Commission has had in place rules that set certain standards for BellSouth's retail service. (See Chapter 25-4, Florida Administrative Code). These rules are, in effect, performance measurements that apply to retail service offerings. If a carrier violates these rules, it is subject to precisely the same type of penalties that would apply to any violation of the Commission rules. Specifically, a proceeding is held to determine whether a violation--as defined in 364.285, Florida Statutes--has occurred, and, if so, a penalty is assessed as provided in this statutory provision. Collected penalties are deposited with the State, in the General Revenue Fund (§ 364.285(1), F.S.)

In contrast, what appears to be contemplated in this docket is a set of "enforcement mechanisms" whereby an ILEC that has failed to meet performance standards that apply to its service to an ALEC (in effect, a wholesale customer) would be made to pay money directly to the ALEC. Further, the financial penalty would be pre-determined and the payment of the penalty automatic. Under this arrangement, it is not possible to view this payment of money as anything other than an award of damages.

If the payment were simply a penalty, then the penalty would be applied (and paid) through the process that the Commission has always used for the

violation of service rules. In contrast, the payment of money directly from the provider to a customer (wholesale or otherwise) is unprecedented. There is no statutory provision, Commission rules, and/or previous Commission Orders that contemplates a penalty of this sort. The only tenable explanation for this entirely new and unprecedented approach to enforcement is that the money paid represents, in effect, an award of damages. Moreover, the controlling authority supports this view.

As BellSouth stated in its Supplementary Comments (filed April 7, 2000), this Commission has already ruled that it lacks the authority under state law to award damages for the breach of an interconnection agreement. These prior Commission decisions would be the end of this inquiry but for the recent entry of an Order by the United States District Court for the Northern District of Florida (MCI Telecommunications Corporation v. BellSouth Telecommunications, Inc., Case No. 4:97 CV 141-RH, entered June 6, 2000). In that case, the Federal Court considered the claim of MCI that this Commission erred by refusing to consider the question of whether a provision for damages should be included in the interconnection agreement between the parties. The Federal Court prefaced its consideration of this issue by categorizing it as follows: “As part of its Petition for Arbitration before the Florida Commission, MCI sought to include in the interconnection agreement specific performance criteria and a compensation mechanism similar to a liquidated damages provision.” (Order, p. 31-32) (emphasis added). Although a variety of euphemisms have been applied to the subject damages (e.g., enforcement mechanisms), the Federal Court was fairly

clear as to what was the subject of this portion of its Order. The Court consistently referred to MCI's request as being for a compensation mechanism. (See, e.g., Id., pp. 32-34, 35 through 37).¹

From a legal standpoint, it is simply not possible to see the payments contemplated in this proceeding as anything other than damages. Clearly, these payments are a form of, as the Federal Court put it, compensation mechanism. Further, as stated above, there are marked differences in this approach to "penalties" and the historical manner in which this Commission has administered penalties. These facts, taken together, make it clear that the subject enforcement mechanisms can only be viewed as a payment of damages.

Issue I

The first issue, whether the Commission has the authority to set in a generic context enforcement mechanism that is tantamount to damages must be answered in the negative; although, this issue presents a somewhat more difficult question. Again, much of the consideration of enforcement mechanisms in this docket would not be taking place if not for the Federal Court's recent decision. There is nothing in the Court's decision, however, that can be read as an endorsement of including an enforcement mechanisms/liquidated damages provision in interconnection agreements, and there is nothing that even contemplates that a provision of this sort would be developed in the context of a generic docket.

¹ It is also noteworthy that in the presentation that MCI made to this Commission on August 8, 2000, its printed materials consistently referred to its proposed enforcement mechanism as a remedy plan.

Although the Federal Court suggested that this Commission might well have the ability to award liquidated damages under state law (contrary to the Commission's finding), the gravamen of the initial stage of the decision was that it simply does not matter. The Court noted in this regard that "if a compensation provision were truly required by the Telecommunications Act and could be adopted in some form without imposing on the Florida Commission an unconstitutional burden . . . [Citation Omitted] . . . , then any contrary Florida law obviously would not preclude adoption of such a provision." (Order, p. 36). Having opined that Federal law, in effect, pre-empts state law, the Court went on to hold that this Commission must consider literally anything that a party raises in an arbitration. The Court's logic was as follows: 1) parties are free to negotiate anything they wish; 2) to the extent negotiations fail to yield an agreement, parties may raise in arbitration issues that were the subject of negotiations; 3) when a Commission undertakes to arbitrate a dispute between the parties, it is required to arbitrate all "open issues", i.e., whatever the parties raise. This constitutes perhaps the broadest interpretation of the Act that has been made by any Federal Court in the Country. Still, the Court was careful to clarify its ruling as follows:

Nothing in this Order should be read as an indication that the Telecommunications Act imposes on state Commissions an obligation to perform any enforcement role requested by the parties, or that Congress lawfully could impose any such obligation on state commissions. The holding here is simply that, having undertaken to arbitration "any open issues" under the Act, the Florida Commission must arbitrate the open issue of whether or not the parties' arbitrated interconnection agreement should or should not include an enforcement or compensation mechanism of the type requested by MCI."

(Id., p. 36, footnote 16).

Thus, the Federal Court's decision really relates to the scope of the duty of the Commission to arbitrate "open issues." The fact that the particular open issue that prompted the Court's decision involved a liquidated damages-type compensation mechanism was almost coincidental. Viewed in proper context, it is obvious that there is nothing in this decision that supports the view that the Commission should undertake in the context of a generic proceeding to set enforcement remedies that would be utilized in all future interconnection agreements. In fact, given the actual logic of the Federal Court's decision, it would tend to support precisely the opposite conclusion.

Again, the Court found that in an arbitration the Commission must resolve all open issues. Logically, the arbitration of all open issues in a proceeding would seem to require a consideration of the position of the parties on the issues. If the Commission were to set in advance of any given arbitration, a generic set of enforcement mechanisms with the intention of simply placing them into each subsequently negotiated or arbitrated contract, then this would effectively preempt the consideration of any differing set of enforcement mechanisms that a party might raise in an arbitration. In other words, if the Commission uses a pre-determined set of enforcement mechanisms in future arbitrations, and declines to consider alternatives, this approach would appear to contradict the ruling of the Federal Court. Thus, paradoxically, the Court's decision, while unquestionably having the effect of broadening the scope of arbitrations, will in all likelihood also

have the effect of narrowing the scope of potentially arbitrable issues that can be dealt with in a generic proceeding.

The only other possibility if the Commission sets generic enforcement mechanisms is that the Commission would, nevertheless, consider alternative enforcement mechanisms when raised in arbitrations in order to resolve the “open issue” of the particular enforcement mechanisms that should be placed in a particular arbitration agreement. If the Commission were to take this approach, however, it would undercut the usefulness of setting generic enforcement mechanisms in advance. Thus, the Federal Court’s decision has placed on shaky ground any attempt to deal with enforcement mechanisms on a generic basis before the fact of any given arbitration.

Beyond the narrow question of whether the Commission can set damage-like enforcement mechanisms is the equally important question of whether it should do so. BellSouth believes that it is inappropriate for this Commission, even if concludes that it can set these mechanisms generically, to proceed directly to a process that is designed to do so. Instead, the question of whether these mechanisms are necessary (and the related question of whether it is preferable to set them on a generic basis) is of extreme importance and deserves careful scrutiny.

Again, the Federal Court made it clear that it was not endorsing enforcement mechanisms. Moreover, the decision of the Federal Court is consistent with the decision of other Federal Courts. In other words, when Commissions have declined to set enforcement mechanisms, this decision has

been upheld. To give one example, in an arbitration in Kentucky between MCI and BellSouth, MCI requested performance standards, reporting requirements and penalty provisions. The Kentucky Commission found that there was no need for the requested mechanisms and rejected MCI's request. (Order entered December 20, 1996, Case No. 96-98). Upon review, the Federal District Court for the Eastern District of Kentucky held that declining to set performance measurements or enforcement mechanisms was within the discretion of the Kentucky Commission under the Act. MCI Telecommunications Corp. v. BellSouth Telecommunications, 40 F Supp 2d 416 (E.D. Ky 1999). Specifically, the Court refused to read the Act to require that a Commission impose these mechanisms (id., p. 428).

Further, the question of whether an enforcement mechanism is necessary should be considered in the context within which this mechanism has been utilized by the FCC. In the Orders approving the only two successful 271 applications to date (Bell Atlantic's New York application and SBC's Texas application), there is nothing to suggest that the FCC considers enforcement mechanisms as necessary to demonstrate checklist compliance under 271. Instead, the FCC stated specifically that it considered enforcement mechanisms only to the extent that these mechanisms serve the public interest by guarding against backsliding after 271 authority is granted. Without holding that enforcement mechanisms were the only way to ensure that there will be no backsliding, the FCC ruled that this is an acceptable means to counter

backsliding, and it considered enforcement mechanisms solely for this purpose.² Given this, BellSouth believes that it would be inappropriate for this Commission to proceed without carefully considering and resolving the issue of whether enforcement mechanisms should be dealt with generically and, if so, when and for what purpose.

Consistent with the FCC's recent Orders, BellSouth has developed a set of performance measurements and enforcement mechanisms, and has included them in negotiated interconnection agreements. In keeping with the prescription of the FCC, these enforcement mechanisms will go into place only after BellSouth has 271 authority. BellSouth believes that its plan will satisfy the FCC's concerns by protecting the public interest post-271. Further, BellSouth will continue to make these available in the context of interconnection agreements whether the Commission goes forward with a generic docket or not.

Given the above, BellSouth believes that this Commission should not consider ordering in a generic context enforcement mechanisms that would go into effect pre-271, even if the Commission finds that it has the legal ability to do so. Of course, other parties argue that BellSouth should be subject to enforcement mechanisms to which it does not agree, and which would be payable immediately. Although the dispute on this point will certainly be resolved in the future in some context, BellSouth believes that the Commission should

² "The Commission has stated that the fact that a BOC will be subject to performance monitoring and enforcement mechanisms would constitute probative evidence that the BOC will continue to meet its Section 271 obligations and that its entry would be consistent with the public interest." (FCC Order No. 00-238, released June 30, 2000 in CC Docket No. 00-65 ("Texas Order"), Par. 420).

consider carefully the question of whether this issue is best-addressed in a generic context, and whether there is any need to do so at this time.

For these reasons, BellSouth submits that this Commission, even if it finds that it can order a generic enforcement mechanism, should not automatically embark upon a path by which it would consider any parties particular proposal at this time. Instead, it is crucial to take the intermediate step of considering whether setting generic enforcement mechanisms at this time (or at all) is an appropriate course of action.

3. What should be the objective of an enforcement mechanism?

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," i.e., discriminatory performance after the RBOC has received § 271 approval. In its order approving Bell Atlantic's entry into long distance in New York, the FCC analyzed Bell Atlantic's performance plan "solely for the purpose of determining whether the risk of post-approval non-compliance is sufficiently great that approval of its section 271 application would not be in the public interest." (FCC Order 99-404, CC Docket No. 99-205, fn. 1326). As stated above, the FCC reaffirmed this in its decision on SWBT's Texas application.

The FCC has also stated that enforcement mechanisms should not be construed as a replacement for enforcement alternatives that already exist, such as dispute resolution, commission complaints, and enforcement of interconnection agreements. (*See, Bell Atlantic Order, par. 435; SWBT Order, par. 421*). In its August 1996 Local Competition Order, the FCC noted that

several carriers advocated performance penalties. (*Local Competition Order*, 11 *FCC Rcd at 15658, par. 305*). The FCC did not adopt such penalties in that Order. Instead, it acknowledged the wide variety of remedies available to an ALEC that believes it has received discriminatory performance in violation of the Act. (*Id.*, par. 129).

Finally, any enforcement mechanism should be structured to achieve its proper objective in a way that is relatively simple to implement and can be administered with only minimal regulatory oversight.

4. For purposes of evaluating ILEC performance in the context of an interconnection agreement, how should any Commission established enforcement mechanism be structured conceptually?

- A. Frequency of monitoring?**
- B. Time frame to be evaluated?**
- C. Level of disaggregation across metrics and offerings?**
- D. How should items A, B, and C above be balanced to provide statistical significance for metrics with a small number of observations per reporting period?**
- E. Automatic penalties for noncompliance?**

Tier 1 of BellSouth's penalty plan is specifically designed to evaluate ILEC performance in the context of individual ALEC interconnection agreements.

- A. Monitoring and reporting is done on a monthly basis.
- B. Evaluations are done on a monthly basis.
- C. Levels of disaggregation should be sufficient to deter disparate performance and to allow meaningful comparison. There are two items to consider when speaking of disaggregation: the reporting level ("A" above) and the testing level ("B" above). The metrics should be balanced so as to encompass the entire range of ILEC to

CLEC performance. However, this does not mean that each and every sub-process need be considered. The primary purpose of disaggregated reporting should be to ensure that service parity is evaluated at a point where 'like-to-like' comparisons can be made, so as not to mask discrimination. Examples of these 'like-to-like' comparisons include such things as geography (e.g. region, state, wire center), product groupings (e.g. resale residence, resale business, UNEs), similar activities (e.g. new connects, change orders, moves) and seasonality (e.g. holiday workload).

Finally, evaluations resulting in penalties should be based only on outcome oriented metrics that impact the customer's experience. For example, an end user would be negatively impacted by a missed installation appointment. The customer does not experience all the subprocesses that may have led to that missed installation appointment, such as jeopardy notices, held order interval and firm order confirmation interval. Again, the customer only experiences the missed installation appointment. To pay penalties on each of these subprocesses would duplicate the penalty associated with the missed due date.

The measurement set included in BellSouth's VSEEM III plan are key, outcome oriented measures. BellSouth developed these measures based upon the collaborative work between ILECs, ALECs and State Commissions in New York and Texas.

Collaborative efforts in both New York and Texas resulted in either a “critical” measurement set, or a prioritized set of measures of “high, medium, and low” significance. These commissions charged the ALECs with identifying the measurement set that is most ‘customer impacting’. BellSouth’s experience in providing access to IXCs, combined with the outcome of prioritized measures from New York and Texas has resulted in BellSouth offering a key set of customer impacting metrics.

- D. BellSouth believes that a suitable statistical methodology will amply address the balancing of frequency, time frames and disaggregation to address small numbers of observations.
- E. Yes. Penalties should be automatic. BellSouth’s proposed penalty plan automatically generates penalty payments for noncompliance based on like-to-like comparisons at the lowest level possible.

5. For purposes of evaluating ILEC (and ALEC) performance in the aggregate, how should any Commission enforcement mechanism be structured conceptually?

- A. Frequency of monitoring?**
- B. Time frame to be evaluated?**
- C. Level of disaggregation across metrics and offerings?**
- D. How should items A, B, and C above be balanced to provide statistical significance for metrics with a small number of observations per reporting period?**
- E. Automatic vs. case-by-case fines for noncompliance?**

BellSouth’s responses to this section are the same as its response to Issue 4 above. Generally speaking, aggregate performance should be integrated with, and an extension of individual ALEC evaluations.

6. How should the dollar value of penalties be determined?

There are several criteria that should be used to develop appropriate penalty levels for determining the dollar value of penalties. First, the dollar amount should be significant enough to incent the ILEC to provide nondiscriminatory performance. Second, the penalty should not be so large that it is economically advantageous to the ALECs to receive penalties in lieu of marketing their own local service. Third, penalties should address all ALEC modes of entry (i.e., resale, facility based and interconnection) as well as electronic and manual processing. The dollar value assigned to each metric should give more weight to critical measurements, key products and processes.

Finally, it is important to acknowledge that non-monetary remedy mechanisms are equally, if not more, important than monetary remedy payment amounts. A prime example is BellSouth's Tier 3 proposal to voluntarily cease to market interLATA long distance services.

7. Should there be a cap on penalty amounts and if so, how should that cap be determined?

Yes, any voluntary, self-executing remedy plan adopted by the Commission should contain an absolute cap. There should be a limit on how much financial risk an ILEC should have to bear in self-executing penalty payments. In BellSouth's VSEEM III, the cap is based upon a percentage of net revenue from local exchange service on a state by state basis. This by no means guarantees an overall cap on BellSouth's ultimate liability. BellSouth's

enforcement plan also contains non-monetary consequences in the form of an extraordinary Tier-3 penalty that, if triggered, would automatically prohibit BellSouth from marketing interLATA long distance service to new customers. This Tier III remedy will be triggered in the event performance deteriorates to the level that Tier I and Tier 2 remedies are exhausted. It is also important to remember that no matter what the cap, CLECs will retain the right to pursue other legal remedies under state and federal law.

8. How and when should consequences be escalated?

Penalties should escalate when it is more likely from a statistical standpoint that disparate performance has taken place. Also, penalties should correspond to the activity level, in other words, be assessed on a per transaction basis. BellSouth's enforcement plan is designed to accomplish this based on 3 tiers of escalation.

Tier 1 of BellSouth's enforcement plan pays liquidated damages directly to an individual ALEC 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 ALEC, who retains all rights to pursue further legal remedies. Tier 2 assessments address patterns of poor performance to the ALEC 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 Commission. Finally, BellSouth's enforcement plan has a Tier III remedy, which is unique to BellSouth, and which provides the ultimate

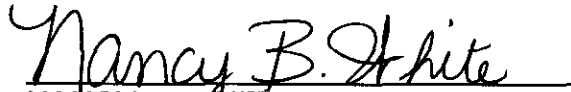
incentive for continued non-discriminatory performance that has escalated over time: the suspension of marketing of interLATA long distance services to new customers.

9. How should extraordinary events be handled?

It is not appropriate to hold any ILEC responsible for situations that arise that are beyond its control. These situations would include such things as natural disasters (e.g. hurricanes, floods, tornadoes, etc.) and situations created by third parties (e.g. major cable cuts by construction companies). As much as possible, these types of situations should be pre-identified and included as allowable exceptions to the ILEC penalty plan under existing Commission rules. In addition, the Commission should allow for a waiver process, whereby an ILEC could petition the Commission to approve additional exceptions under appropriate circumstances.

Respectfully submitted this 25th day of August, 2000.

BELLSOUTH TELECOMMUNICATIONS, INC.



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of the type contemplated in a generic proceeding, and that this mechanism does constitute an award of damages. BellSouth will address the second of these issues first because it is the simpler of the two.

Issue II

Historically, the Commission has had in place rules that set certain standards for BellSouth's retail service. (See Chapter 25-4, Florida Administrative Code). These rules are, in effect, performance measurements that apply to retail service offerings. If a carrier violates these rules, it is subject to precisely the same type of penalties that would apply to any violation of the Commission rules. Specifically, a proceeding is held to determine whether a violation--as defined in 364.285, Florida Statutes--has occurred, and, if so, a penalty is assessed as provided in this statutory provision. Collected penalties are deposited with the State, in the General Revenue Fund (§ 364.285(1), F.S.)

In contrast, what appears to be contemplated in this docket is a set of "enforcement mechanisms" whereby an ILEC that has failed to meet performance standards that apply to its service to an ALEC (in effect, a wholesale customer) would be made to pay money directly to the ALEC. Further, the financial penalty would be pre-determined and the payment of the penalty automatic. Under this arrangement, it is not possible to view this payment of money as anything other than an award of damages.

If the payment were simply a penalty, then the penalty would be applied (and paid) through the process that the Commission has always used for the

violation of service rules. In contrast, the payment of money directly from the provider to a customer (wholesale or otherwise) is unprecedented. There is no statutory provision, Commission rules, and/or previous Commission Orders that contemplates a penalty of this sort. The only tenable explanation for this entirely new and unprecedented approach to enforcement is that the money paid represents, in effect, an award of damages. Moreover, the controlling authority supports this view.

As BellSouth stated in its Supplementary Comments (filed April 7, 2000), this Commission has already ruled that it lacks the authority under state law to award damages for the breach of an interconnection agreement. These prior Commission decisions would be the end of this inquiry but for the recent entry of an Order by the United States District Court for the Northern District of Florida (MCI Telecommunications Corporation v. BellSouth Telecommunications, Inc., Case No. 4:97 CV 141-RH, entered June 6, 2000). In that case, the Federal Court considered the claim of MCI that this Commission erred by refusing to consider the question of whether a provision for damages should be included in the interconnection agreement between the parties. The Federal Court prefaced its consideration of this issue by categorizing it as follows: “As part of its Petition for Arbitration before the Florida Commission, MCI sought to include in the interconnection agreement specific performance criteria and a compensation mechanism similar to a liquidated damages provision.” (Order, p. 31-32) (emphasis added). Although a variety of euphemisms have been applied to the subject damages (e.g., enforcement mechanisms), the Federal Court was fairly

clear as to what was the subject of this portion of its Order. The Court consistently referred to MCI's request as being for a compensation mechanism. (See, e.g., Id., pp. 32-34, 35 through 37).¹

From a legal standpoint, it is simply not possible to see the payments contemplated in this proceeding as anything other than damages. Clearly, these payments are a form of, as the Federal Court put it, compensation mechanism. Further, as stated above, there are marked differences in this approach to "penalties" and the historical manner in which this Commission has administered penalties. These facts, taken together, make it clear that the subject enforcement mechanisms can only be viewed as a payment of damages.

Issue I

The first issue, whether the Commission has the authority to set in a generic context enforcement mechanism that is tantamount to damages must be answered in the negative; although, this issue presents a somewhat more difficult question. Again, much of the consideration of enforcement mechanisms in this docket would not be taking place if not for the Federal Court's recent decision. There is nothing in the Court's decision, however, that can be read as an endorsement of including an enforcement mechanisms/liquidated damages provision in interconnection agreements, and there is nothing that even contemplates that a provision of this sort would be developed in the context of a generic docket.

¹ It is also noteworthy that in the presentation that MCI made to this Commission on August 8, 2000, its printed materials consistently referred to its proposed enforcement mechanism as a remedy plan.

Although the Federal Court suggested that this Commission might well have the ability to award liquidated damages under state law (contrary to the Commission's finding), the gravamen of the initial stage of the decision was that it simply does not matter. The Court noted in this regard that "if a compensation provision were truly required by the Telecommunications Act and could be adopted in some form without imposing on the Florida Commission an unconstitutional burden . . . [Citation Omitted] . . . , then any contrary Florida law obviously would not preclude adoption of such a provision." (Order, p. 36). Having opined that Federal law, in effect, pre-empts state law, the Court went on to hold that this Commission must consider literally anything that a party raises in an arbitration. The Court's logic was as follows: 1) parties are free to negotiate anything they wish; 2) to the extent negotiations fail to yield an agreement, parties may raise in arbitration issues that were the subject of negotiations; 3) when a Commission undertakes to arbitrate a dispute between the parties, it is required to arbitrate all "open issues", i.e., whatever the parties raise. This constitutes perhaps the broadest interpretation of the Act that has been made by any Federal Court in the Country. Still, the Court was careful to clarify its ruling as follows:

Nothing in this Order should be read as an indication that the Telecommunications Act imposes on state Commissions an obligation to perform any enforcement role requested by the parties, or that Congress lawfully could impose any such obligation on state commissions. The holding here is simply that, having undertaken to arbitration "any open issues" under the Act, the Florida Commission must arbitrate the open issue of whether or not the parties' arbitrated interconnection agreement should or should not include an enforcement or compensation mechanism of the type requested by MCI."

(Id., p. 36, footnote 16).

Thus, the Federal Court's decision really relates to the scope of the duty of the Commission to arbitrate "open issues." The fact that the particular open issue that prompted the Court's decision involved a liquidated damages-type compensation mechanism was almost coincidental. Viewed in proper context, it is obvious that there is nothing in this decision that supports the view that the Commission should undertake in the context of a generic proceeding to set enforcement remedies that would be utilized in all future interconnection agreements. In fact, given the actual logic of the Federal Court's decision, it would tend to support precisely the opposite conclusion.

Again, the Court found that in an arbitration the Commission must resolve all open issues. Logically, the arbitration of all open issues in a proceeding would seem to require a consideration of the position of the parties on the issues. If the Commission were to set in advance of any given arbitration, a generic set of enforcement mechanisms with the intention of simply placing them into each subsequently negotiated or arbitrated contract, then this would effectively preempt the consideration of any differing set of enforcement mechanisms that a party might raise in an arbitration. In other words, if the Commission uses a pre-determined set of enforcement mechanisms in future arbitrations, and declines to consider alternatives, this approach would appear to contradict the ruling of the Federal Court. Thus, paradoxically, the Court's decision, while unquestionably having the effect of broadening the scope of arbitrations, will in all likelihood also

have the effect of narrowing the scope of potentially arbitrable issues that can be dealt with in a generic proceeding.

The only other possibility if the Commission sets generic enforcement mechanisms is that the Commission would, nevertheless, consider alternative enforcement mechanisms when raised in arbitrations in order to resolve the "open issue" of the particular enforcement mechanisms that should be placed in a particular arbitration agreement. If the Commission were to take this approach, however, it would undercut the usefulness of setting generic enforcement mechanisms in advance. Thus, the Federal Court's decision has placed on shaky ground any attempt to deal with enforcement mechanisms on a generic basis before the fact of any given arbitration.

Beyond the narrow question of whether the Commission can set damage-like enforcement mechanisms is the equally important question of whether it should do so. BellSouth believes that it is inappropriate for this Commission, even if concludes that it can set these mechanisms generically, to proceed directly to a process that is designed to do so. Instead, the question of whether these mechanisms are necessary (and the related question of whether it is preferable to set them on a generic basis) is of extreme importance and deserves careful scrutiny.

Again, the Federal Court made it clear that it was not endorsing enforcement mechanisms. Moreover, the decision of the Federal Court is consistent with the decision of other Federal Courts. In other words, when Commissions have declined to set enforcement mechanisms, this decision has

been upheld. To give one example, in an arbitration in Kentucky between MCI and BellSouth, MCI requested performance standards, reporting requirements and penalty provisions. The Kentucky Commission found that there was no need for the requested mechanisms and rejected MCI's request. (Order entered December 20, 1996, Case No. 96-98). Upon review, the Federal District Court for the Eastern District of Kentucky held that declining to set performance measurements or enforcement mechanisms was within the discretion of the Kentucky Commission under the Act. MCI Telecommunications Corp. v. BellSouth Telecommunications, 40 F Supp 2d 416 (E.D. Ky 1999). Specifically, the Court refused to read the Act to require that a Commission impose these mechanisms (Id., p. 428).

Further, the question of whether an enforcement mechanism is necessary should be considered in the context within which this mechanism has been utilized by the FCC. In the Orders approving the only two successful 271 applications to date (Bell Atlantic's New York application and SBC's Texas application), there is nothing to suggest that the FCC considers enforcement mechanisms as necessary to demonstrate checklist compliance under 271. Instead, the FCC stated specifically that it considered enforcement mechanisms only to the extent that these mechanisms serve the public interest by guarding against backsliding after 271 authority is granted. Without holding that enforcement mechanisms were the only way to ensure that there will be no backsliding, the FCC ruled that this is an acceptable means to counter

backsliding, and it considered enforcement mechanisms solely for this purpose.² Given this, BellSouth believes that it would be inappropriate for this Commission to proceed without carefully considering and resolving the issue of whether enforcement mechanisms should be dealt with generically and, if so, when and for what purpose.

Consistent with the FCC's recent Orders, BellSouth has developed a set of performance measurements and enforcement mechanisms, and has included them in negotiated interconnection agreements. In keeping with the prescription of the FCC, these enforcement mechanisms will go into place only after BellSouth has 271 authority. BellSouth believes that its plan will satisfy the FCC's concerns by protecting the public interest post-271. Further, BellSouth will continue to make these available in the context of interconnection agreements whether the Commission goes forward with a generic docket or not.

Given the above, BellSouth believes that this Commission should not consider ordering in a generic context enforcement mechanisms that would go into effect pre-271, even if the Commission finds that it has the legal ability to do so. Of course, other parties argue that BellSouth should be subject to enforcement mechanisms to which it does not agree, and which would be payable immediately. Although the dispute on this point will certainly be resolved in the future in some context, BellSouth believes that the Commission should

² "The Commission has stated that the fact that a BOC will be subject to performance monitoring and enforcement mechanisms would constitute probative evidence that the BOC will continue to meet its Section 271 obligations and that its entry would be consistent with the public interest." (FCC Order No. 00-238, released June 30, 2000 in CC Docket No. 00-65 ("Texas Order"), Par. 420).

consider carefully the question of whether this issue is best-addressed in a generic context, and whether there is any need to do so at this time.

For these reasons, BellSouth submits that this Commission, even if it finds that it can order a generic enforcement mechanism, should not automatically embark upon a path by which it would consider any parties particular proposal at this time. Instead, it is crucial to take the intermediate step of considering whether setting generic enforcement mechanisms at this time (or at all) is an appropriate course of action.

3. What should be the objective of an enforcement mechanism?

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," i.e., discriminatory performance after the RBOC has received § 271 approval. In its order approving Bell Atlantic's entry into long distance in New York, the FCC analyzed Bell Atlantic's performance plan "solely for the purpose of determining whether the risk of post-approval non-compliance is sufficiently great that approval of its section 271 application would not be in the public interest." (FCC Order 99-404, CC Docket No. 99-205, fn. 1326). As stated above, the FCC reaffirmed this in its decision on SWBT's Texas application.

The FCC has also stated that enforcement mechanisms should not be construed as a replacement for enforcement alternatives that already exist, such as dispute resolution, commission complaints, and enforcement of interconnection agreements. (See, *Bell Atlantic Order*, par. 435; *SWBT Order*, par. 421). In its August 1996 Local Competition Order, the FCC noted that

several carriers advocated performance penalties. (*Local Competition Order*, 11 *FCC Rcd at 15658, par. 305*). The FCC did not adopt such penalties in that Order. Instead, it acknowledged the wide variety of remedies available to an ALEC that believes it has received discriminatory performance in violation of the Act. (*Id.*, par. 129).

Finally, any enforcement mechanism should be structured to achieve its proper objective in a way that is relatively simple to implement and can be administered with only minimal regulatory oversight.

4. For purposes of evaluating ILEC performance in the context of an interconnection agreement, how should any Commission established enforcement mechanism be structured conceptually?

- A. Frequency of monitoring?**
- B. Time frame to be evaluated?**
- C. Level of disaggregation across metrics and offerings?**
- D. How should items A, B, and C above be balanced to provide statistical significance for metrics with a small number of observations per reporting period?**
- E. Automatic penalties for noncompliance?**

Tier 1 of BellSouth's penalty plan is specifically designed to evaluate ILEC performance in the context of individual ALEC interconnection agreements.

- A. Monitoring and reporting is done on a monthly basis.
- B. Evaluations are done on a monthly basis.
- C. Levels of disaggregation should be sufficient to deter disparate performance and to allow meaningful comparison. There are two items to consider when speaking of disaggregation: the reporting level ("A" above) and the testing level ("B" above). The metrics should be balanced so as to encompass the entire range of ILEC to

CLEC performance. However, this does not mean that each and every sub-process need be considered. The primary purpose of disaggregated reporting should be to ensure that service parity is evaluated at a point where 'like-to-like' comparisons can be made, so as not to mask discrimination. Examples of these 'like-to-like' comparisons include such things as geography (e.g. region, state, wire center), product groupings (e.g. resale residence, resale business, UNEs), similar activities (e.g. new connects, change orders, moves) and seasonality (e.g. holiday workload).

Finally, evaluations resulting in penalties should be based only on outcome oriented metrics that impact the customer's experience. For example, an end user would be negatively impacted by a missed installation appointment. The customer does not experience all the subprocesses that may have led to that missed installation appointment, such as jeopardy notices, held order interval and firm order confirmation interval. Again, the customer only experiences the missed installation appointment. To pay penalties on each of these subprocesses would duplicate the penalty associated with the missed due date.

The measurement set included in BellSouth's VSEEM III plan are key, outcome oriented measures. BellSouth developed these measures based upon the collaborative work between ILECs, ALECs and State Commissions in New York and Texas.

Collaborative efforts in both New York and Texas resulted in either a “critical” measurement set, or a prioritized set of measures of “high, medium, and low” significance. These commissions charged the ALECs with identifying the measurement set that is most ‘customer impacting’. BellSouth’s experience in providing access to IXCs, combined with the outcome of prioritized measures from New York and Texas has resulted in BellSouth offering a key set of customer impacting metrics.

- D. BellSouth believes that a suitable statistical methodology will amply address the balancing of frequency, time frames and disaggregation to address small numbers of observations.
- E. Yes. Penalties should be automatic. BellSouth’s proposed penalty plan automatically generates penalty payments for noncompliance based on like-to-like comparisons at the lowest level possible.

5. For purposes of evaluating ILEC (and ALEC) performance in the aggregate, how should any Commission enforcement mechanism be structured conceptually?

- A. Frequency of monitoring?**
- B. Time frame to be evaluated?**
- C. Level of disaggregation across metrics and offerings?**
- D. How should items A, B, and C above be balanced to provide statistical significance for metrics with a small number of observations per reporting period?**
- E. Automatic vs. case-by-case fines for noncompliance?**

BellSouth’s responses to this section are the same as its response to Issue 4 above. Generally speaking, aggregate performance should be integrated with, and an extension of individual ALEC evaluations.

6. How should the dollar value of penalties be determined?

There are several criteria that should be used to develop appropriate penalty levels for determining the dollar value of penalties. First, the dollar amount should be significant enough to incent the ILEC to provide nondiscriminatory performance. Second, the penalty should not be so large that it is economically advantageous to the ALECs to receive penalties in lieu of marketing their own local service. Third, penalties should address all ALEC modes of entry (i.e., resale, facility based and interconnection) as well as electronic and manual processing. The dollar value assigned to each metric should give more weight to *critical measurements, key products and processes*.

Finally, it is important to acknowledge that *non-monetary remedy mechanisms are equally, if not more, important than monetary remedy payment amounts*. A prime example is BellSouth's Tier 3 proposal to voluntarily cease to market interLATA long distance services.

7. Should there be a cap on penalty amounts and if so, how should that cap be determined?

Yes, any voluntary, self-executing remedy plan adopted by the Commission should contain an *absolute cap*. There should be a limit on how much financial risk an ILEC should have to bear in self-executing penalty payments. In BellSouth's VSEEM III, the cap is based upon a percentage of net revenue from local exchange service on a state by state basis. This by no means guarantees an overall cap on BellSouth's ultimate liability. BellSouth's

enforcement plan also contains non-monetary consequences in the form of an extraordinary Tier-3 penalty that, if triggered, would automatically prohibit BellSouth from marketing interLATA long distance service to new customers. This Tier III remedy will be triggered in the event performance deteriorates to the level that Tier I and Tier 2 remedies are exhausted. It is also important to remember that no matter what the cap, CLECs will retain the right to pursue other legal remedies under state and federal law.

8. How and when should consequences be escalated?

Penalties should escalate when it is more likely from a statistical standpoint that disparate performance has taken place. Also, penalties should correspond to the activity level, in other words, be assessed on a per transaction basis. BellSouth's enforcement plan is designed to accomplish this based on 3 tiers of escalation.

Tier 1 of BellSouth's enforcement plan pays liquidated damages directly to an individual ALEC 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 ALEC, who retains all rights to pursue further legal remedies. Tier 2 assessments address patterns of poor performance to the ALEC 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 Commission. Finally, BellSouth's enforcement plan has a Tier III remedy, which is unique to BellSouth, and which provides the ultimate

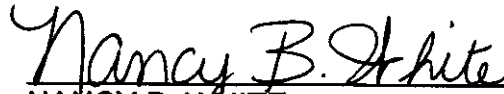
incentive for continued non-discriminatory performance that has escalated over time: the suspension of marketing of interLATA long distance services to new customers.

9. How should extraordinary events be handled?

It is not appropriate to hold any ILEC responsible for situations that arise that are beyond its control. These situations would include such things as natural disasters (e.g. hurricanes, floods, tornadoes, etc.) and situations created by third parties (e.g. major cable cuts by construction companies). As much as possible, these types of situations should be pre-identified and included as allowable exceptions to the ILEC penalty plan under existing Commission rules. In addition, the Commission should allow for a waiver process, whereby an ILEC could petition the Commission to approve additional exceptions under appropriate circumstances.

Respectfully submitted this 25th day of August, 2000.

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BellSouth
Service Quality Measurements Plan

Appendix A: Reporting Scope*

Standard Service Groupings	
Standard Service Groupings	<p style="text-align: right;"><u>Pre-Order, Ordering</u></p> <ul style="list-style-type: none">➤ Residence Resale➤ Business Resale➤ Special➤ Local Interconnection Trunks➤ UNE➤ UNE Design➤ UNE - Loops w/LNP <p style="text-align: right;"><u>Provisioning</u></p> <p><u>Resale and Retail</u></p> <ul style="list-style-type: none">➤ Pots – Residence➤ Pots – Business➤ Design➤ PBX (Louisiana SQM)➤ CENTREX (Louisiana SQM)➤ ISDN (Louisiana SQM) (Note: ISDN included in POTS for Georgia Only) <p><u>Unbundled Network Elements</u></p> <ul style="list-style-type: none">➤ UNE Design➤ UNE Non-Design➤ UNE 2 Wire Loop (Louisiana SQM)➤ UNE Loop Other (Louisiana SQM)➤ Unbundled Ports (Louisiana SQM)➤ Combos, Switching, Local Transport, DSL (under development) <p style="text-align: right;"><u>Maintenance and Repair</u></p> <p><u>Resale / Retail</u></p> <ul style="list-style-type: none">➤ Pots – Residence➤ Pots – Business➤ Design➤ PBX (Louisiana SQM)➤ CENTREX (Louisiana SQM)➤ ISDN (Louisiana SQM) (Note: ISDN Trouble included in Non-Design for Georgia Only) <p><u>Unbundled Network Elements</u></p> <ul style="list-style-type: none">➤ UNE Design (Georgia and Regional SQM)➤ UNE Non-Design (Georgia and Regional SQM)➤ UNE 2 Wire Loop (Louisiana SQM)➤ UNE Loop Other (Louisiana SQM)➤ Unbundled Ports (Louisiana SQM)➤ UNE Other Non-Design➤ Combos, Switching, Local Transport, DSL (under development)

**BellSouth
Service Quality Measurements Plan**

Appendix A: Reporting Scope*

<p>Standard Service Groupings</p>	<p align="center"><u>Maintenance and Repair/Provisioning</u></p> <p><u>Trunks</u></p> <ul style="list-style-type: none"> ➤ Local Interconnection Trunks <p><u>Geographic Scope</u></p> <ul style="list-style-type: none"> ➤ State, Region and further geographic disaggregation as required by State Commission Order (e.g., Metropolitan Service Area – MSA) <p align="center"><u>Local Interconnection Trunk Group Blockage</u></p> <ul style="list-style-type: none"> ➤ BST CTTG Trunk Groups ➤ CLEC Trunk Groups
<p>Standard Service Order Activities</p> <p><i>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.</i></p>	<ul style="list-style-type: none"> ➤ New Service Installations ➤ Service Migrations Without Changes ➤ Service Migrations With Changes ➤ Move and Change Activities ➤ Service Disconnects (Unless noted otherwise)
<p>Pre-Ordering Query Types:</p> <p>Maintenance Query Types:</p>	<ul style="list-style-type: none"> ➤ Address ➤ Telephone Number ➤ Appointment Scheduling ➤ Customer Service Record ➤ Feature Availability <p>TAFI - *Note TAFI Access the system list below:</p> <ul style="list-style-type: none"> ➤ CRIS ➤ DLR ➤ LMOSupd ➤ March ➤ Predictor ➤ Oleth ➤ LMOS ➤ LNP ➤ NIW ➤ OSPCM ➤ SOCS
<p>Report Levels</p>	<ul style="list-style-type: none"> ➤ CLEC RESH ➤ CLEC MSA ➤ CLEC State ➤ CLEC Region ➤ Aggregate CLEC State ➤ Aggregate CLEC Region ➤ BST MSA ➤ BST State ➤ BST Region

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

EXHIBIT A

Service Quality Measurement Plan (SQM)

Measurement Descriptions

Version

July, 2000

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.

BellSouth
Service Quality Measurements Plan

TABLE OF CONTENTS

<u>CATEGORY</u>	<u>MEASUREMENT DESCRIPTION*</u>	
(OSS) Operations Support Systems	OSS-1. Average Response Time and Response Interval (Pre-Ordering/Ordering) OSS-2. Interface Availability (Pre-Ordering) OSS-3. Interface Availability (Maintenance & Repair) OSS-4. Response Interval (Maintenance & Repair)	OSS-Pg. 1 OSS-Pg.3 OSS-Pg. 5 OSS-Pg. 7
(O) Ordering	O-1. Percent Flow-through Service Requests (Summary) O-2. Percent Flow-through Service Requests (Detail) O-3. Flow-through Error Analysis O-4. CLEC LSR Information LSR Flow-Through Matrix O-5. Percent Rejected Service Requests O-6. Reject Interval O-7. Firm Order Confirmation Timeliness O-8. Speed of Answer in Ordering Center O-9. LNP-Percent Rejected Service Request O-10. LNP-Reject Interval Distribution & Average Reject Interval O-11. LNP-Firm Order Confirmation Timeliness Interval Distribution & Firm Order confirmation Average Interval	O-Pg. 1 O-Pg. 3 O-Pg. 5 O-Pg. 6 O-Pg. 7 O-Pg. 10 O-Pg. 12 O-Pg. 14 O-Pg. 16 O-Pg.17 O-Pg. 18 O-Pg. 20
(P) Provisioning	Provisioning Level of Disaggregation P-1. Mean Held Order Interval & Distribution Intervals P-2. Average Jeopardy Notice Interval & Percentage of Orders Given Jeopardy Notices P-3. Percent Missed Installation Appointments P-4. Average Completion Interval (OCI) & Order Completion Interval Distribution P-5. Average Completion Notice Interval P-6. Coordinated Customer Conversions P-6A. Coordinated Customer Conversions Hot Cut Timeliness % within Interval and Average Interval P-6B. Coordinated Customer Conversions - % Provisioning Troubles Received Within 7 days of a completed Service Order P-7. % Provisioning Troubles w/i 30 days of Service Order Activity P-8. Total Service Order Cycle Time (TSOCT) P-9. Service Order Accuracy (GEORGIA ONLY) P-10. LNP -Percent Missed Installation Appointments P-11. LNP-Average Disconnect Timeliness Interval & Disconnect Timeliness Interval Distribution P-12. LNP-Total Service Order Cycle Time	P-Pg. 1 P-Pg. 2 P-Pg. 4 P-Pg. 5 P-Pg. 6 P-Pg. 8 P-Pg. 9 P-Pg. 10 P-Pg. 11 P-Pg. 12 P-Pg. 13 P-Pg. 14 P-Pg. 15 P-Pg. 16 P-Pg. 17
(M&R) Maintenance & Repair	M&R Level of Disaggregation M&R-1. Missed Repair Appointments M&R-2. Customer Trouble Report Rate M&R-3. Maintenance Average Duration M&R-4. Percent Repeat Troubles w/i 30 days) M&R-5. Out of Service > 24 Hours M&R-6. Average Answer Time - Repair Centers	M&R-Pg. 1 M&R-Pg. 2. M&R-Pg. 3 M&R-Pg. 4 M&R-Pg. 5 M&R-Pg. 6 M&R-Pg. 7
(B) Billing	B-1. Invoice Accuracy B-2. Mean Time to Deliver Invoices B-3. Usage Data Delivery Accuracy B-4. Usage Data Delivery Completeness B-5. Usage Data Delivery Timeliness B-6. Mean Time to Deliver Usage	B-Pg. 1 B-Pg. 2 B-Pg. 3 B-Pg. 4 B-Pg. 5 B-Pg. 6

BellSouth
Service Quality Measurements Plan

TABLE OF CONTENTS – (continued)

<u>CATEGORY</u>	<u>MEASUREMENT DESCRIPTION *</u>	
(OS) (DA) Operator Services Toll & Directory Assistance	OS-1. Speed to Answer Performance/Average Speed to Answer (Toll)	OS-Pg. 1
	OS-2. Speed to Answer Performance/Percent Answered within "X" Seconds (Toll)	OS-Pg. 2
	DA-1. Speed to Answer Performance/Average Speed to Answer (DA)	DA-Pg. 3
	DA-2. Speed to Answer Performance/Percent Answered within "X" Seconds (DA)	DA-Pg. 4
(E) E911	E-1. Timeliness	E-Pg. 1
	E-2. Accuracy	E-Pg. 2
	E-3. Mean Interval	E-Pg. 3
(TGP) Trunk Group Performance	TGP-1. Trunk Group Performance-Aggregate	TGP-Pg. 1
	TGP-2. Trunk Group Performance-CLEC Specific	TGP-Pg. 3
	TGP-3. Trunk Group Service Report	TGP-Pg. 5
	TGP-4. Trunk Group Service Detail	TGP. Pg 6
(C) Collocation	C-1. Average Response Time	C-Pg. 1
	C-2. Average Arrangement Time	C-Pg. 2
	C-3. % of Due Dates Missed	C-Pg. 3
(CM) Change Management	CM-1 Change Management Notices Sent on Time	CM-Pg. 1
	CM-2 % Change Management Notices – Delay 8 Plus Days	CM-Pg. 2
Appendix A	Reporting Scope	
Appendix B	Glossary of Acronyms and Terms	
Appendix C	Audit Policy	
Appendix D	BST SQM Retail Analog & Benchmarks	

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

BellSouth
Service Quality Measurements Plan

OSS (Operations Support Systems)

Report/Measurement:	
OSS-1. Average Response Time and Response Interval (Pre-Ordering/Ordering)	
Definition:	
Average response time and response intervals are the average times and number of requests responded to within certain intervals for accessing legacy data associated with appointment scheduling, service & feature availability, address verification, request for Telephone numbers (TNs), and Customer Service Records (CSRs).	
Exclusions:	
None	
Business Rules:	
The average response time for retrieving pre-order/order information from a given legacy system is determined by summing the response times for all requests submitted to the legacy systems during the reporting period and dividing by the total number of legacy system requests for that month. The response interval starts when the client application (LENS or TAG for CLECs and RNS for BST) submits a request to the legacy system and ends when the appropriate response is returned to the client application. The number of accesses to the legacy systems during the reporting period, which take less than 2.3 seconds and the number, which take more than 6 seconds are also captured.	
Level of Disaggregation:	
<ul style="list-style-type: none"> • RSAG – Address (Regional Street Address Guide-Address) – stores street address information used to validate customer addresses. CLECs and BST query this legacy system. • RSAG – TN (Regional Street Address Guide-Telephone number) – contains information about facilities available and telephone numbers working at a give address. CLECs and BST query this legacy system. • ATLAS (Application for Telephone Number Load Administration and Selection) – acts as a warehouse for storing telephone numbers that are available for assignment by the system. It enables CLECs and BST service reps to select and reserve telephone numbers. CLECs and BST query this legacy system. • COFFI (Central Office Feature File Interface) – stores information about product and service offerings and availability. CLECs query this legacy system. • DSAP (DOE Support Application) – provides due date information. CLECs and BST query this legacy system. • HAL/CRIS (Hands-Off Assignment Logic/Customer Record Information System) – a system used to access the Business Office Customer Record Information System (BOCRIS). It allows BST servers, including LENS, access to legacy systems. CLECs query this legacy system. • P/SIMS (Product/Services Inventory Management system) – provides information on capacity, tariffs, inventory and service availability. CLECs query this legacy system. • OASIS (Obtain Available Services Information Systems) – Information on feature and rate availability. BST queries this legacy system. 	
Calculation:	
$\frac{\Sigma [\text{Date \& Time of Legacy Response} - (\text{Date \& Time of Request to Legacy})]}{(\text{Number of Legacy Requests During the Reporting Period})}$	
Report Structure:	
<ul style="list-style-type: none"> • Not CLEC Specific • Not product/service specific • Regional Level 	
Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
<ul style="list-style-type: none"> • Report month • Legacy Contract (per reporting dimension) • Response Interval • Regional Scope 	<ul style="list-style-type: none"> • Report month • Legacy Contract (per reporting dimension) • Response Interval • Regional Scope
Retail Analog/Benchmark:	
See Appendix D	

Revision Date: 05/05/00 (lg)

BellSouth
Service Quality Measurements Plan

LEGACY SYSTEM ACCESS TIMES FOR RNS

System	Contract	Data	< 2.3 sec	> 6 sec	<= 6.3 sec	Avg. Sec	# of Calls
RSAG	RSAG-TN	Address	x	x	x	x	x
RSAG	RSAG-ADDR	Address	x	x	x	x	x
ATLAS	ATLAS-TN	TN	x	x	x	x	x
DSAP	DSAP-DDI	Schedule	x	x	x	x	x
CRIS	CRSACCTS	CSR	x	x	x	x	x
OASIS	OASISBSN	Feature/Service	x	x	x	x	x
OASIS	OASISCAR	Feature/Service	x	x	x	x	x
OASIS	OASISLPC	Feature/Service	x	x	x	x	x
OASIS	OASISMTN	Feature/Service	x	x	x	x	x
OASIS	OASISBIG	Feature/Service	x	x	x	x	x

LEGACY SYSTEM ACCESS TIMES FOR R0S

System	Contract	Data	< 2.3 sec	> 6 sec	<=6.3 sec	Avg. Sec	# of Calls
RSAG	RSAG-TN	Address	x	x	x	x	x
RSAG	RSAG-ADDR	Address	x	x	x	x	x
ATLAS	ATLAS-TN	TN	x	x	x	x	x
DSAP	DSAP-DDI	Schedule	x	x	x	x	x
CRIS	CRSOCSR	CSR	x	x	x	x	x
OASIS	OASISBIG	Feature/Service	x	x	x	x	x

LEGACY SYSTEM ACCESS TIMES FOR LENS

System	Contract	Data	< 2.3 sec	> 6 sec	<=6.3 sec	Avg. Sec	# of Calls
RSAG	RSAG-TN	Address	x	x	x	x	x
RSAG	RSAG-ADDR	Address	x	x	x	x	x
ATLAS	ATLAS-TN	TN	x	x	x	x	x
DSAP	DSAP-DDI	Schedule	x	x	x	x	x
HAL	HAL/CRIS	CSR	x	x	x	x	x
COFFI	COFFI/USOC	Feature/Service	x	x	x	x	x
P/SIMS	PSIMS/ORB	Feature/Service	x	x	x	x	x

LEGACY SYSTEM ACCESS TIMES FOR TAG

System	Contract	Data	< 2.3 sec	> 6 sec	<=6.3 sec	Avg. Sec	# of Calls
RSAG	RSAG-TN	Address	x	x	x	x	x
RSAG	RSAG-ADDR	Address	x	x	x	x	x
ATLAS	ATLAS-TN	TN	x	x	x	x	x
ATLAS	ATLAS-MLH	TN	x	x	x	x	x
ATLAS	ATLAS-DID	TN	x	x	x	x	x
DSAP	DSAP-DDI	Schedule	x	x	x	x	x
HAL	HAL/CRIS	CSR	x	x	x	x	x
CRIS	CRSEINIT	CSR	x	x	x	x	x
CRIS	CRSECSR	CSR	x	x	x	x	x

BellSouth
Service Quality Measurements Plan

OSS (Operations Support Systems)

Report/Measurement:	
OSS-2. Interface Availability (Pre-Ordering)	
Definition:	
<p>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</p>	
Exclusions:	
None	
Business Rules:	
<p>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:</p> <ul style="list-style-type: none"> • 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:	
Regional Level	
Calculation:	
$(\text{Functional Availability}) / (\text{Scheduled Availability}) \times 100$	
Report Structure:	
<ul style="list-style-type: none"> • Not CLEC Specific • Not product/service specific • Regional Level 	
Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
<ul style="list-style-type: none"> • Report month • Legacy Contract Type (per reporting dimension) • Regional Scope • Hours of Downtime 	<ul style="list-style-type: none"> • Report month • Legacy Contract Type (per reporting dimension) • Regional Scope

**BellSouth
Service Quality Measurements Plan**

OSS (Operations Support Systems) – (OSS-2. Interface Availability (Pre-Ordering) – Continued)

Retail Analog/Benchmark:
Benchmark – 99.5%

OSS Interface Availability

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

Revision Date: 07/13/00 (lg)

BellSouth
Service Quality Measurements Plan

OSS (Operations Support Systems)

Report/Measurement:	
OSS-3. Interface Availability (Maintenance & Repair)	
Definition:	
The percentage of time the OSS Interface is functionally available compared to scheduled availability. Availability percentage for the CLEC and BST interface systems and for the legacy systems accessed by them are captured.	
Exclusions:	
None	
Business Rules:	
<p>This measure is designed to compare the OSS availability versus scheduled availability of BST's legacy systems. Note: Only full outages are used in the calculation of Application Availability. A full outage is incurred when any of the following circumstances exist.</p> <ul style="list-style-type: none"> • 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. 	
Calculation:	
OSS Interface Availability = (Actual System Functional Availability) / (Actual planned System Availability) X 100	
Report Structure:	
<ul style="list-style-type: none"> • Aggregate <ul style="list-style-type: none"> ➢ CLEC ➢ BST & CLEC • Regional Level 	
Level of Disaggregation:	
Region	
Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
<ul style="list-style-type: none"> • Availability of CLEC TAFI • Availability of LMOS HOST, MARCH, SOCS, CRIS, PREDICTOR, LNP and OSPCCM • ECTA 	<ul style="list-style-type: none"> • Availability of BST TAFI • Availability of LMOS HOST, MARCH, SOCS, CRIS, PREDICTOR, LNP and OSPCCM
Retail Analog/Benchmark:	
Parity by design; Retail Analog ECTA Benchmark – 99.5% See Appendix D	

BellSouth
Service Quality Measurements Plan

OSS Interface Availability (M&R)

OSS Interface	% Availability
BST TAFI	X
CLEC TAFI	X
CLEC ECTA	X
BST and CLEC	X
CRIS	X
LMOS HOST	X
LNP	X
MARCH	X
OSPCM	X
PREDICTOR	X
SOCS	X

Revision Date: 07/17/00 (see)

BellSouth
Service Quality Measurements Plan

OSS (Operations Support Systems)

Report/Measurement:	
OSS-4. Response Interval (Maintenance & Repair)	
Definition:	
The response intervals are determined by subtracting the time a request is received on the BST side of the interface from the time the response is received from the legacy system. Percentages of requests falling into each interval category are reported, along with the actual number of requests falling into those categories.	
Exclusions:	
None	
Business Rules:	
This measure is designed to monitor the time required for the CLEC and 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 on the BST side of the interface and the clock stops when the response has been transmitted through that same point to the requester.	
NOTE: The OSS Response Interval BST Total Report is a combination of BST Residence and Business Total.	
Calculation:	
OSS Response Interval = (Query Response Date and Time for Category "X") - (Query Request Date and Time for Category "X") / (Number of Queries Submitted in the Reporting Period) where, "X" is 0-4, ≥ 4 to 10, ≥ 10, ≥ 30 seconds X 100	
Report Structure:	
<ul style="list-style-type: none"> • CLEC • BST Residence • BST Business by interface for each legacy system and function as appropriate. • BST total (Business + Residence) 	
Level of Disaggregation:	
Region	
Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
<ul style="list-style-type: none"> • CLEC Transaction Intervals 	<ul style="list-style-type: none"> • BST Business and Residence transaction Intervals
Retail Analog/Benchmark:	
OSS Response Interval for CLEC's is comparable to OSS Response Interval for BST.	

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

Revision Date 07/17/00 (see)

BellSouth
Service Quality Measurements Plan

ORDERING

Report/Measurement:														
O-1. Percent Flow-Through Service Requests (Summary)														
Definition:														
The percentage of Local Service Requests (LSR) and LNP Local Service Requests (LNP LSRs) submitted electronically via the CLEC mechanized ordering process that flow through and reach a status for a FOC to be issued, without manual intervention.														
Exclusions:														
<ul style="list-style-type: none"> • Fatal Rejects • Auto Clarification • Manual Fallout • CLEC System Fallout 														
Business Rules:														
<p>The CLEC mechanized ordering process includes all LSRs, including supplements (subsequent versions) which are submitted through one of the three gateway interfaces (TAG, EDI, and LENS), that flow through and reach a status for a FOC to be issued, without manual intervention. These LSRs can be divided into two classes of service; Business and Residence, and two types of service; Resale, and Unbundled Network Elements (UNE). The CLEC mechanized ordering process does not include LSRs, which are, submitted manually (e.g., fax, and courier), or are not designed to flow through, i.e., Manual Fallout.</p> <p>Definitions:</p> <p>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.</p> <p>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.</p> <p>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:</p> <table border="0"> <tr> <td>1. Complex*</td> <td>8. Low volume such as activity type "T" (move)</td> </tr> <tr> <td>2. Expedites (requested by the CLEC)</td> <td>9. Pending order review required</td> </tr> <tr> <td>3. Special pricing plans</td> <td>10. More than 25 business lines</td> </tr> <tr> <td>4. Denials-restore and conversion, or disconnect and conversion orders</td> <td>11. Restore or suspend for UNE combos</td> </tr> <tr> <td>5. Partial migrations</td> <td>12. Transfer of calls option for the CLEC's end users</td> </tr> <tr> <td>6. Class of service invalid in certain states with some types of service</td> <td>13. CSR inaccuracies such as invalid or missing CSR data in CRIS</td> </tr> <tr> <td>7. New telephone number not yet posted to BOCRIS</td> <td></td> </tr> </table> <p>*Attached is a list of services, including complex services, and whether LSRs issued for the services are eligible to flow through.</p> <p>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.</p>	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	
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														

BellSouth
Service Quality Measurements Plan

ORDERING (O-1. 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:	
<ul style="list-style-type: none"> • CLEC Aggregate <ul style="list-style-type: none"> ➢ Region 	
Level of Disaggregation:	
<ul style="list-style-type: none"> • Geography <ul style="list-style-type: none"> ➢ Region • Product <ul style="list-style-type: none"> ➢ Residence ➢ Business ➢ UNE ➢ LNP 	
Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
<ul style="list-style-type: none"> • Report month • Total number of LSRs received, by interface, by CLEC <ul style="list-style-type: none"> ➢ TAG ➢ EDI ➢ LENS • Total number of errors by type, by CLEC <ul style="list-style-type: none"> ➢ Fatal rejects ➢ Auto clarification ➢ CLEC caused system fallout • Total number of errors by error code • Total fallout for manual processing 	<ul style="list-style-type: none"> • Report month • Total number of errors by type <ul style="list-style-type: none"> ➢ BST system error
Retail Analog/Benchmark:	
Residence 90% Business 80% UNE 80%	

Revision Date: 05/15/00 (tm)

BellSouth
Service Quality Measurements Plan

ORDERING

Report/Measurement:														
O-2. Percent Flow-Through Service Requests (Detail)														
Definition:														
A detailed list by CLEC of the percentage of Local Service Requests (LSR) and LNP Local Service Requests (LNP LSRs) submitted electronically via the CLEC mechanized ordering process that flow through and reach a status for a FOC to be issued, without manual or human intervention.														
Exclusions:														
<ul style="list-style-type: none"> • Fatal Rejects • Auto Clarification • Manual Fallout • CLEC System Fallout 														
Business Rules:														
<p>The CLEC mechanized ordering process includes all LSRs, including supplements (subsequent versions) which are submitted through one of the three gateway interfaces (TAG, EDI, and LENS), that flow through and reach a status for a FOC to be issued, without manual intervention. These LSRs can be divided into two classes of service; Business and Residence, and three types of service; Resale, and Unbundled Network Elements (UNE) and specials. The CLEC mechanized ordering process does not include LSRs, which are, submitted manually (e.g., fax, and courier), or are not designed to flow through, i.e., Manual Fallout.</p> <p>Definitions:</p> <p>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.</p> <p>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.</p> <p>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:</p> <table border="0"> <tr> <td>1. Complex services*</td> <td>8. Low volume such as activity type "T" (move)</td> </tr> <tr> <td>2. Expedites (requested by the CLEC)</td> <td>9. Pending order review required</td> </tr> <tr> <td>3. Special pricing plans</td> <td>10. More than 25 business lines</td> </tr> <tr> <td>4. Denials-restore and conversion, or disconnect and conversion orders</td> <td>11. Restore or suspend for UNE combos</td> </tr> <tr> <td>5. Partial migrations</td> <td>12. Transfer of calls option for the CLEC's end users</td> </tr> <tr> <td>6. Class of service invalid in certain states with some types of service</td> <td>13. CSR inaccuracies such as invalid or missing CSR data in CRIS</td> </tr> <tr> <td>7. New telephone number not yet posted to BOCRIS</td> <td></td> </tr> </table> <p>*Attached is a list of services, including complex services, and whether LSRs issued for the services are eligible to flow through.</p> <p>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.</p>	1. Complex services*	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	
1. Complex services*	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														

BellSouth
Service Quality Measurements Plan

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

Calculations:	
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:	
<ul style="list-style-type: none"> • Provides the flow through percentage for each CLEC (by alias designation) submitting LSRs through the CLEC mechanized ordering process. The report provides the following: <ul style="list-style-type: none"> ➢ 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:	
<ul style="list-style-type: none"> • CLEC Specific (by alias designation to protect CLEC specific proprietary data) • Geographic <ul style="list-style-type: none"> ➢ Region • Product <ul style="list-style-type: none"> ➢ Residence ➢ Business ➢ UNE ➢ LNP 	
Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
<ul style="list-style-type: none"> • Report month • Total number of LSRs received, by interface, by CLEC <ul style="list-style-type: none"> ➢ TAG ➢ EDI ➢ LENS • Total number of errors by type, by CLEC <ul style="list-style-type: none"> ➢ Fatal rejects ➢ Auto clarification ➢ CLEC errors • Total number of errors by error code • Total fallout for manual processing 	<ul style="list-style-type: none"> • Report month • Total number of errors by type <ul style="list-style-type: none"> ➢ BST system error
Retail Analog/Benchmark:	
Residence 90%	
Business 80%	
UNE 80%	

Revision Date: 05/15/00 (tm)

BellSouth
Service Quality Measurements Plan

ORDERING

Report/Measurement:	
O-3. Flow-Through Error Analysis	
Definition:	
An analysis of each error type (by error code) that was experienced by the LSRs that did not flow through and reach a status for a FOC to be issued.	
Exclusions:	
Each Error Analysis is error code specific, therefore exclusions are not applicable.	
Business Rules:	
The CLEC mechanized ordering process includes all LSRs, including supplements (subsequent versions) which are submitted through one of the three gateway interfaces (TAG, EDI, and LENS), that flow through and reach a status for a FOC to be issued. The CLEC mechanized ordering process does not include LSRs, which are, submitted manually (e.g., fax, and courier).	
Calculation:	
Σ Of errors by type	
Report Structure:	
<ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> ➤ Error Type (by error code) ➤ Count of each error type ➤ Percent of each error type ➤ Cumulative percent ➤ Error Description ➤ CLEC Caused Count of each error code ➤ Percent of aggregate by CLEC caused count ➤ Percent of CLEC caused count ➤ 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 Performance:
<ul style="list-style-type: none"> • Report month • Total number of LSRs received • Total number of errors by type (by error code) <ul style="list-style-type: none"> ➤ CLEC caused error 	<ul style="list-style-type: none"> • Report month • Total number of errors by type (by error code) <ul style="list-style-type: none"> ➤ BST system error
Retail Analog/Benchmark:	
Not Applicable	

Revision Date: 02/22/00 (tm)

**BellSouth
Service Quality Measurements Plan**

ORDERING

Report/Measurement:	
O-4. CLEC LSR Information	
Definition:	
A list, with the flow through activity, of LSRs, by cc, pon and ver, issued by each CLEC during the report period.	
Exclusions:	
Fatal Rejects	
Business Rules:	
The CLEC mechanized ordering process includes all LSRs, including supplements (subsequent versions) which are submitted through one of the three gateway interfaces (TAG, EDI, and LENS), that flow through and reach a status for a FOC to be issued. The CLEC mechanized ordering process does not include LSRs, which are, submitted manually (e.g., fax, and courier).	
Calculation:	
NA	
Report Structure:	
<ul style="list-style-type: none"> • Provides a list, with the flow through activity, of LSRs by cc, pon, and ver, issued by each CLEC during the report period with an explanation of the of the columns and content. This report is available on a CLEC specific basis. The report provides the following for each LSR. <ul style="list-style-type: none"> ➤ CC ➤ PON ➤ Ver ➤ Timestamp ➤ Type ➤ Err # ➤ Note or error description 	
Level of Disaggregation:	
Region	
Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Experience:
<ul style="list-style-type: none"> • Report month • Record of LSRs received by cc, pon, and ver • Record of timestamp, type, err # and note or error description for each LSR by cc, pon, and ver. 	NA
Retail Analog/Benchmark:	
Not Applicable	

Revision Date: 5/2/00(tm)

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Service Quality Measurements Plan

LSR Flow-Through Matrix

PRODUCT	FT ⁵	COMPLEX SERVICE	COMPLEX ORDER	PLANNED FALLOUT FOR MANUAL HANDLING ¹	EDI	TAG ²	LENS 99 ⁴	LENS ³	COMMENTS
2 wire analog DID trunk port	No	UNE	Yes	NA	N	N	N	N	
2 wire analog port	Yes	UNE	No	No	Y	Y	N	N	
2 wire ISDN digital line side port	No	UNE	Yes	NA	N	N	N	N	
2 wire ISDN digital loop	No	UNE	Yes	Yes	Y	Y	N	N	
3 Way Calling	Yes	No	No	No	Y	Y	Y	Y	
4 wire analog voice grade loop	Yes	UNE	Yes	No	Y	Y	N	N	
4 wire DS0 & PRI digital loop	No	UNE	Yes	NA	N	N	N	N	
4 wire DS1 & PRI digital loop	No	UNE	Yes	NA	N	N	N	N	
4 wire ISDN DSI digital trunk ports	No	UNE	Yes	Yes	N	N	N	N	
Accupulse	No	Yes	Yes	NA	N	N	N	N	
ADSL	No	UNE	Yes	NA	N	N	N	N	
Area Plus	Yes	No	No	No	Y	Y	Y	Y	
Basic Rate ISDN	No	Yes	Yes	Yes	Y	Y	N	N	
Call Block	Yes	No	No	No	Y	Y	Y	Y	
Call Forwarding-Variable	Yes	No	No	No	Y	Y	Y	Y	
Call Return	Yes	No	No	No	Y	Y	Y	Y	
Call Selector	Yes	No	No	No	Y	Y	Y	Y	
Call Tracing	Yes	No	No	No	Y	Y	Y	Y	
Call Waiting	Yes	No	No	No	Y	Y	Y	Y	
Call Waiting Deluxe	Yes	No	No	No	Y	Y	Y	Y	
Caller ID	Yes	No	No	No	Y	Y	Y	Y	
CENTREX	No	Yes	Yes	NA	N	N	N	N	
DID WITH PBX ACT W	No	Yes	Yes	Yes	Y	N	Y	N	
DID ACT W	No	Yes	Yes	Yes	Y	N	Y	N	
Digital Data Transport	No	UNE	Yes	NA	N	N	N	N	
Directory Listing Intentions	No	No	No	Yes	Y	Y	Y	Y	
Directory Listings Captions	No	No	Yes	Yes	Y	Y	Y	N	
Directory Listings (simple)	Yes	No	No	No	Y	Y	Y	Y	
DS3	No	UNE	Yes	NA	N	N	N	N	
DS1 Loop	Yes	UNE	Yes	No	Y	Y	N	N	

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Service Quality Measurements Plan

DSO Loop	Yes	UNE	Yes	No	Y	Y	N	N
Enhanced Caller ID	Yes	No	No	No	Y	Y	Y	Y
ESSX	No	Yes	Yes	NA	N	N	N	N
Flat Rate/Business	Yes	No	No	No	Y	Y	Y	Y
Flat Rate/Residence	Yes	No	No	No	Y	Y	Y	Y
FLEXSERV	No	Yes	Yes	NA	N	N	N	N
Frame Relay	No	Yes	Yes	NA	N	N	N	N
FX	No	Yes	Yes	NA	N	N	N	N
Ga. Community Calling	Yes	No	No	No	Y	Y	Y	Y
HDSL	No	UNE	Yes	NA	N	N	N	N
Hunting MLH	No	C/S ^o	C/S	Yes	Y	Y	N	N
Hunting Series Completion	Yes	C/S	C/S	No	Y	Y	Y	Y
INP to LNP Conversions	No	UNE	Yes	Yes	Y	Y	N	N
LightGate	No	Yes	Yes	NA	N	N	N	N
Local Number Portability	Yes	UNE	Yes	No	Y	Y	N	N
LNP with Complex Listing	No	UNE	Yes	Yes	Y	Y	N	N
LNP with Partial Migration	No	UNE	Yes	Yes	Y	Y	N	N
LNP with Complex Services	No	UNE	Yes	Yes	Y	Y	N	N
Loop+INP	No	UNE	No	Yes	Y	Y	N	N
Loop+LNP	Yes	UNE	No	No	Y	Y	N	N
Measured Rate/Bus.	Yes	No	No	No	Y	Y	Y	Y
Measured Rate/Res.	Yes	No	No	No	Y	Y	Y	Y
Megalink	No	Yes	Yes	NA	N	N	N	N
Megalink-T1	No	Yes	Yes	NA	N	N	N	N
Memory Call	Yes	No	No	No	Y	Y	Y	Y
Memory Call Ans. Svc.	Yes	No	No	No	Y	Y	Y	Y
Multiserv	No	Yes	Yes	NA	N	N	N	N
Native Mode LAN Interconnection (NMLI)	No	Yes	Yes	NA	N	N	N	N
Off-Prem Stations	No	Yes	Yes	NA	N	N	N	N
Optional Calling Plan	Yes	No	No	No	Y	Y	Y	Y
Package/Complete Choice and area plus	Yes	No	No	No	Y	Y	Y	Y
Pathlink Primary Rate ISDN	No	Yes	Yes	NA	N	N	N	N
Pay Phone Provider	No	No	No	NA	N	N	N	N
PBX Standalone ACT A,C, D	No	Yes	Yes	Yes	Y	Y	Y	N
PBX Trunks	No	Yes	Yes	Yes	Y	Y	Y	N
Port/Loop Combo	Yes	UNE	No	No	Y	Y	Y	N
Port/Loop PBX	No	No	No	Yes	Y	Y	N	N
Preferred Call Forward	Yes	No	No	No	Y	Y	Y	Y

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RCF Basic	Yes	No	No	No	Y	Y	Y	Y	
Remote Access to CF	Yes	No	No	No	Y	Y	Y	Y	
Repeat Dialing	Yes	No	No	No	Y	Y	Y	Y	
Ringmaster	Yes	No	No	No	Y	Y	Y	N	
Smartpath	No	Yes	Yes	NA	N	N	N	N	
SmartRING	No	Yes	Yes	NA	N	N	N	N	
Speed Calling	Yes	No	No	No	Y	Y	Y	Y	
Synchronet	No	Yes	Yes	Yes	Y	Y	N	N	
Tie Lines	No	Yes	Yes	NA	N	N	N	N	
Touchtone	Yes	No	No	No	Y	Y	Y	Y	
Unbundled Loop-Analog 2W, SL1, SL2	Yes	UNE	No	No	Y	Y	Y	N	
WATS	No	Yes	Yes	NA	N	N	N	N	
XDSL Extended LOOP	No	UNE	Yes	NA	N	N	N	N	

Note¹: Planned Fallout for Manual Handling denotes those services that are electronically submitted and are not intended to flow through due to the complexity of the service.

Note²: The TAG column includes those LSR submitted via RoboTAG.

Note³: The LENS column denotes the ordering status of services prior to OSS 99.

Note⁴: The LENS 99 column denotes the ordering status of services post OSS 99.

Note⁵: 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, 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, CSR inaccuracies such as invalid or missing CSR data in CRIS, Directory listings, transfer of calls option for CLEC end user— new TN not yet posted to BOCRIS. many are unique to the CLEC environment.

Note⁶: Services with C/S in the Complex Service and/or the Complex Order columns can be either complex or simple

BellSouth
Service Quality Measurements Plan

ORDERING

Report/Measurement:
O-5. Percent Rejected Service Requests
Definition:
Percent Rejected Service Request is the percent of total Local Service Requests (LSRs) received which are rejected due to error or omission. An LSR is considered valid when it is submitted by the CLEC and passes edit checks to insure the data received is correctly formatted and complete.
Exclusions:
Service Requests canceled by the CLEC prior to being rejected/clarified.
Business Rules:
<p>Fully Mechanized: An LSR is considered "rejected" when it is submitted electronically but does not pass LEO edit checks in the ordering systems (EDI, LENS, TAG, LEO, LESOG) and is returned to the CLEC without manual intervention. There are two types of "Rejects" in the Mechanized category:</p> <ul style="list-style-type: none"> ● A Fatal Reject occurs when a CLEC attempts to electronically submit an LSR but required fields are either not populated or incorrectly populated and the request is returned to the CLEC before it is considered a valid LSR. In LEO, Fatal Rejects are included in the "Other" category for Regional reports only. ● An Auto Clarification occurs when a valid LSR is electronically submitted but rejected from LESOG because it does not pass further edit checks for order accuracy. <p>Partially Mechanized: A valid LSR, which is electronically submitted (via EDI, LENS, TAG) but cannot be processed electronically and "falls out" for manual handling. It is then put into "clarification" and sent back (rejected) to the CLEC.</p> <p>Total Mechanized: Combination of Fully Mechanized and Partially Mechanized LSRs electronically submitted by the CLEC.</p> <p>Non-Mechanized: LSRs which are faxed or mailed to the LCSC for processing and "clarified" (rejected) back to the CLEC by the BST service representative.</p> <p>Interconnection Trunks: Interconnection Trunks are ordered on Access Service Requests (ASRs). ASRs are submitted to and processed by the Interconnection Purchasing Center (IPC). Trunk data is reported as a separate category.</p>
Calculation:
Percent Rejected Service Requests = (Total Number of Rejected Service Requests in the reporting period) / (Total Number of Service Requests Received in the reporting period) X 100.
Report Structure:
<ul style="list-style-type: none"> ● Fully Mechanized, Partially Mechanized, Total Mechanized, Non-Mechanized ● CLEC Specific ● CLEC Aggregate
Level of Disaggregation:
<ul style="list-style-type: none"> ● Product Reporting Levels <ul style="list-style-type: none"> ➢ Resale Residence ➢ Resale Business ➢ Resale – Design (Special) ➢ Other ➢ UNE ➢ UNE Loop with NP ➢ Interconnection Trunks ● Geographic Scope <ul style="list-style-type: none"> ➢ State, Region and further geographic disaggregation as required by State Commission Order ● Product Specific % Rejected ● Total % Rejected

BellSouth
Service Quality Measurements Plan

ORDERING (O-5. Percent Rejected Service Requests – Continued)

Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
<ul style="list-style-type: none">• Report month• Total number of LSRs• Total number of Rejects• State and Region• Total Number of ASRs (Trunks)	
Retail Analog/Benchmark:	
See Appendix D	

Revision Date: 07/27/00 (lg)

BellSouth Service Quality Measurements Plan

ORDERING

Report/Measurement:
O-6. Reject Interval
Definition:
Reject Interval is the average reject time from receipt of an LSR to the distribution of a Reject. An LSR is considered valid when it is submitted by the CLEC and passes edit checks to insure the data received is correctly formatted and complete.
Exclusions:
<ul style="list-style-type: none"> • Service Requests canceled by CLEC prior to being rejected/clarified. • Designated Holidays are excluded from the interval calculation. • The following hours for Non-mechanized LSRs are excluded from the interval calculation*: <ul style="list-style-type: none"> - Residence Resale Group - from 10:00 PM Saturday until 7:00 AM Monday. - Business Resale, Complex, UNE Groups - from 8:00 PM Friday until 8:00 AM Monday. <p>* The hours excluded will be altered to reflect changes in the Center operating hours.</p>
Business Rules:
<ul style="list-style-type: none"> • Fully Mechanized: The elapsed time from receipt of a valid electronically submitted LSR (date and time stamp in EDI, LENS or TAG) until the LSR is rejected (date and time stamp or reject in LEO). Auto Clarifications are considered in the Fully Mechanized category. • Partially Mechanized: The elapsed time from receipt of a valid electronically submitted LSR (date and time stamp in EDI, LENS or TAG) until it falls out for manual handling. The stop time on partially mechanized LSRs is when the LCSC Service Representative clarifies the LSR back to the CLEC via LEO. • Total Mechanized: Combination of Fully Mechanized and Partially Mechanized LSRs which are electronically submitted by the CLEC. • Non-Mechanized: The elapsed time from receipt of a valid LSR (date and time stamp of FAX or date and time mailed LSR is received in the LCSC) until notice of the reject (clarification) is returned to the CLEC via LON. • Interconnection Trunks: Interconnection Trunks are ordered on Access Service Requests (ASRs). ASRs are submitted to and processed by the Interconnection Purchasing Center (IPC). Trunk data is reported as a separate category.
Calculation:
Reject Interval = $\Sigma[(\text{Date and Time of Service Request Rejection}) - (\text{Date and Time of Service Request Receipt})] / (\text{Number of Service Requests Rejected in Reporting Period})$
Report Structure:
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • Fully Mechanized, Partially Mechanized, Total Mechanized, Non-Mechanized, Trunks

BellSouth
Service Quality Measurements Plan

ORDERING – (O-6. Reject Interval – Continued)

Level of Disaggregation:	
<ul style="list-style-type: none"> • Product Reporting Levels <ul style="list-style-type: none"> ➤ Resale – Residence ➤ Resale – Business ➤ Resale – Design (Special) ➤ Other ➤ UNE ➤ UNE Loop with NP ➤ Interconnection Trunks <ul style="list-style-type: none"> < 10 Circuits/Lines > 10 Circuits/Lines • Geographic Scope <ul style="list-style-type: none"> ➤ State, Region and further geographic disaggregation as required by State Commission Order • Mechanized: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 0 - < 1 hour 1 - < 4 hours 4 - < 8 hours 8 - < 12 hours 12 - < 16 hours 16 - < 20 hours 20 - < 24 hours > 24 hours. • Trunks: <ul style="list-style-type: none"> < 5 days > 5-8 days > 8-12 days >12-14 days >14-17 days >17-20 days > 20 days • Average Interval for mechanized reports in hours, non-mechanized and Trunk reports in days. 	
Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
<ul style="list-style-type: none"> • Report month • Reject Interval • Total Number of LSRs • Total number of Rejects • State and Region • Total Number of ASRs (Trunks) 	
Retail Analog/Benchmark:	
See Appendix D	

Revision Date: 06/20/00 (lg)

BellSouth Service Quality Measurements Plan

ORDERING

Report/Measurement:
O-7. 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:
<ul style="list-style-type: none"> • Rejected LSRs • Designated Holidays are excluded from the interval calculation. • The following hours for Non-mechanized LSRs are excluded from the interval calculation*: <ul style="list-style-type: none"> - Residence Resale Group - from 10:00 PM Saturday until 7:00 AM Monday. - Business Resale, Complex, UNE Groups - from 8:00 PM Friday until 8:00 AM Monday. <p>* The hours excluded will be altered to reflect changes in the Center operating hours.</p>
Business Rules:
<ul style="list-style-type: none"> • 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. • Partially Mechanized: The elapsed time from receipt of a valid electronically submitted LSR which falls out for manual handling until appropriate service orders are issued by a BST service representative via Direct Order Entry (DOE) or Service Order Negotiation Generation System (SONGS) to SOCS and a Firm Order Confirmation is returned to the CLEC. • Total Mechanized: Combination of Fully Mechanized and Partially Mechanized LSRs which are electronically submitted by the CLEC. • Non-Mechanized: The elapsed time from receipt of a valid paper LSR (date and time stamp of FAX or date and time paper LSRs received in LCSC) until appropriate service orders are issued by a BST service representative via Direct Order Entry (DOE) or Service Order Negotiation Generation System (SONGS) to SOCS and a Firm Order Confirmation is sent to the CLEC via LON. • Interconnection Trunks: Interconnection Trunks are ordered on Access Service Requests (ASRs). ASRs are submitted to and processed by the Interconnection Purchasing Center (IPC). Trunk data is reported as a separate category.
Calculation:
Firm Order Confirmation Timeliness = $\Sigma[(\text{Date and Time of Firm Order Confirmation}) - (\text{Date and Time of Service Request Receipt})] / (\text{Number of Service Requests Confirmed in Reporting Period})$
Report Structure:
<ul style="list-style-type: none"> • Fully Mechanized, Partially Mechanized, Total Mechanized, Non-Mechanized • CLEC Specific • CLEC Aggregate
Level of Disaggregation:
<ul style="list-style-type: none"> • Product Reporting Levels <ul style="list-style-type: none"> ➢ Resale – Residence ➢ Resale – Business ➢ Resale – Design (Special) ➢ Other ➢ UNE ➢ UNE Loop with NP ➢ Interconnection Trunks <ul style="list-style-type: none"> < 10 Circuits/Lines > 10 Circuits/Lines

BellSouth
Service Quality Measurements Plan

ORDERING – (O-7. Firm Order Confirmation Timeliness – Continued)

Level of Disaggregation: (Continued)	
<ul style="list-style-type: none"> • Geographic Scope <ul style="list-style-type: none"> ➤ State, Region and further geographic disaggregation (MSA) as required by State Commission Order • Mechanized: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 0 - < 4 hours 4 - < 8 hours 8 - < 12 hours 12 - < 16 hours 16 - < 20 hours 20 - < 24 hours 24 - < 48 hours > 48 hours • Trunks: <ul style="list-style-type: none"> 0 - 5 days 6 - 8 days 9 - 11 days 12 - 14 days 15 - 17 days 18 - 20 days 20 days • Average Interval in Days 	
Data Retained Relating to CLCC Experience:	Data Retained Relating to BST Performance:
<ul style="list-style-type: none"> • Report month • Interval for FOC • Total number of LSRs • State and Region • Total Number of ASRs (Trunks) 	
Retail Analog Benchmark:	
See Appendix D	

Revision Date: 06/20/00 (lg)

**BellSouth
Service Quality Measurements Plan**

ORDERING

Report/Measurement:	
O-8. 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 BST's Local Carrier Service Center (LCSC) answers the CLEC call.	
Calculation:	
$(\text{Total seconds in queue}) / (\text{Total number of calls answered in the Reporting Period})$	
Report Structure:	
Aggregate <ul style="list-style-type: none"> • CLEC – Local Carrier Service Center • BST <ul style="list-style-type: none"> - Business Service Center - Residence Service Center <p>Note: Combination of Residence Service Center and Business Service Center data under development</p>	
Level of Disaggregation:	
Aggregate <ul style="list-style-type: none"> • CLEC – Local Carrier Service Center • BST <ul style="list-style-type: none"> - Business Service Center - Residence Service Center <p>Note: Combination of Residence Service Center and Business Service Center data under development</p>	
Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
<ul style="list-style-type: none"> • Mechanized tracking through LCSC Automatic Call Distributor 	<ul style="list-style-type: none"> • Mechanized tracking through BST Retail center support systems
Retail Analog/Benchmark:	
For CLEC, Speed of Answer in Ordering Center (LCSC) is comparable to Speed of Answer in BST Business Offices. See Appendix D	

Revision Date: 06/20/00 (lg)

**BellSouth
Service Quality Measurements Plan**

ORDERING – (LNP)

Report/Measurement:
O-9. LNP-Percent Rejected Service Requests
Definition:
Percent Rejected Service Request is the percent of total Local Service Requests (LSRs) which are rejected due to error or omission. An LSR is considered valid when it is electronically submitted by the CLEC and passes LNP Gateway edit checks to insure the data received is correctly formatted and complete, i.e., fatal rejects are excluded.
Exclusions:
<ul style="list-style-type: none"> • Service Requests canceled by the CLEC • Fatal Rejects • Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.) where identifiable. • Non Mechanized LSR's
Business Rules:
An LSR is considered "rejected" when it is submitted electronically but does not pass edit checks in the ordering systems (EDI, TAG, LNP Gateway, LAUTO) and is returned to the CLEC without manual intervention.
Fully Mechanized: There are two types of "Rejects" in the Fully Mechanized category:
<ul style="list-style-type: none"> • A Fatal Reject occurs when a CLEC attempts to electronically submit an LSR (via EDI or TAG) but required fields are not populated correctly and the request is returned to the CLEC. <p><i>Fatal rejects are reported in a separate column, and for informational purposes ONLY. They are not considered in the calculation of the percent of total LSRs rejected or the total number of rejected LSRs.</i></p> <ul style="list-style-type: none"> • An Auto Clarification is a valid LSR which is electronically submitted (via EDI or TAG), but is rejected from LAUTO because it does not pass further edit checks for order accuracy. Auto Clarifications are returned without manual intervention.
Partially Mechanized: A valid LSR which electronically submitted (via EDI or TAG), but cannot be processed electronically due to a CLEC error and "falls out" for manual handling. It is then put into "clarification", and sent back (rejected) to the CLEC.
Total Mechanized: Combination of Fully Mechanized and Partially Mechanized rejects.
Calculation:
$\frac{[(\text{Number of Service Requests Rejected in the Reporting Period}) / (\text{Number of Service Requests Received in the Reporting Period})] \times 100}{}$
Report Structure:
<ul style="list-style-type: none"> • Fully Mechanized, Partially Mechanized, Total Mechanized • CLEC Specific • CLEC Aggregate
Level of Disaggregation:
<ul style="list-style-type: none"> • Product Reporting Levels <ul style="list-style-type: none"> > LNP > UNE Loop with LNP • Geographic Scope <ul style="list-style-type: none"> > State, Region
Retail Analog/Benchmark:
See Appendix D

Revision Date: 05/15/00 (lg)

BellSouth
Service Quality Measurements Plan

ORDERING – (LNP)

Report/Measurement:
O-10. LNP-Reject Interval Distribution & Average Reject Interval
Definition:
Reject Interval is the average reject time from receipt of an LSR to the distribution of a Reject. An LSR is considered valid when it is electronically submitted by the CLEC and passes LNP Gateway edit checks to insure the data received is correctly formatted and complete, i.e., fatal rejects are excluded.
Exclusions:
<ul style="list-style-type: none"> • Service Requests canceled by the CLEC • Fatal Rejects • Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.) where identifiable. • Non Mechanized LSR's
Business Rules:
<p>The Reject interval is determined for each rejected LSR processed during the reporting period. The Reject interval is the elapsed time from when BST receives LSR until that LSR is rejected back to the CLEC. Elapsed time for each LSR is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the associated total number of rejected LSRs to produce the reject interval distribution.</p> <p>An LSR is considered "rejected" when it is submitted electronically but does not pass edit checks in the ordering systems (EDI, TAG, LNP Gateway, LAUTO) and is returned to the CLEC without manual intervention.</p> <p>Fully Mechanized: There are two types of "Rejects" in the Fully Mechanized category:</p> <ul style="list-style-type: none"> • 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. <p><i>Fatal rejects are reported in a separate column, and for informational purposes ONLY. They are not considered in the calculation of the percent of total LSRs rejected or the total number of rejected LSRs.</i></p> <ul style="list-style-type: none"> • An Auto Clarification is a valid LSR which is electronically submitted (via EDI or TAG), but is rejected from LAUTO because it does not pass further edit checks for order accuracy. Auto Clarifications are returned without manual intervention. <p>Partially Mechanized: A valid LSR which electronically submitted (via EDI or TAG), but cannot be processed electronically due to a CLEC error and "falls out" for manual handling. It is then put into "clarification", and sent back to the CLEC.</p> <p>Total Mechanized: Combination of Fully Mechanized and Partially Mechanized rejects.</p>
Calculation:
<p>Average Reject Interval: $\frac{\Sigma[(\text{Date \& Time of Service Request Rejection}) - (\text{Date \& Time of Service Request Receipt})]}{(\text{Total Number of Service Requests Rejected in Reporting Period})}$</p> <p>Reject Interval Distribution: $\frac{[\Sigma(\text{Service Requests Rejected in "X" minutes/hours})]}{(\text{Total Number of Service Requests Rejected in Reporting Period})} \times 100$</p>
Report Structure:
<ul style="list-style-type: none"> • Fully Mechanized, Partially Mechanized, Total Mechanized • CLEC Specific • CLEC Aggregate

BellSouth
Service Quality Measurements Plan

ORDERING – (O-11. LNP-Firm Order Confirmation Timeliness Interval Distribution & Firm Order Confirmation Average Interval – Continued)

Level of Disaggregation:

- Reported in intervals
 - 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
- Product Reporting Levels
 - LNP
 - UNE Loop with LNP
- Geographic Scope
- State, Region

Retail Analog/Benchmark:

See Appendix D

Revision Date: 05/15/00 (lg)

BellSouth
Service Quality Measurements Plan

PROVISIONING – (P-1. Mean Held Order Interval & Distribution Intervals – Continued)

Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
<ul style="list-style-type: none"> • Report month • CLEC Order Number and PON (PON) • Order Submission Date (TICKET_ID) • Committed Due Date (DD) • Service Type (CLASS_SVC_DESC) • Hold Reason • Total line/circuit count • Geographic Scope <p>NOTE: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none"> • Report month • BST Order Number • Order Submission Date • Committed Due Date • Service Type • Hold Reason • Total line/circuit count • Geographic Scope
Retail Analog/Benchmark:	
CLEC Residence Resale/BST Residence Retail CLEC Business Resale/BST Business Retail CLEC Non-UNE Design/BST Design Interconnection Trunks-CLEC/Interconnection Trunks – BST UNEs-(See Appendix D)	

Revision Date: 07/15/00 (taf)

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Service Quality Measurements Plan

PROVISIONING –

(P-4. Average Completion Interval (OCI) & Order Completion Interval Distribution – Continued)

Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
<ul style="list-style-type: none"> • Report month • CLEC Company Name • Order Number (PON) • Submission Date & Time (TICKET_ID) • Completion Date (CMPLTN_DT) • Service Type (CLASS_SVC_DESC) • Geographic Scope <p>NOTE: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none"> • Report month • BST Order Number • Order Submission Date & Time • Order Completion Date & Time • Service Type • Geographic Scope
Retail Analog/Benchmark:	
CLEC Residence Resale / BST Residence Retail CLEC Business Resale / BST Business Retail CLEC Non-UNE Design / BST Design Interconnection Trunks-CLEC / Interconnection Trunks-BST UNES-(See Appendix D)	

Revision Date: 07/15/00 (taf)

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Service Quality Measurements Plan**

PROVISIONING

Report/Measurement:	
P-5. Average Completion Notice Interval	
Definition:	
The Completion Notice Interval is the elapsed time between the BST reported completion of work and the issuance of a valid completion notice to the CLEC.	
Exclusions:	
<ul style="list-style-type: none"> • Non-mechanized Orders • Partially Mechanized Orders • Cancelled Service Orders • Order Activities of BST associated with internal or administrative use of local services. • D&F orders 	
Business Rules:	
Measurement on interval of completion date and time entered by a field technician on dispatched orders, and 5PM start time on the due date for non-dispatched orders; to the release of a notice to the CLEC/BST of the completion status. The field technician notifies the CLEC the work was complete and then he/she enters the completion time stamp information in his/her computer. This information switches through to the SOCS systems either completing the order or rejecting the order to the Work Management Center (WMC). If the completion is rejected, it is manually corrected and then completed by the WMC. The notice is returned on each individual order submitted and as the notice is sent electronically, it can only be switched to those orders that were submitted by the CLEC electronically. The start time is the completion stamp either by the field technician or the 5PM due date stamp; the end time is the time stamp the notice was submitted to the CLEC/BST system.	
Calculation:	
$\Sigma (\text{Date and Time of Notice of Completion}) - (\text{Date and Time of Work Completion}) / (\text{Number of Orders with Notice of Completion in Reporting Period})$	
Report Structure:	
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate 	
Level of Disaggregation:	
<ul style="list-style-type: none"> • Reporting intervals in Hours; 0-1, 1-2, 2-4, 4-8, 8-12, 12-24, > 24, plus Overall Average Hour Interval • Reported in categories of <10 line/circuits; >= 10 line/circuits 	
Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
<ul style="list-style-type: none"> • Report month • CLEC Order Number (so_nbr) • Work Completion Date (cmpltn_dt) • Work Completion Time • Completion Notice Availability Date • Completion Notice Availability Time • Service Type • Geographic Scope 	<ul style="list-style-type: none"> • Report month • BST Order Number (so_nbr) • Work Completion Date (cmpltn-dt) • Work Completion Time • Completion Notice Availability Date • Completion Notice Availability Time • Service Type • Geographic Scope
NOTE: Code in parentheses is the corresponding header found in the raw data file.	NOTE: Code in parentheses is the corresponding header found in the raw data file.
Retail Analog/Benchmark:	
CLEC Residence Resale/BST Residence Retail CLEC Business Resale/BST Business Retail CLEC Non-UNE Design/BST Design Interconnection Trunks-CLEC/Interconnection Trunks – BST UNEs-(See Appendix D)	

Revision Date: 07/15/00 (taf)

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Service Quality Measurements Plan

PROVISIONING

Report/Measurement:	
P-6. 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:	
<ul style="list-style-type: none"> • Any order canceled by the CLEC will be excluded from this measurement. • Delays due to CLEC following disconnection of the unbundled loop • Unbundled Loops where there is no existing subscriber loop and loops where coordination is not requested. 	
Business Rules:	
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:	
$\Sigma [(Completion\ Date\ and\ Time\ for\ Cross\ Connection\ of\ an\ Coordinated\ Unbundled\ Loop) - (Disconnection\ Date\ and\ Time\ of\ an\ Coordinated\ Unbundled\ Loop)] / Total\ Number\ of\ Unbundled\ Loop\ with\ Coordinated\ Conversions\ (items)\ for\ the\ reporting\ period.$	
Report Structure:	
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate 	
Level of Disaggregation:	
Reported in intervals <=5 minutes; >5,<=15 minutes; >15 minutes, plus Overall Average interval	
Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
<ul style="list-style-type: none"> • Report Month • CLEC Order Number • Committed Due Date (DD) • Service Type (CLASS_SVC_DESC) • Cutover Start Time • Cutover Completion time • Portability start and completion times (INP orders) • Total Conversions (Items) <p>NOTE: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none"> • No BST Analog Exists
Retail Analog/Benchmark:	
Benchmark – See Appendix D	

Revision Date: 07/15/00 (taf)

BellSouth
Service Quality Measurements Plan

PROVISIONING

Report/Measurement:	
P-6A. Coordinated Customer Conversions – Hot Cut Timeliness % within Interval and Average Interval	
Definition:	
This category measures whether BST begins the cutover of an unbundled loop on a time specific order at the CLEC requested time. It measures the percentage of orders worked within 15 minutes of the requested start time of the order and the average interval.	
Exclusions:	
<ul style="list-style-type: none"> • Any order canceled by the CLEC will be excluded from this measurement. • Delays caused by the CLEC • Unbundled Loops where there is no existing subscriber loop and loops where coordination is not requested. • All unbundled loops on multiple loop orders after the first loop. 	
Business Rules:	
This report measures whether BST begins the cutover of an unbundled loop on a coordinated and/or a time specific order at the CLEC requested start time. The cut is considered on time if it starts 15 minutes before or after the requested start time. Using the scheduled time and the actual cutover start time, the measurement will calculate the % within interval and the average interval. If a cut involves multiple lines, the cut will be considered “on time” if the first line is cut within the interval. ≤ 15 minutes includes intervals that began 15 minutes or less before the scheduled cut time and cuts that began 15 minutes or less after the scheduled cut time; >15 minutes, ≤30 minutes includes cuts within 15:00 – 30:00 minutes either prior to or after the scheduled cut time; >30 minutes includes cuts greater than 30:00 minutes either prior to or after the scheduled cut time.	
Calculation:	
<p>% within Interval – [Total Number of Coordinated Unbundled Loop Orders for the interval] / Total Number of Coordinated Unbundled Loop Orders for the reporting period X 100.</p> <p>Average Interval - [Σ (Scheduled Date and Time for Cross Connection of a Coordinated Unbundled Loop Order) – (Actual Start Date and Time of a Coordinated Unbundled Loop Order)] / Total Number of Coordinated Unbundled Loop Orders for the reporting period.</p>	
Report Structure:	
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate 	
Level of Disaggregation:	
<p>Reported in intervals of early, on time and late cuts %≤ 15 minutes; % >15 minutes, ≤30 minutes; % >30 minutes, plus Overall Average Interval</p> <ul style="list-style-type: none"> • Product Reporting Level <ul style="list-style-type: none"> ➢ SL1 Time Specific ➢ SL1 Non-Time Specific ➢ SL2 Time Specific ➢ Coordinated Cuts (SL2 Non-Time Specific) 	
Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
<ul style="list-style-type: none"> • Report Month • CLEC Order Number (so_nbr) • Committed Due Date (DD) • Service Type (CLASS_SVC_DESC) • Cutover Scheduled Start Time • Cutover Actual Start Time • Total Conversions Orders <p>NOTE: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none"> • No BST Analog Exists

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Service Quality Measurements Plan**

Retail Analog/Benchmark

Benchmark – 95% Within + or – 15 minutes of Scheduled Start Time

Revision Date: 07/11/00 (BF)

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Service Quality Measurements Plan

PROVISIONING

Report/Measurement:	
P-6B. Coordinated Customer Conversions - % Provisioning Troubles Received Within 7 days of a completed Service Order (Under Development)	
Definition:	
Percent Provisioning Troubles received within 7 days of a completed service order associated with a Coordinated Customer Conversion. Measures the quality and accuracy of Coordinated Customer Conversion Activities.	
Exclusions:	
<ul style="list-style-type: none"> • Any order canceled by the CLEC • Troubles caused by Customer Provided Equipment 	
Business Rules:	
Measures the quality and accuracy of completed service orders associated with Coordinated Customer Conversions. The first trouble report received on a circuit ID within 7 days following a service order completion is counted in this measure. Subsequent trouble reports are measured in Repeat Report Rate. Reports are calculated searching in the prior report period for completed Coordinated Customer Conversion service orders and following 30 days after the completion of the service order for a trouble report issue date.	
Calculation:	
$\% \text{ Provisioning Troubles within 7 days of service order completion} = \frac{\sum(\text{Trouble reports on all completed Coordinated Customer Conversion Circuits} \leq 7 \text{ days following service order(s) completion})}{(\text{All Coordinated Customer Conversion service order circuits completed in the previous report calendar month})} \times 100.$	
Report Structure:	
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • 	
Level of Disaggregation:	
<ul style="list-style-type: none"> • Design • Non-Design 	
Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
<ul style="list-style-type: none"> • Report Month • CLEC Order Number (so_nbr) • PON • Order Submission Date(TICKET_ID) • Order Submission Time(TICKET_ID) • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope • Total conversion circuits <p>NOTE: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none"> • No BST Analog exists
Retail Analog/Benchmark:	
≤ 5% of total circuits	

Preliminary Issue 1.2 7/10/00BF

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Service Quality Measurements Plan

PROVISIONING

Report/Measurement:	
P-7. % Provisioning Troubles within 30 days of Service Order Completion	
Definition:	
Percent Provisioning Troubles within 30 days of Service Order Completion measures the quality and accuracy of Service order activities.	
Exclusions:	
<ul style="list-style-type: none"> • 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 • Trouble reports caused and closed out to Customer Provided Equipment (CPE) 	
Business Rules:	
Measures the quality and accuracy of completed orders. The first trouble report from a service order after completion is counted in this measure. Subsequent trouble reports are measured in Repeat Report Rate. Reports are calculated searching in the prior report period for completed service orders and following 30 days after completion of the service order for a trouble report issue date. D & F orders are excluded as there is no subsequent activity following a disconnect.	
Calculation:	
% Provisioning Troubles within 30 days of Service Order Activity = Σ (Trouble reports on all completed orders \leq 30 days following service order(s) completion) / (All Service Orders completed in the previous report calendar month) X 100	
Report Structure:	
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate 	
Level of Disaggregation:	
<ul style="list-style-type: none"> • Reported in categories of <10 line/circuits; \geq 10 line/circuits • Dispatch / No Dispatch 	
Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Report Month • BST Order Number • Order Submission Date • Order Submission Time • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope
NOTE: Code in parentheses is the corresponding header found in the raw data file.	
Retail Analog/Benchmark:	
CLEC Residence Resale / BST Residence Retail CLEC Business Resale / BST Business Retail CLEC Non-UNE Design / BST Design Interconnection Trunks-CLEC / Interconnection Trunks -BST UNEs-(See Appendix D)	

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Service Quality Measurements Plan

PROVISIONING

Report/Measurement:	
P-8. Total Service Order Cycle Time (TSOCT)	
Definition:	
This report measures the total service order cycle time from receipt of a valid service order request to the completion of the service order.	
Exclusions:	
<ul style="list-style-type: none"> • 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:	
<p>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.</p> <p>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. Orders that are worked on zero due dates are calculated with a .33 day interval (8 hours) in order to report a portion of a day interval. These orders are issued and worked/completed on same day. They can be either flow through orders (no field work-non-dispatched) or field orders(dispatched).</p> <p>Reporting is by Fully Mechanized, Partially Mechanized and Non-Mechanized receipt of LSRs.</p>	
Calculation:	
Total Service Order Cycle Time: $\Sigma(\text{Completion Date of Service Order}) - (\text{Date of Service Request Receipt}) / (\text{Count of Orders Completed in Reporting Period})$	
Report Structure:	
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate • Fully Mechanized; Partially Mechanized; Non-Mechanized 	
Level of Disaggregation:	
<ul style="list-style-type: none"> • Reported in categories of < 10 line/circuits; > = 10 line/circuits • Dispatch/No Dispatch categories applicable to all levels except trunks. • Intervals 0-5, 5-10, 10-15, 15-20, 20-25, 25-30, > = 30 Days 	
Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
<ul style="list-style-type: none"> • Report Month • Interval for FOC • CLEC Company Name (OCN) • Order Number (PON) • Submission Date & Time (TICKET_ID) • Completion Date (CMPLTN_DT) • Service Type (CLASS_SVC_DESC) • Geographic Scope 	<ul style="list-style-type: none"> • Report Month • BST Order Number • Order Submission Date & Time • Order Completion Date & Time • Service Type • Geographic Scope
NOTE: Code in parentheses is the corresponding header found in the raw data file.	
Retail Analog/Benchmark	
See Appendix D	

Revision Date: 07/15/00 (taf)

BellSouth
Service Quality Measurements Plan

PROVISIONING

Report/Measurement:	
P-9. Service Order Accuracy <u>GEORGIA ONLY</u>	
Definition:	
The "service order accuracy" measurement measures the accuracy and completeness of a sample of BST service orders by comparing what was ordered and what was completed.	
Exclusions:	
<ul style="list-style-type: none"> • Cancelled Service Orders • Order Activities of BST associated with internal or administrative use of local services • D & F orders 	
Business Rules:	
A manual sampling of service orders, completed during a monthly reporting period, is compared to the original account profile and the order that the CLEC sent to BST. An order is "completed without error" if all service attributes and account detail changes (as determined by comparing the original order) completely and accurately reflect the activity specified on the original order and any supplemental CLEC order. For both small and large sample sizes, when a Service Request cannot be matched with a corresponding Service Order, it will not be counted. For small sample sizes an effort will be made to replace the service request.	
Calculation:	
Percent Service Order Accuracy = Σ (Orders Completed without Error) / Σ (Orders Completed in Reporting Period) x 100	
Report Structure:	
CLEC Aggregate	
Level of Disaggregation:	
<ul style="list-style-type: none"> • Reported in categories of <10 line/circuits; >= 10 line/circuits • Dispatch / No Dispatch 	
Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
<ul style="list-style-type: none"> • Report Month • CLEC Order Number and PON • Local Service Request (LSR) • Order Submission Date • Committed Due Date • Service Type • Standard Order Activity 	<ul style="list-style-type: none"> • Being investigated at this time
Retail Analog/Benchmark:	
(Under Investigation)	

Revision Date: 07/15/00 (taf)

BellSouth
Service Quality Measurements Plan

PROVISIONING

Report/Measurement:
P-10. LNP-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:
<ul style="list-style-type: none"> • Canceled Service Orders • Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.) where identifiable.
Business Rules:
Percent Missed Installation Appointments (PMI) is the percentage of total orders processed for which BST is unable to complete the service orders on the committed due dates. Missed Appointments caused by end-user reasons will be included and reported in a separate category. 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:
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:
<ul style="list-style-type: none"> • Mechanized (service orders generated by LSRs submitted via EDI or TAG) • CLEC Specific • CLEC Aggregate <p>Report explanation: Total Missed Appointments is the total % of orders missed either by BST or the CLEC end user. End User MA represents the percentage of orders missed by the CLEC end user. The difference between End User Missed Appointments and Total Missed Appointments is the result of BST caused misses.</p>
Level of Disaggregation:
<ul style="list-style-type: none"> • Product Reporting Levels <ul style="list-style-type: none"> ➢ LNP ➢ UNE Loop Associated w/LNP • Geographic Scope <ul style="list-style-type: none"> ➢ State, Region
Retail Analog/Benchmark:
See Appendix D

Revision Date: 07/15/00 (taf)

BellSouth
Service Quality Measurements Plan

PROVISIONING – (LNP)

Report/Measurement:	P-11. LNP-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:	<ul style="list-style-type: none"> • Canceled Service Orders • Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.) where identifiable.
Business Rules:	The Disconnect Timeliness interval is determined for each Disconnect service order processed on an LSR during the reporting period. The Disconnect Timeliness interval is the elapsed time from when BST receives the 'Number Ported' message for an LSR's disconnect order from NPAC (signifying the CLEC 'Activate') until the Disconnect service order is completed in SOCS. Elapsed time for each order is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the total number of selected disconnect orders which have been completed.
Calculation:	<p>Average Disconnect Timeliness Interval: $\frac{\sum [(\text{Disconnect Service Order Completion Date \& Time}) - (\text{'Number Ported' Message Received Date \& Time})]}{\sum (\text{Total Number of Disconnect Service Orders Completed in Reporting Period})}$</p> <p>Disconnect Timeliness Interval Distribution: $[\sum (\text{Disconnect Service Orders Completed in "X" days}) / (\text{Total Disconnect Service Orders Completed in Reporting Period})] \times 100$</p>
Report Structure:	<ul style="list-style-type: none"> • Mechanized (service orders generated by LSRs submitted via EDI or TAG) • CLEC Specific • CLEC Aggregate
Level of Disaggregation:	<ul style="list-style-type: none"> • Reported in day intervals = 0,1,2,3,4, 5, >5 days • Product Reporting Levels <ul style="list-style-type: none"> ➢ LNP • Geographic Scope <ul style="list-style-type: none"> ➢ State, Region
Retail Analog/Benchmark:	See Appendix D

Revision Date: 05/15/00 (taf)

BellSouth
Service Quality Measurements Plan

PROVISIONING

Report/Measurement:	
P-12. LNP-Total Service Order Cycle Time	
Definition:	Total Service Order Cycle Time measures the interval from receipt of a valid service order request to the completion of the final service order associated with that service request.
Exclusions:	<ul style="list-style-type: none"> • Canceled Service Orders • Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.) where identifiable • "L" appointment coded orders (indicating the customer has requested a later than offered interval) • "S" missed appointment coded orders (indicating subscriber missed reasons), except for "SP" codes (indicating subscriber prior due date requested).
Business Rules:	<p>The interval is determined for each service request processed during the reporting period. This measurement combines two reports: FOC (Firm Order Confirmation) with Average Order Completion Interval.</p> <p>This interval starts with the receipt of a valid service request and stops when the technician or system completes all the related service orders for the LSR in SOCS. Elapsed time for each service request is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the associated total number of service requests completed to produce the total service order cycle time.</p>
Calculation:	<p>Average Total Service Order Cycle Time: $\Sigma [(\text{Service Order Completion Date}) - (\text{Service Request Receipt Date})] / \Sigma (\text{Total Number Service Requests Completed in Reporting Period})$</p> <p>Total Service Order Cycle Time Interval Distribution: $\Sigma (\text{Total Number of Service Requests Completed in "X" minutes/hours}) / (\text{Total Number of Service Requests Received in Reporting Period}) \times 100$</p>
Report Structure:	<ul style="list-style-type: none"> • Mechanized (service orders generated by LSRs submitted via EDI or TAG) • CLEC Specific • CLEC Aggregate • "W" Appointment Code Only (Company Offered)
Level of Disaggregation:	<ul style="list-style-type: none"> • Reported in day intervals 0 - 5, 5 - 10, 10 - 15, 15 - 20, 20 - 25, 25 - 30, >30 days • Product Reporting Levels <ul style="list-style-type: none"> > LNP > UNE Loop with LNP • Geographic Scope <ul style="list-style-type: none"> > State, Region
Retail Analog/Benchmark:	See Appendix D

Revision Date: 07/15/00 (taf)

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Service Quality Measurements Plan

Maintenance and Repair Level of Disaggregation

Product Reporting Levels

- Resale / Retail
 - Pots – Residence
 - Pots – Business
 - Design
 - PBX (Louisiana SQM)
 - CENTREX (Louisiana SQM)
 - ISDN (Louisiana SQM) (**Note:** ISDN Trouble included in POTS for Georgia Only)

- Unbundled Network Elements
 - UNE Design
 - UNE Non-Design
 - UNE 2 Wire Loop (Louisiana SQM)
 - UNE Loop Other (Louisiana SQM)
 - Unbundled Ports (Louisiana SQM)
 - UNE Other Non-Design
 - Combos, Switching, Local Transport, DSL (under development)

- Trunks
 - Local Interconnection Trunks

- Dispatch/No Dispatch categories applicable to all levels

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

BellSouth
Service Quality Measurements Plan

MAINTENANCE & REPAIR

Report/Measurement:	
M&R-1. Missed Repair Appointments	
Definition:	
The percent of trouble reports not cleared by the committed date and time.	
Exclusions:	
<ul style="list-style-type: none"> • 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:	
<p>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 not part of this measure because they are not a missed appointment.)</p> <p>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.</p>	
Calculation:	
$\text{Percentage of missed Repair Appointments} = \frac{\Sigma (\text{Count of Customer Troubles Not Cleared by the Quoted Commitment Date and Time})}{\Sigma (\text{Total Trouble reports closed in Reporting Period})} \times 100$	
Report Structure:	
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate 	
Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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
NOTE: Code in parentheses is the corresponding header found in the raw data file.	
Retail Analog/Benchmarks:	
CLEC Residence Resale/BST Residence Retail CLEC Business Resale/BST Business Retail CLEC Design-Resale/BST Design-Retail CLEC PBX, Centrex, and ISDN Resale/BST PBX, Centrex, and ISDN Retail CLEC Trunking-Resale / BST Trunking-Retail UNEs-(See Appendix D)	

Revision Date: 05/15/00 (see)

BellSouth
Service Quality Measurements Plan

MAINTENANCE & REPAIR

Report/Measurement:	
M&R-2. Customer Trouble Report Rate	
Definition:	
Initial and repeated customer direct or referred troubles closed within a calendar month per 100 lines/circuits in service.	
Exclusions:	
<ul style="list-style-type: none"> • 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:	
Customer Trouble Report Rate is computed by accumulating the number of maintenance initial and repeated trouble reports closed during the reporting period. The resulting number of trouble reports are divided by the total "number of service" lines, ports or combination that exist for the CLECs and BST respectively at the end of the report month.	
Calculation:	
Customer Trouble Report Rate = (Count of Initial and Repeated Trouble Reports closed in the Current Period) / (Number of Service Access Lines in service at End of the Report Period) X 100	
Report Structure:	
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate 	
Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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
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-Resale/BST Design-Retail CLEC PBX, Centrex, and ISDN Resale/BST PBX, Centrex, and ISDN Retail CLEC Trunking-Resale / BST Trunking-Retail UNES-(See Appendix D)	

Revision Date: 07/17/00 (see)

BellSouth
Service Quality Measurements Plan

MAINTENANCE & REPAIR

Report/Measurement:	
M&R-3. Maintenance Average Duration	
Definition:	
The Average duration of Customer Trouble Reports from the receipt of the Customer Trouble Report to the time the trouble report is cleared.	
Exclusions:	
<ul style="list-style-type: none"> • 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. • Trouble reports greater than 10 days 	
Business Rules:	
For Average Duration the clock starts on the date and time of the receipt of a correct repair request. The clock stops on the date and time the service is restored and the BST or CLEC customer is notified (when the technician completes the trouble ticket on his/her CAT or work systems).	
Calculation:	
Maintenance Average Duration = $\Sigma(\text{Date and Time of Service Restoration}) - (\text{Date and Time Trouble Ticket was Opened}) / \Sigma(\text{Total Closed Troubles in the reporting period})$	
Report Structure:	
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate 	
Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
<ul style="list-style-type: none"> • Report month • Total Tickets (LINE_NBR) • 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) • Geographic Scope 	<ul style="list-style-type: none"> • 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
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-Resale/BST Design-Retail CLEC PBX, Centrex, and ISDN Resale/BST PBX, Centrex, and ISDN Retail CLEC Trunking-Resale / BST Trunking-Retail UNES-(See Appendix D)	

Revision Date: 05/25/00 (see)

BellSouth
Service Quality Measurements Plan

MAINTENANCE & REPAIR

Report/Measurement:	
M&R-4. 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 closed.	
Exclusions:	
<ul style="list-style-type: none"> • 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:	
Includes Customer trouble reports received within 30 days of an original Customer trouble report	
Calculation:	
Percent Repeat Troubles within 30 Days = (Count of closed Customer Troubles where more than one trouble report was logged for the same service line within a continuous 30 days of the reporting period) / (Total Trouble Reports Closed in Reporting Period) X 100	
Report Structure:	
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate 	
Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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
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-Resale/BST Design-Retail CLEC PBX, Centrex, and ISDN Resale/BST PBX, Centrex, and ISDN Retail CLEC Trunking-Resale / BST Trunking-Retail UNES-(See Appendix D)	

Revision Date: 07/17/00 (see)

BellSouth
Service Quality Measurements Plan

MANTENANCE & REPAIR

Report/Measurement:	
M&R-5. Out of Service (OOS) > 24 Hours	
Definition:	
For Out of Service Troubles (no dial tone, cannot be called or cannot call out) the percentage of Total OOS Troubles cleared in excess of 24 hours. (All design services are considered to be out of service).	
Exclusions:	
<ul style="list-style-type: none"> • 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 elapsed time exceeds 24 hours.	
Calculation:	
Out of Service (OOS) > 24 hours = (Total Cleared Troubles OOS > 24 Hours) / Total OOS Troubles in Reporting Period) X 100	
Report Structure:	
<ul style="list-style-type: none"> • CLEC Specific • BST Aggregate • CLEC Aggregate 	
Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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
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-Resale / BST Design-Retail CLEC PBX, Centrex and ISDN Resale / BST PBX, Centrex and ISDN Retail CLEC Trunking-Resale /BST Trunking- Retail UNEs – (See Appendix D)	

Revision Date: 05/12/00 (see)

**BellSouth
Service Quality Measurements Plan**

MAINTENANCE & REPAIR

Report/Measurement:	
M&R-6. Average Answer Time – Repair Centers	
Definition:	
This measures the average time a customer is in Queue when calling a BellSouth Repair Center.	
Exclusions:	
None	
Business Rules:	
The clock starts when a CLEC Representative or BellSouth customer makes a choice on the Repair Center's menu and is put in queue for the next repair attendant. The clock stops when the repair attendant answers the call. (abandoned calls are not included)	
(NOTE: The Total Column is a combined BST Residence and Business number)	
Level of Disaggregation:	
Region. CLEC/BST Service Centers and BST Repair Centers are regional.	
Calculation:	
Average Answer Time for BST's Repair Centers = (Time BST Repair Attendant Answers Call) – (Time of entry into queue until ACD Selection) / (Total number of calls by reporting period)	
Report Structure:	
<ul style="list-style-type: none"> • CLEC Aggregate • BST Aggregate 	
Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
<ul style="list-style-type: none"> • CLEC Average Answer Time 	<ul style="list-style-type: none"> • BST Average Answer Time
Retail Analog/Benchmark:	
For CLEC, Average Answer Times in UNE Center and BRMC are comparable to the Average Answer Times in the BST Repair Centers.	

Revision Date: 05/25/00 (see)

BellSouth
Service Quality Measurements Plan

BILLING

Report/Measurement:	
B-1. Invoice Accuracy	
Definition:	
This measure provides the percentage of accuracy of the billing invoices rendered to CLECs during the current month.	
Exclusions:	
Adjustments not related to billing errors (e.g., credits for service outage, special promotion credits, adjustments to satisfy the customer)	
Business Rules:	
The accuracy of billing invoices delivered by BST to the CLEC must enable them to provide a degree of billing accuracy comparative to BST bills rendered to retail customers 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:	
$\text{Invoice Accuracy} = (\text{Total Billed Revenues during current month}) - (\text{Absolute Value of Billing Related Adjustments during current month}) / \text{Total Billed Revenues during current month} \times 100$	
Report Structure:	
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate 	
Level of Disaggregation:	
<ul style="list-style-type: none"> • Product / Invoice Type <ul style="list-style-type: none"> ➢ Resale ➢ UNE ➢ Interconnection • Geographic Scope <ul style="list-style-type: none"> ➢ Region 	
Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
<ul style="list-style-type: none"> • Report Month • Invoice Type • Total Billed Revenue Adjustments 	<ul style="list-style-type: none"> • Report month • Retail Type <ul style="list-style-type: none"> ➢ CRIS ➢ CABS • Total Billed Revenue • Billing Related Adjustments
Retail Analog/Benchmark:	
CLEC Invoice Accuracy is comparable to BST Invoice Accuracy See Appendix D	

Revision Date: 05/03/00 (dg)

**BellSouth
Service Quality Measurements Plan**

BILLING

Report/Measurement:	
B-2. Mean Time to Deliver Invoices	
Definition:	
<p>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.</p> <p>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.</p>	
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:	
$\text{Mean Time To Deliver Invoices} = \frac{\sum [(\text{Invoice Transmission Date}) - (\text{Close Date of Scheduled Bill Cycle})]}{(\text{Count of Invoices Transmitted in Reporting Period})}$	
Report Structure:	
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate 	
Level of Disaggregation:	
<ul style="list-style-type: none"> • Product / Invoice Type <ul style="list-style-type: none"> ➢ Resale ➢ UNE ➢ Interconnection • Geographic Scope <ul style="list-style-type: none"> ➢ Region 	
Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
<ul style="list-style-type: none"> • Report month • Invoice Type • Invoice Transmission Count • Date of Scheduled Bill Close 	<ul style="list-style-type: none"> • Report month • Retail Type <ul style="list-style-type: none"> ➢ CRIS ➢ CABS • Invoice Transmission Count • Date of Scheduled Bill Close
Retail Analog/Benchmark:	
<p>CRIS-based invoices will be released for delivery within six (6) business days. CABS-based invoices will be released for delivery within eight (8) calendar days. CLEC Average Delivery Intervals for both CRIS and CABS Invoices are comparable to BST Average delivery for both systems. See Appendix D</p>	

Revision Date: 05/03/00 (dg)

**BellSouth
Service Quality Measurements Plan**

BILLING

Report/Measurement:	
B-3. Usage Data Delivery Accuracy	
Definition:	
This measurement captures the percentage of recorded usage that is delivered error free and in an acceptable format to the appropriate Competitive Local Exchange Carrier (CLEC). These percentages will provide the necessary data for use as a comparative measurement for BellSouth performance. This measurement captures Data Delivery Accuracy rather than the accuracy of the individual usage recording.	
Exclusions:	
None	
Business Rules:	
The accuracy of the data delivery of usage records delivered by BST to the CLEC must enable them to provide a degree of accuracy comparative to BST bills rendered to their retail customers. If errors are detected in the delivery process, they are investigated, evaluated and documented. Errors are corrected and the data retransmitted to the CLEC.	
Calculation:	
Usage Data Delivery Accuracy = $\Sigma[(\text{Total number of usage data packs sent during current month}) - (\text{Total number of usage data packs requiring retransmission during current month})] / (\text{Total number of usage data packs send during current month}) \times 100$	
Report Structure:	
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate 	
Level of Disaggregation:	
<ul style="list-style-type: none"> • Geographic Scope <ul style="list-style-type: none"> ➢ Region 	
Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
<ul style="list-style-type: none"> • Report Month • Record Type <ul style="list-style-type: none"> ➢ BellSouth Recorded ➢ Non BellSouth Recorded 	<ul style="list-style-type: none"> • Report month • Record Type
Retail Analog/Benchmark:	
CLEC Usage Data Delivery Accuracy is comparable to BST Usage Data Delivery Accuracy See Appendix D	

Revision Date: 02/28/00 (dg)

**BellSouth
Service Quality Measurements Plan**

BILLING

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

Revision Date: 02/28/00 (dg)

BellSouth
Service Quality Measurements Plan

BILLING

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

Revision date: 02/28/00 (dg)

BellSouth
Service Quality Measurements Plan

BILLING

Report/Measurement	
B-6. Mean Time to Deliver Usage	
Definition:	
This measurement provides the average time it takes to deliver Usage Records to a CLEC. A parity measure is also provided showing timeliness of BST messages processed and transmitted via CMDS. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.	
Exclusions:	
None	
Business Rules:	
The purpose of this measurement is to demonstrate the average number of days it takes BST to deliver Usage data to the appropriate CLEC. Usage data is mechanically transmitted or mailed to the CLEC data processing center once daily. Method of delivery is at the option of the CLEC.	
Calculation:	
Mean Time to Deliver Usage = Σ (Volume of Records Delivered X estimated number of days to deliver) / Total Record Volume Delivered.	
Note: Any usage record falling in the 30+ day interval will be added using an average figure of 31.5 days.	
Report Structure:	
<ul style="list-style-type: none"> • CLEC Aggregate • CLEC Specific • BST Aggregate 	
Level of Disaggregation:	
<ul style="list-style-type: none"> • Geographic Scope <ul style="list-style-type: none"> ➢ Region 	
Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
<ul style="list-style-type: none"> • Report Month • Record Type <ul style="list-style-type: none"> ➢ BellSouth Recorded ➢ Non-BellSouth Recorded 	<ul style="list-style-type: none"> • Report Monthly • Record Type
Retail Analog/Benchmark:	
Mean Time to Deliver Usage to CLEC is comparable to Mean Time to Deliver Usage to BST See Appendix D	

Revision Date: 05/03/00 (dg)

BellSouth
Service Quality Measurements Plan

OPERATOR SERVICES AND DIRECTORY ASSISTANCE

Report/Measurement:
OS-1. Speed to Answer Performance/Average Speed to Answer - Toll
Definition:
Measurement of the average time in seconds calls wait before answered by a toll operator.
Exclusions:
None
Business Rules:
The clock starts when the customer enters the queue and the clock stops when a BellSouth representative answers the call or the customer abandons the call. The length of each call is determined by measuring, using a scanning technique, and accumulating the elapsed time from the entry of a customer call into the BellSouth call management system queue until the customer call is abandoned or transferred to BellSouth personnel assigned to handle calls for assistance. The system makes no distinction between CLEC customers and BST customers.
Calculation:
Total queue time ÷ total calls answered (Note: Total queue time includes time that answered calls wait in queue as well as time abandoned calls wait in queue prior to abandonment.)
Report Structure:
<ul style="list-style-type: none">• Reported for the aggregate of BST and CLECs<ul style="list-style-type: none">➢ State
Level of Disaggregation:
None
Data Retained (on Aggregate Basis):
<ul style="list-style-type: none">• For the items below, BST's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP• Month• Call Type (Toll)• Average Speed of Answer
Retail Analog/Benchmark:
Parity by Design See Appendix D

Revision Date: 07/19/00 (tg)

**BellSouth
Service Quality Measurements Plan**

OPERATOR SERVICES AND DIRECTORY ASSISTANCE

Report/Measurement:
OS-2. Speed to Answer Performance/Percent Answered with "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 for the Average Speed to Answer by a State Commission.
Exclusions:
None
Business Rules:
The clock starts when the customer enters the queue and the clock stops when a BellSouth representative answers the call or the customer abandons the call. The length of each call is determined by measuring, using a scanning technique, and accumulating the elapsed time from the entry of a customer call into the BellSouth call management system queue until the customer call is abandoned or transferred to BellSouth personnel assigned to handle calls for assistance. The system makes no distinction between CLEC customers and 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:
<ul style="list-style-type: none"> • Reported for the aggregate of BST and CLECs <ul style="list-style-type: none"> ➢ State
Level of Disaggregation:
None
Data Retained (on Aggregate Basis):
<ul style="list-style-type: none"> • For the items below, BST's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP • Month • Call Type (Toll) • Average Speed of Answer
Retail Analog/Benchmark:
Parity by Design See Appendix D

Revision Date: 07/19/00 (tg)

BellSouth
Service Quality Measurements Plan

OPERATOR SERVICES AND DIRECTORY ASSISTANCE

Report/Measurement:
DA-1. Speed to Answer Performance/Average Speed to Answer – Directory Assistance (DA)
Definition:
Measurement of the average time in seconds calls wait before answered by a DA operator.
Exclusions:
None
Business Rules:
The clock starts when the customer enters the queue and the clock stops when a BellSouth representative answers the call or the customer abandons the call. The length of each call is determined by measuring, using a scanning technique, and accumulating the elapsed time from the entry of a customer call into the BellSouth call management system queue until the customer call is abandoned or transferred to BellSouth personnel assigned to handle calls for assistance. The system makes no distinction between CLEC customers and BST customers.
Calculation:
Total queue time ÷ total calls answered (Note: Total queue time includes time that answered calls wait in queue as well as time abandoned calls wait in queue prior to abandonment.)
Report Structure:
<ul style="list-style-type: none"> • Reported for the aggregate of BST and CLECs <ul style="list-style-type: none"> ➢ State
Level of Disaggregation:
None
Data Retained (on Aggregate Basis)
<ul style="list-style-type: none"> • For the items below, BST's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP • Month • Call Type (DA) • Average Speed of Answer
Retail Analog/Benchmark
Parity by Design See Appendix D

Revision Date: 07/19/00 (tg)

BellSouth
Service Quality Measurements Plan

OPERATOR SERVICES AND DIRECTORY ASSISTANCE

Report/Measurement:
DA-2. Speed to Answer Performance/Percent Answered within "X" Seconds – Directory Assistance (DA)
Definition:
Measurement of the percent of DA calls that are answered in less than "X" seconds. The number of seconds represented by "X" is twenty, except where a different regulatory benchmark has been set for the Average Speed to Answer by a State Commission.
Exclusions:
None
Business Rules:
The clock starts when the customer enters the queue and the clock stops when a BellSouth representative answers the call or the customer abandons the call. The length of each call is determined by measuring, using a scanning technique, and accumulating the elapsed time from the entry of a customer call into the BellSouth call management system queue until the customer call is abandoned or transferred to BellSouth personnel assigned to handle calls for assistance. The system makes no distinction between CLEC customers and 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:
<ul style="list-style-type: none"> • Reported for the aggregate of BST and CLECs <ul style="list-style-type: none"> ➢ State
Level of Disaggregation:
None
Data Retained (on Aggregate Basis)
<ul style="list-style-type: none"> • For the items below, BST's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP. • Month • Call Type (DA) • Average Speed of Answer
Retail Analog/Benchmark
Parity by Design See Appendix D

Revision Date: 07/19/00 (tg)

**BellSouth
Service Quality Measurements Plan**

E911

Report/Measurement:
E-1. Timeliness
Definition:
Measures the percent of batch orders for E911 database updates (to CLEC resale and BST retail records) processed successfully within a 24-hour period.
Exclusions:
<ul style="list-style-type: none"> • 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 Control System (SOCS). Processing stops when SCC loads the individual records to the E911 database. The system makes no distinction between CLEC resale records and BST retail records.
Calculation:
$E911 \text{ Timelines} = \Sigma (\text{Number of batch orders processed within 24 hours} \div \text{Total number of batch orders submitted}) \times 100$
Report Structure:
<ul style="list-style-type: none"> • Reported for the aggregate of CLEC resale updates and BST retail updates <ul style="list-style-type: none"> ➢ State ➢ Region
Level of Disaggregation:
None
Data Retained:
<ul style="list-style-type: none"> • Report month • Aggregate data
Retail Analog/Benchmark:
Parity by Design See Appendix D

Revision Date: 05/10/00 (tg)

**BellSouth
Service Quality Measurements Plan**

E911

Report/Measurement:
E-1. Accuracy
Definition:
Measures the percent of E911 telephone number (TN) record updates (to CLEC resale and BST retail records) processed successfully for E911.
Exclusions:
<ul style="list-style-type: none"> • 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 Control System (SOCS). The system makes no distinction between CLEC resale records and BST retail records.
Calculation:
$E911 \text{ Accuracy} = \Sigma (\text{Number of record individual updates processed with no errors} \div \text{Total number of individual record updates}) \times 100$
Report Structure:
<ul style="list-style-type: none"> • Reported for the aggregate of CLEC resale updates and BST retail updates <ul style="list-style-type: none"> ➢ State ➢ Region
Level of Disaggregation:
None
Data Retained:
<ul style="list-style-type: none"> • Report month • Aggregate data
Retail Analog/Benchmark:
Parity by Design See Appendix D

Revision Date: 05/10/00 (tg)

BellSouth
Service Quality Measurements Plan

E911

Report/Measurement:
E-3. Mean Interval
Definition:
Measures the mean interval processing of E911 batch orders (to update CLEC resale and BST retail records).
Exclusions:
<ul style="list-style-type: none"> • Any resale order canceled by a CLEC • Facilities-based CLEC orders
Business Rules:
The processing period is calculated based on the date and time processing starts on the batch orders and the date and time processing stops on the batch orders. Data is posted in 4-hour increments up to and beyond 24 hours. The system makes no distinction between CLEC resale records and BST retail records.
Calculation:
$\text{E911 Mean Interval} = \frac{\sum (\text{Date and time of batch order completion} - \text{Date and time of batch order submission})}{\text{Number of batch orders completed}}$
Report Structure:
<ul style="list-style-type: none"> • Reported for the aggregate of CLEC resale updates and BST retail updates <ul style="list-style-type: none"> > State > Region
Level of Disaggregation:
None
Data Retained:
<ul style="list-style-type: none"> • Report month • Aggregate data
Retail Analog/Benchmark:
Parity by Design See Appendix D

Revision Date: 05/15/00 (tg)

BellSouth
Service Quality Measurements Plan

TRUNK GROUP PERFORMANCE

Report/Measurement:																												
TGP-1. Trunk Group Performance-Aggregate																												
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:																												
<ul style="list-style-type: none"> • Trunk Groups for which valid data is not available for an entire study period • Duplicate trunk group information 																												
Business Rules:																												
<p>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.</p> <p>Monthly Weighted Average Blocking:</p> <ul style="list-style-type: none"> • 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. <p>Aggregate Monthly Blocking:</p> <ul style="list-style-type: none"> • 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. <p>Trunk Categorization:</p> <ul style="list-style-type: none"> • 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. <p>CLEC Affecting Categories:</p> <table style="width: 100%; border: none;"> <thead> <tr> <th style="width: 20%;"></th> <th style="width: 40%; text-align: center;"><u>Point A</u></th> <th style="width: 40%; text-align: center;"><u>Point B</u></th> </tr> </thead> <tbody> <tr> <td>Category 1:</td> <td>BellSouth End Office</td> <td>BellSouth Access Tandem</td> </tr> <tr> <td>Category 3:</td> <td>BellSouth End Office</td> <td>CLEC Switch</td> </tr> <tr> <td>Category 4:</td> <td>BellSouth Local Tandem</td> <td>CLEC Switch</td> </tr> <tr> <td>Category 5:</td> <td>BellSouth Access Tandem</td> <td>CLEC Switch</td> </tr> <tr> <td>Category 10:</td> <td>BellSouth End Office</td> <td>BellSouth Local Tandem</td> </tr> <tr> <td>Category 16:</td> <td>BellSouth Tandem</td> <td>BellSouth Tandem</td> </tr> </tbody> </table> <p>BellSouth Affecting Categories:</p> <table style="width: 100%; border: none;"> <thead> <tr> <th style="width: 20%;"></th> <th style="width: 40%; text-align: center;"><u>Point A</u></th> <th style="width: 40%; text-align: center;"><u>Point B</u></th> </tr> </thead> <tbody> <tr> <td>Category 9:</td> <td>BellSouth End Office</td> <td>BellSouth End Office</td> </tr> </tbody> </table>			<u>Point A</u>	<u>Point B</u>	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		<u>Point A</u>	<u>Point B</u>	Category 9:	BellSouth End Office	BellSouth End Office
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BellSouth
Service Quality Measurements Plan

TRUNK GROUP PERFORMANCE – (TGP-1. Trunk Group Performance-Aggregate - Continued)

Calculation:	
<p>Monthly Average Blocking:</p> <ul style="list-style-type: none"> 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. <p>Aggregate Monthly Blocking:</p> <ul style="list-style-type: none"> 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:	
<ul style="list-style-type: none"> CLEC Aggregate BST Aggregate <ul style="list-style-type: none"> ➤ State 	
Level of Disaggregation:	
Trunk Group	
Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
<ul style="list-style-type: none"> Report Month Total Trunk Groups Number of Trunk Groups by CLEC Hourly blocking per trunk group Hourly usage per trunk group Hourly call attempts per trunk group 	<ul style="list-style-type: none"> Report Month Total Trunk Groups Aggregate Hourly blocking per trunk group Hourly usage per trunk group Hourly call attempts per trunk group
Retail Analog/Benchmark:	
Any 2 hour period in 24 hours where CLEC blockage exceeds BST blockage by more than 0.5% = a miss using trunk groups 1,3,4,5,10,16 for CLECs and 9 for BST.	

Revision Date: 6/23/00 (tm)

BellSouth
Service Quality Measurements Plan

TRUNK GROUP PERFORMANCE

Report/Measurement:																												
TGP-2. Trunk Group Performance-CLEC Specific																												
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:																												
<ul style="list-style-type: none"> • Trunk Groups for which valid data is not available for an entire study period • Duplicate trunk group information 																												
Business Rules:																												
<p>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.</p> <p>Monthly Weighted Average Blocking:</p> <ul style="list-style-type: none"> • 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. <p>Aggregate Monthly Blocking:</p> <ul style="list-style-type: none"> • 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. <p>Trunk Categorization:</p> <ul style="list-style-type: none"> • 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. <p>CLEC Affecting Categories:</p> <table style="width: 100%; border: none;"> <thead> <tr> <th style="width: 20%;"></th> <th style="text-align: center; border-bottom: 1px solid black;"><u>Point A</u></th> <th style="text-align: center; border-bottom: 1px solid black;"><u>Point B</u></th> </tr> </thead> <tbody> <tr> <td>Category 1:</td> <td>BellSouth End Office</td> <td>BellSouth Access Tandem</td> </tr> <tr> <td>Category 3:</td> <td>BellSouth End Office</td> <td>CLEC Switch</td> </tr> <tr> <td>Category 4:</td> <td>BellSouth Local Tandem</td> <td>CLEC Switch</td> </tr> <tr> <td>Category 5:</td> <td>BellSouth Access Tandem</td> <td>CLEC Switch</td> </tr> <tr> <td>Category 10:</td> <td>BellSouth End Office</td> <td>BellSouth Local Tandem</td> </tr> <tr> <td>Category 16:</td> <td>BellSouth Tandem</td> <td>BellSouth Tandem</td> </tr> </tbody> </table> <p>BellSouth Affecting Categories:</p> <table style="width: 100%; border: none;"> <thead> <tr> <th style="width: 20%;"></th> <th style="text-align: center; border-bottom: 1px solid black;"><u>Point A</u></th> <th style="text-align: center; border-bottom: 1px solid black;"><u>Point B</u></th> </tr> </thead> <tbody> <tr> <td>Category 9:</td> <td>BellSouth End Office</td> <td>BellSouth End Office</td> </tr> </tbody> </table>			<u>Point A</u>	<u>Point B</u>	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		<u>Point A</u>	<u>Point B</u>	Category 9:	BellSouth End Office	BellSouth End Office
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BellSouth
Service Quality Measurements Plan

TRUNK GROUP PERFORMANCE – (TGP-1. Trunk Group Performance-Aggregate – Continued)

Calculation:	
<p>Monthly Average Blocking:</p> <ul style="list-style-type: none"> 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. <p>Aggregate Monthly Blocking:</p> <ul style="list-style-type: none"> 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:	
<ul style="list-style-type: none"> CLEC Specific <ul style="list-style-type: none"> State 	
Level of Disaggregation:	
Trunk Group	
Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
<ul style="list-style-type: none"> Report Month Total Trunk Groups Number of Trunk Groups by CLEC Hourly blocking per trunk group Hourly usage per trunk group Hourly call attempts per trunk group 	<ul style="list-style-type: none"> Report Month Total Trunk Groups Aggregate Hourly blocking per trunk group Hourly usage per trunk group Hourly call attempts per trunk group
Retail Analog/Benchmark:	
Any 2 hour period in 24 hours where CLEC blockage exceeds BST blockage by more than 0.5% = a miss using trunk groups 1,3,4,5,10,16 for CLECs and 9 for BST.	

Revision Date: 6/23/00 (tm)

BellSouth
Service Quality Measurements Plan

TRUNK GROUP PERFORMANCE

Report/Measurement:	
TGP-3. Trunk Group Service Report	
Definition:	
A report of the percent blocking above the Measured Blocking Threshold (MBT) on all final trunk groups between CLEC Points of Termination and BST end offices or tandems.	
Exclusions:	
<ul style="list-style-type: none"> • 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 Network Information Warehouse (NIW), on an hourly basis for Business and non-business Days . The traffic load sets, including offered load and observed blocking ratio (calls blocked divided by calls attempted), are averaged for the entire report 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 highlights 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:	
<ul style="list-style-type: none"> • BST Aggregate <ul style="list-style-type: none"> ➢ CTTG ➢ Local • CLEC Aggregate <ul style="list-style-type: none"> ➢ BST Administered CLEC Trunk ➢ CLEC Administered CLEC Trunk • CLEC Specific <ul style="list-style-type: none"> ➢ BST Administered CLEC Trunk ➢ CLEC Administered CLEC Trunk 	
Level of Disaggregation:	
State	
Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Report month • Total trunk groups • Total trunk groups for which data is available • Trunk groups with blocking greater than the MBT • Percent of trunk groups with blocking greater than the MBT
Retail Analog/Benchmark:	
CLEC Trunk Blockage/BST Trunk Blockage See Appendix D	

Revision Date: 07/26/00 (tm)

BellSouth
Service Quality Measurements Plan

TRUNK GROUP PERFORMANCE

Report/Measurement:	
TGP-4. Trunk Group Service Detail	
Definition:	
A detailed list of all final trunk groups between CLEC Points of Presence and BST end offices or tandems, and the actual blocking performance when the blocking exceeds the Measured Blocking Threshold (MBT) for the trunk groups.	
Exclusions:	
<ul style="list-style-type: none"> • Trunk groups for which valid traffic data is not available • High use trunk groups 	
Business Rules:	
<p>Traffic trunking data measurements are validated and processed by the Network Information Warehouse (NIW), on an hourly basis for Business and non-business Days . The traffic load sets, including offered load and observed blocking ratio (calls blocked divided by calls attempted), are averaged for the entire reportperiod, 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 highlights 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%.</p>	
Calculation:	
Measured blocking = (Total number of blocked calls) / (Total number of attempted calls) X 100	
Report Structure:	
<ul style="list-style-type: none"> • BST Specific/CLEC Specific <ul style="list-style-type: none"> ➤ Traffic Identity ➤ TGSN ➤ Tandem ➤ End Office ➤ 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 Performance:
<ul style="list-style-type: none"> • 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 identify, TGSN, end points, description, busy hour, valid study days, number reports 	<ul style="list-style-type: none"> • 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 identify, TGSN, end points, description, busy hour, valid study days, number reports
Retail Analog/Benchmark:	
CLEC Trunk Blockage/BST Blockage See Appendix D	

Revision Date: 07/26/00 (tm)

BellSouth
Service Quality Measurements Plan

COLLOCATION

Report/Measurement:
C-1. Average Response Time
Definition:
Measures the average time (counted in business days) from the receipt of a complete and accurate <i>collocation application</i> (including receipt of application fees) to the date BellSouth responds in writing.
Exclusions:
<ul style="list-style-type: none"> • 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 = $\Sigma[(\text{Request Response Date}) - (\text{Request Submission Date})] / \text{Count of Responses Returned within Reporting Period.}$
Report Structure:
<ul style="list-style-type: none"> • Individual CLEC (alias) aggregate • Aggregate of all CLECs
Level of Disaggregation:
<ul style="list-style-type: none"> • State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area – MSA) • Virtual-Initial • Virtual-Augment • Virtual-Combined • Physical-Initial • Physical-Augment • Physical-Combined • Caged/Cageless (under development)
Data Retained:
<ul style="list-style-type: none"> • Report period • Aggregate data
Retail Analog/Benchmark:
See Appendix D

Revision Date: 07/19/00 (tg)

BellSouth
Service Quality Measurements Plan

COLLOCATION

Report/Measurement:
C-2. Average Arrangement Time
Definition:
Measures the average time (counted in calendar days) from the receipt of a complete and accurate Bone Fide firm order (including receipt of appropriate fee) to the date BST completes the collocation arrangement and notifies the CLEC.
Exclusions:
<ul style="list-style-type: none"> • Any Bona Fide firm order cancelled by the CLEC • Time for BST to obtain permits (applies in AL, GA, KY, LA, MS, NC, SC and TN)
Business Rules:
The clock starts on the date that BST receives a complete and accurate Bone 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 and notifies the customer.
Calculation:
Average Arrangement Time = $\Sigma[(\text{Date Collocation Arrangement is Complete}) - (\text{Date Order for Collocation Arrangement Submitted})] / \text{Total Number of Collocation Arrangements Completed during Reporting Period.}$
Report Structure:
<ul style="list-style-type: none"> • Individual CLEC (alias) aggregate • Aggregate of all CLECs
Level of Disaggregation:
<ul style="list-style-type: none"> • State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area – MSA) • Virtual-Initial • Virtual-Augment • Virtual-Combined • Physical-Initial • Physical-Augment • Physical-Combined • Cage/Cageless (under development)
Data Retained:
<ul style="list-style-type: none"> • Report period • Aggregate data
Retail Analog/Benchmark:
See Appendix D

Revision Date: 07/19/00 (tg)

BellSouth
Service Quality Measurements Plan

COLLOCATION

Report/Measurement:
C-3. Percent of Due Dates Missed
Definition:
Measures the percent of missed due dates for collocation arrangements.
Exclusions:
<ul style="list-style-type: none"> • Any Bona Fide firm order cancelled by the CLEC • Time for BST to obtain permits
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:
$\% \text{ of Due Dates Missed} = \Sigma (\text{Number of Completed Orders that were not completed w/I ILEC Committed Due Date during Reporting Period}) / \text{Number of Orders Completed in Reporting Period} \times 100.$
Report Structure:
<ul style="list-style-type: none"> • Individual CLEC (alias) aggregate • Aggregate of all CLECs
Level of Disaggregation:
<ul style="list-style-type: none"> • State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area – MSA) • Virtual-Initial • Virtual-Augment • Virtual-Combined • Physical-Initial • Physical-Augment • Physical-Combined • Cage/Cageless (under development)
Data Retained
<ul style="list-style-type: none"> • Report period • Aggregate data
Retail Analog/Benchmark:
See Appendix D < 10% Missed Due Dates

Revision Date: 07/19/00 (tg)

**Service Performance Measurements
And Enforcement Mechanisms**

1. Scope

- 1.1 This Attachment includes Enforcement Measurements with corresponding Enforcement Mechanisms applicable to this Agreement. All Exhibits are located on the BellSouth website at <https://pmap.bellsouth.com/help.cfm>.
- 1.2 If the Commission issues an order mandating certain service performance measurements and associated remedies, that order will supercede this Attachment on the effective date of the order.

2. Reporting

- 2.1 In providing services pursuant to this Agreement, BellSouth will report its performance to CLEC-1 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 Exhibit B.
- 2.2 BellSouth will make performance reports available to CLEC-1 on a monthly basis. The reports will contain information collected in each performance category and will be available to CLEC-1 through some electronic medium to be determined by BellSouth. BellSouth will also provide electronic access to the raw data underlying the performance measurements. Within thirty (30) days of execution of this Agreement, BellSouth will provide a detailed session of instruction to CLEC-1 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 each calendar quarter. BellSouth will not delete any Service Quality Measurement without prior written consent of CLEC-1. CLEC-1 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 pursuant to Section 16.5 of 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 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, 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 CLEC-1. BellSouth will notify CLEC-1 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 pursuant to Section 16.5 of 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 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 CLEC-1'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 CLEC-1 agree to amend this Attachment to conform to the FCC's order.

4.2 Effective Date

The Enforcement Mechanisms set forth in this Attachment 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, 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 CLEC-1 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, 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 CLEC-1 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 CLEC-1 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 CLEC-1 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 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 legal and regulatory claims and remedies available to CLEC-1.

4.4.2 Payment of any Tier-1 or Tier-2 Enforcement Mechanisms shall not be considered as an admission against interest or an admission of liability or culpability in any legal, regulatory or other proceeding relating to BellSouth’s performance. The payment of any Tier-1 Enforcement Mechanisms to CLEC-1 shall be credited against any liability associated with or related to BellSouth’s service performance.

4.4.3 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. CLEC-1 will not oppose any effort by BellSouth to set off Tier-2 Enforcement Mechanisms from any additional assessment imposed by the Commission.

4.4.4 CLEC-1 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 CLEC-1. Therefore, CLEC-1 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.

4.5 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 included in 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 located within 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 included in 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 included in 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 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 CLEC-1 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 (30th) 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 CLEC-1 the required amount, BellSouth will pay CLEC-1 6% simple interest per annum.
- 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 CLEC-1 disputes the amount paid to CLEC-1 for Tier-1 Enforcement Mechanisms, CLEC-1 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 CLEC-1 written findings within thirty (30) days after receipt of the claim. If BellSouth determines CLEC-1 is owed additional amounts, BellSouth shall pay CLEC-1 such additional amounts within thirty (30) days after its findings along with 6% simple interest per annum.
- 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 CLEC-1 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 CLEC-1 with reasonable notice of such acts or omissions and provide CLEC-1 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 CLEC-1 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 CLEC-1 that is contrary to any of its obligations under its Interconnection Agreement with BellSouth; an act or omission by CLEC-1 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.

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, CLEC-1 may commence a proceeding with the Commission to demonstrate why BellSouth should pay any amount in excess of the cap. CLEC-1 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 Commission.

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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.
	ALEC	Alternative Local Exchange Company = FL CLEC
	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
	CLP	Competitive Local Provider = NC CLEC
	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.

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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	DSL	Digital Subscriber Line
	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 if 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.

BellSouth
Service Quality Measurements Plan

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
	IPC	Interconnection Purchasing Center
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.

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Service Quality Measurements Plan

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

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Service Quality Measurements Plan

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. RSAG software contract for address search
	RSAGADDR	RSAG software contract for telephone number search
	RSAGTN	
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	VSEEM	Voluntary Self Effectuating Enforcement Mechanism
W	WTN	A unique identifier for elements combined in a service configuration
X		
Y		
Z		
Σ		Sum of:

**BellSouth
Service Quality Measurements Plan**

Appendix C

BELLSOUTH'S AUDIT POLICY:

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

1. The cost shall be borne 50% by BellSouth and 50% by the CLEC or CLECs.
2. The independent third party auditor shall be selected with input from BellSouth, the PSC, if applicable, and the CLEC(s).
3. BellSouth, the PSC and the CLEC(s) shall jointly determine the scope of the audit.

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

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Service Quality Measurements Plan**

**APPENDIX D
Analog and Benchmarks**

BST SQM Category	Measures and Sub-Metrics	Resale Retail Analogue	UNEs Retail Analogue	Benchmark*
<i>Pre-Ordering</i>	Percent Response Received within "X" seconds	Parity w/ retail where applicable		
	OSS Interface Availability			99.5%
<i>Ordering</i>	Percent Rejected Service Request ♦ Residence ♦ Business ♦ UNE			90% 80% 80%
	Percent Rejected Service Request	Diagnostic		Diagnostic
	Reject Interval (Mechanized)			95% within 1 hrs.
	♦ Reject Interval (Non-Mechanized and Partially Mechanized)			85% < 48 hrs.
	Firm Order Confirmation Timeliness (Mechanized) (Non-Mechanized & Partially Mechanized)			95% within 4 hrs. 85% < 48 hrs.
	Speed of Answer in Ordering Center	X	X	
<i>Provisioning</i>	Mean Held Order Interval			
	♦ Resale Residence	X		
	♦ Resale Business	X		
	♦ Resale Design	X		
	♦ Resale PBX	X		
	♦ Resale Centrex	X		
	♦ Resale ISDN	X		
	♦ UNE Design		Retail Design	
	♦ UNE Non Design		Retail Residence and Business	
	♦ UNE Loop and Port Combos		Retail Residence and Business	
	♦ UNE 2w Loop with NP -- Non-Design		Retail Residence and Business	
	♦ UNE 2w Loop without NP -- Non-Design		Retail Residence and Business	
	♦ UNE Loop Other with NP Non-Design		Retail Residence and Business	
	♦ UNE Loop Other without NP Non-Design		Retail Residence and Business	

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**APPENDIX D
Analog and Benchmarks**

BST SQM Category	Measures and Sub-Metrics	Resale Retail Analogue	UNEs Retail Analogue	Benchmark*
<i>Provisioning</i>	• UNE Other Non-Design		Retail Residence and Business	
	• UNE 2w Loop with NP - Design		Retail Residence and Business	
	• UNE 2w Loop without NP - Design		Retail Residence and Business	
	• UNE Loop Other with NP – Design		Retail Design	
	• UNE Loop Other without NP – Design		Retail Design	
	• UNE Other Design		Retail Design	
	♦ Local Interconnection Trunks	X		
	<u>Average Jeopardy Notice Interval (Mechanized)</u>			
	• 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 Design			95% > = 24 hrs.
	• UNE Non-Design			95% > = 24 hrs.
	♦ UNE Loop and Port Combos			95% > = 24 hrs.
	♦ UNE 2w Loop with NP – Non-Design			95% > = 24 hrs.
	♦ UNE 2w Loop without NP – Non-Design			95% > = 24 hrs.
	♦ UNE Loop Other with NP Non-Design			95% > = 24 hrs.
	♦ UNE Loop Other without NP Non-Design			95% > = 24 hrs.
	♦ UNE Other Non-Design			95% > = 24 hrs.
	♦ UNE 2w Loop with NP – Design			95% > = 24 hrs.
	♦ UNE 2w Loop without NP – Design			95% > = 24 hrs.
	♦ UNE Loop Other with NP – Design			95% > = 24 hrs.
	♦ UNE Loop Other without NP – Design			95% > = 24 hrs.
	♦ UNE Other Design			95% > = 24 hrs.
	♦ Local Interconnection Trunks			95% > = 24 hrs.

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**APPENDIX D
Analog and Benchmarks**

BST SQM Category	Measures and Sub-Metrics	Resale Retail Analogue	UNEs Retail Analogue	Benchmark*
Provisioning	% of Orders given jeopardy notice (Mechanized)			
	• Resale Residence	X		
	♦ Resale Business	X		
	• Resale Design	X		
	• Resale PBX	X		
	• Resale Centrex	X		
	♦ Resale ISDN	X		
	♦ UNE Loop and Port Combos		Retail Residence and Business	
	♦ UNE Design		Retail Design	
	♦ UNE Non-Design		Retail Residence and Business	
	♦ UNE 2w Loop with NP – Non-Design		Retail Residence and Business	
	♦ UNE 2w Loop without NP – Non-Design		Retail Residence and Business	
	♦ UNE Loop Other with NP Non-Design		Retail Residence and Business	
	♦ UNE Loop Other without NP Non-Design		Retail Residence and Business	
	♦ UNE Other Non-Design		Retail Residence and Business	
	♦ UNE 2w Loop with NP - Design		Retail Residence and Business	
	♦ UNE 2w Loop without NP - Design		Retail Residence and Business	
	♦ UNE Loop Other with NP - Design		Retail Design	
	♦ UNE Loop Other without NP - Design		Retail Design	
	♦ UNE Other Design		Retail Design	
	♦ Interconnection Trunks	X		
	Percent Missed Installation Appointments			
	• Resale Residence	X		
	• Resale Business	X		
	• Resale Design	X		
	• Resale PBX	X		
	• Resale Centrex	X		
	• Resale ISDN	X		
	• UNE Loop and Port Combos		Retail Residence and Business	

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Service Quality Measurements Plan**

**APPENDIX D
Analog and Benchmarks**

BST SQM Category	Measures and Sub-Metrics	Resale Retail Analogue	UNEs Retail Analogue	Benchmark*
<i>Provisioning</i>	♦ UNE Design		Retail Design	
	♦ UNE Non-Design		Retail Residence and Business	
	♦ UNE 2w Loop with NP – Non-Design		Retail Residence and Business	
	♦ UNE 2w Loop without NP – Non-Design		Retail Residence and Business	
	♦ UNE Loop Other with NP Non-Design		Retail Residence and Business	
	♦ UNE Loop Other without NP Non-Design		Retail Residence and Business	
	♦ UNE Other Non-Design		Retail Residence and Business	
	♦ UNE 2w Loop with NP – Design		Retail Residence and Business	
	♦ UNE 2w Loop without NP - Design		Retail Residence and Business	
	♦ UNE Loop Other with NP Non-Design		Retail Design	
	♦ UNE Loop Other without NP Non-Design		Retail Design	
	♦ UNE Other Design		Retail Design	
	♦ Local Interconnection Trunks	X		
	Order Completion Interval			
	♦ Resale Residence	X		
♦ Resale Business	X			
♦ Resale Design	X			
♦ Resale PBX	X			
♦ Resale Centrex	X			
♦ Resale ISDN	X			
♦ UNE Loop and Port Combos		Retail Residence and Business		
♦ UNE Design		Retail Design		
♦ UNE Non-Design		Retail Residence and Business		
♦ UNE 2w Loop with NP – Non-Design		Retail Residence and Business		
♦ UNE 2w Loop without NP – Non-Design		Retail Residence and Business		
♦ UNE Loop Other with NP Non-Design		Retail Residence and Business		
♦ UNE Loop Other without NP Non-Design		Retail Residence and Business		
♦ UNE Other Non-Design		Retail Residence and Business		

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Service Quality Measurements Plan**

**APPENDIX D
Analog and Benchmarks**

BST SQM Category	Measures and Sub-Metrics	Resale Retail Analogue	UNEs Retail Analogue	Benchmark*	
Provisioning	♦ UNE 2w Loop with NP - Design		Retail Residence and Business		
	♦ UNE 2w Loop without NP - Design		Retail Residence and Business		
	♦ UNE Loop Other with NP - Design		Retail Design		
	♦ UNE Loop Other without NP - Design		Retail Design		
	♦ UNE Other Design		Retail Design		
	• Local Interconnection Trunks	X			
	Average Completion Notice Interval – Resale POTS (Mech)				
	• Resale Residence		X		
	• Resale Business		X		
	♦ Resale Design		X		
	♦ Resale PBX		X		
	♦ Resale Centrex		X		
	♦ Resale ISDN		X		
	♦ UNE Loop and Port Combos			Retail Residence and Business	
	♦ UNE Design			Retail Design	
	♦ UNE Non-Design			Retail Residence and Business	
	♦ UNE 2w Loop with NP – Non-Design			Retail Residence and Business	
	♦ UNE 2w Loop without NP – Non-Design			Retail Residence and Business	
	♦ UNE Loop Other with NP Non-Design			Retail Residence and Business	
	♦ UNE Loop Other without NP Non-Design			Retail Residence and Business	
	♦ UNE Other Non-Design			Retail Residence and Business	
	♦ UNE 2w Loop with NP - Design			Retail Residence and Business	
	♦ UNE 2w Loop without NP - Design			Retail Residence and Business	
	♦ UNE Loop Other with NP - Design			Retail Design	
	♦ UNE Loop Other without NP - Design			Retail Design	
	♦ UNE Other Design			Retail Design	
	♦ Local Interconnection Trunks		X		

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Service Quality Measurements Plan**

**APPENDIX D
Analog and Benchmarks**

BST SQM Category	Measures and Sub-Metrics	Resale Retail Analogue	UNEs Retail Analogue	Benchmark*
<i>Provisioning</i>	Percent Provisioning Troubles within 30 Days			
	♦ Resale Residence	X		
	♦ Resale Business	X		
	♦ Resale Design	X		
	♦ Resale PBX	X		
	♦ Resale Centrex	X		
	♦ Resale ISDN	X		
	♦ UNE Loop and Port Combos		Retail Residence and Business	
	♦ UNE Design		Retail Design	
	♦ UNE Non-Design		Retail Residence and Business	
	♦ UNE 2w Loop with NP – Non-Design		Retail Residence and Business	
	♦ UNE 2w Loop without NP – Non-Design		Retail Residence and Business	
	♦ UNE Loop Other with NP Non-Design		Retail Residence and Business	
	♦ UNE Loop Other without NP Non-Design		Retail Residence and Business	
	♦ UNE Other Non-Design		Retail Residence and Business	
	♦ UNE 2w Loop with NP - Design		Retail Residence and Business	
	♦ UNE 2w Loop without NP - Design		Retail Residence and Business	
	♦ UNE Loop Other with NP - Design		Retail Design	
	♦ UNE Loop Other without NP - Design		Retail Design	
	♦ UNE Other Design		Retail Design	
	♦ Local Interconnection Trunks	X		
	Total Service Order Cycle Time	Diagnostic	Diagnostic	Diagnostic
	♦ Resale Residence	X		
	♦ Resale Business	X		
	♦ Resale Design	X		
	♦ Resale PBX	X		
	♦ Resale Centrex	X		
	♦ Resale ISDN	X		

BellSouth
Service Quality Measurements Plan
APPENDIX D
Analogs and Benchmarks

BST SQM Category	Measures and Sub-Metrics	Resale Retail Analogue	UNEs Retail Analogue	Benchmark*
Provisioning	♦ UNE Design		Retail Design	
	♦ UNE Non-Design		Retail Residence and Business	
	♦ UNE Loop and Port Combos		Retail Residence and Business	
	♦ UNE 2w Loop with NP – Non-Design		Retail Residence and Business	
	♦ UNE 2w Loop without NP – Non-Design		Retail Residence and Business	
	♦ UNE Loop Other with NP Non-Design		Retail Residence and Business	
	♦ UNE Loop Other without NP Non-Design		Retail Residence and Business	
	♦ UNE Other Non-Design		Retail Residence and Business	
	♦ UNE 2w Loop with NP - Design		Retail Residence and Business	
	♦ UNE 2w Loop without NP - Design		Retail Residence and Business	
	♦ UNE Loop Other with NP - Design		Retail Design	
	♦ UNE Loop Other without NP - Design		Retail Design	
	♦ UNE Other Design		Retail Design	
	♦ Local Interconnection Trunks		X	
Maintenance	Customer Trouble Report Rate	Diagnostic	Diagnostic	Diagnostic
	♦ Resale Residence	X		
	♦ Resale Business	X		
	♦ Resale Design	X		
	♦ Resale PBX	X		
	♦ Resale Centrex	X		
	♦ Resale ISDN	X		
	♦ UNE Design		Retail Design	
	♦ UNE Non-Design		Retail Residence and Business	
	♦ UNE Loop and Port Combos		Retail Residence and Business	
	♦ UNE 2w Loop – Non-Design		Retail Residence and Business	
	♦ UNE Loop Other - Non-Design		Retail Residence and Business	
	♦ UNE Other Non-Design		Retail Residence and Business	
	♦ UNE 2w Loop - Design		Retail Residence and Business	

**BellSouth
Service Quality Measurements Plan**

**APPENDIX D
Analog and Benchmarks**

BST-SQM Category	Measures and Sub-Metrics	Resale Retail Analogue	UNEs Retail Analogue	Benchmark*
<u>Billing</u>	<u>Invoice Accuracy - continued</u>			
	Mean Time to Deliver Usage	X		
<u>Operator Services (Toll)</u>	Average Speed to Answer	PBD		
	% Answered in "X" Seconds	PBD		
<u>Directory Assistance</u>	Average Speed to Answer	PBD		
<u>E911</u>	<u>Timeliness</u>	PBD		
	<u>Accuracy</u>	PBD		
	<u>Mean Interval</u>	PBD		
<u>Trunk Group Performance (Blockage)</u>	<u>Trunk Group Service Report (Percent Trunk Blockage)</u> Any 2 hour period in 24 hours where CLEC blockage exceeds BST blockage by more than 0.5% = a miss using trunk groups 1,3,4,5,10,16 for CLECs and 9 for BST.	X		
	<u>Trunk Group Service Report (Percent Trunk Blockage)</u>	X		
<u>LNP</u>	<u>Average Disconnect Timeliness Interval</u>			95% ≤ 24 Hrs.
	Percent Missed Installation Appointments		Retail Residence and Business	
	FOC Mechanized			95% ≤ 4 Hrs.
	% Reject Service Request		Diagnostic	
	Average Reject Interval Mechanized			95% ≤ 1 Hrs.
	TSOCT		Diagnostic	
	% Flow Through			80%

**BellSouth
Service Quality Measurements Plan**

**APPENDIX D
Analog and Benchmarks**

BST SQM Category	Measures and Sub-Metrics	Resale Retail Analogue	UNEs Retail Analogue	Benchmark*
<u>Customer Coordinated Conversions</u>	<u>Coordinated Customer Conversions – UNE Loop</u>			95% ≤ 15 mins.
	Coordinated Customer Conversions – LNP			95% ≤ 15 mins.
<u>Collocation+</u>	% of Due Dates Missed			< 10% Missed Due Dates
	Average Response Time		FL PSC is addressing this in generic docket	30 Days
+A contract with each CLEC required	<u>Average Arrangement Time</u>		FL PSC is addressing this in generic docket	90 Days 130 Days
	Ordinary Extraordinary			

Note 1: PBD = Parity by Design. UD = Under Development – Benchmarks will be replaced when Analogs are complete.

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

Note 3: Analog and Benchmarks will be re-evaluated periodically, at least once a year, to validate applicability.

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.

BellSouth
Enforcement Measurements

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

BellSouth
Enforcement Measurements

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:	
<ul style="list-style-type: none"> • Region 	
Calculation:	
$\frac{\sum[(\text{Date \& Time of Legacy Response}) - (\text{Date \& Time of Request to Legacy})]}{(\text{Number of Legacy Requests During the Reporting Period})} \times 100$	
Report Structure:	
<ul style="list-style-type: none"> • CLEC Aggregate 	
Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
<ul style="list-style-type: none"> • Report Month • Response Interval • Regional Scope 	
Retail Analog/Benchmark	
Benchmark	

BellSouth
Enforcement Measurements

PRE-ORDERING

Report/Measurement:	
OSS Interface Availability	
Definition:	
<p>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.)</p> <p>Scheduled availability is posted on the ICS Operations internet site: (www.interconnection.bellsouth.com/oss/osshour.html)</p>	
Exclusions:	
None	
Business Rules:	
<p>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.</p> <p>Note: Only full outages are used in the calculation of Application Availability.</p> <p>A full outage is incurred when any of the following circumstances exist:</p> <ul style="list-style-type: none"> • 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:	
<ul style="list-style-type: none"> • Region 	
Calculation:	
$(\text{Functional Availability}) / (\text{Scheduled Availability}) \times 100$	
Report Structure:	
<ul style="list-style-type: none"> • CLEC Aggregate 	
Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
<ul style="list-style-type: none"> • 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:	
<ul style="list-style-type: none"> ● Fatal Rejects ● Auto Clarification ● Manual Fallout ● CLEC System Fallout ● Supplements (Subsequent versions) to cancel LSRs that are not LESOG eligible (under development) 	
Business Rules:	
<p>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.</p> <p>Definitions:</p> <p>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.</p> <p>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.</p> <p>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:</p>	
<ol style="list-style-type: none"> 1. Complex* 2. Expedites (requested by the CLEC) 3. Special pricing plans 4. Denials-restore and conversion, or disconnect and conversion orders 5. Partial migrations 6. Class of service invalid in certain states with some types of service 7. New telephone number not yet posted to BOCRIS 	<ol style="list-style-type: none"> 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
<p>*Attached is a list of services, including complex services, and whether LSRs issued for the services are eligible to flow through.</p> <p>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.</p>	

BellSouth
Enforcement Measurements

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:	
<ul style="list-style-type: none"> • CLEC Aggregate 	
Level of Disaggregation:	
<ul style="list-style-type: none"> • Region 	
Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
<ul style="list-style-type: none"> • Report month <ul style="list-style-type: none"> ➢ Total number of LSRs received • Total number of errors by type: <ul style="list-style-type: none"> ➢ Fatal rejects ➢ Total fallout for manual processing ➢ Auto clarification ➢ CLEC caused system fallout • Total number of errors by error code 	
Retail Analog/Benchmark:	
Benchmark	

BellSouth
Enforcement Measurements

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
Enforcement Measurements

	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	<i>LSR electronically submitted: no flow through.</i>
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	
47a	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	<i>LSR electronically submitted: no flow through</i>
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
Enforcement Measurements

	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	<i>LSR submitted electronically; no flow through</i>
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.

BellSouth
Enforcement Measurements

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 = $\Sigma[(\text{Date and Time of Service Request Rejection}) - (\text{Date and Time of Service Request Receipt})] / (\text{Number of Service Requests Rejected in Reporting Period})$	
Report Structure:	
<ul style="list-style-type: none"> • CLEC Specific 	
Level of Disaggregation:	
<ul style="list-style-type: none"> • State 	
Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
<ul style="list-style-type: none"> • Report Month • Reject Interval • Total Number of LSRs • Total number of Errors • State 	
Retail Analog/Benchmark:	
Benchmark; Retail Analog is underdevelopment	

BellSouth
Enforcement Measurements

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:	
<ul style="list-style-type: none"> • Rejected LSRs • Partially Mechanized or Non-Mechanized LSRs received and/or FOCd outside of normal business hours. 	
Business Rules:	
<ul style="list-style-type: none"> • 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:	
$\text{Firm Order Confirmation Timeliness} = \frac{\sum[(\text{Date and Time of Firm Order Confirmation}) - (\text{Date and Time of Service Request Receipt})]}{(\text{Number of Service Requests Confirmed in Reporting Period})}$	
Report Structure:	
<ul style="list-style-type: none"> • CLEC Specific 	
Level of Disaggregation:	
<ul style="list-style-type: none"> • State 	
Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
<ul style="list-style-type: none"> • Report Month • Interval for FOC • Total number of LSRs • State 	
Retail Analog/Benchmark:	
Benchmark; Retail Analog is underdevelopment	

BellSouth
Enforcement Measurements

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:
<ul style="list-style-type: none"> ● 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:
<ul style="list-style-type: none"> ● 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:
<ul style="list-style-type: none"> ● Product Reporting Levels <ul style="list-style-type: none"> ➢ Resale POTS ➢ Resale Design ➢ UNE Loop & Port Combination ➢ UNE Loops ● Geographic Scope <ul style="list-style-type: none"> ➢ State

BellSouth
Enforcement Measurements

PROVISIONING (Percent Missed Installation Appointments – Continued)

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
<ul style="list-style-type: none">• Report Month• CLEC Order Number and PON• Committed Due Date• Completion Date• Status Type• Status Notice Date• Standard Order Activity• Geographic Scope	<ul style="list-style-type: none">• 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	

BellSouth
Enforcement Measurements

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:
<ul style="list-style-type: none"> ● 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: $\frac{\sum[(\text{Completion Date}) - (\text{Order Issue Date})]}{\sum (\text{Count of Orders Completed in Reporting Period})}$
Report Structure:
<ul style="list-style-type: none"> ● CLEC Specific ● CLEC Aggregate ● BST Aggregate

BellSouth
Enforcement Measurements

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

Level of Disaggregation:	
<ul style="list-style-type: none"> • Product Reporting Levels <ul style="list-style-type: none"> ➢ Resale POTS (Dispatch) ➢ Resale Design (Dispatch) ➢ UNE Loop & Port Combination (Dispatch) ➢ UNE Loops (Dispatch – W Coded Orders Only) ➢ IC Trunks (Dispatch) • Geographic Scope <ul style="list-style-type: none"> ➢ State 	
A W-code indicates orders where the CLEC accepts the offered interval	
Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
<ul style="list-style-type: none"> • Report Month • CLEC Company Name • Order Number • Submission Date & Time • Completion Date • Service Type • Geographic Scope 	<ul style="list-style-type: none"> • Report Month • BST Order Number • Order Submission Date & Time • Order Completion Date & Time • Service Type • Geographic Scope
Retail Analog/Benchmark	
Retail Analog	

BellSouth
Enforcement Measurements

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:	
<ul style="list-style-type: none"> • 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:	
$\frac{\sum [(Completion\ Date\ and\ Time\ for\ Cross\ Connection\ of\ an\ Coordinated\ Unbundled\ Loop) - (Disconnection\ Date\ and\ Time\ of\ an\ Coordinated\ Unbundled\ Loop)]}{Total\ Number\ of\ Unbundled\ Loop\ with\ Coordinated\ Conversions\ (items)\ for\ the\ reporting\ period.}$	
Report Structure:	
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate 	
Level of Disaggregation:	
<ul style="list-style-type: none"> • Geographic Scope <ul style="list-style-type: none"> ➢ State 	
Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
<ul style="list-style-type: none"> • 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	

BellSouth
Enforcement Measurements

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:	
<ul style="list-style-type: none"> • 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:	
$\% \text{ Provisioning Troubles within 4 days of Service Order Activity} = \frac{\sum (\text{Trouble reports on all completed orders} \leq 4 \text{ days following service order(s) completion})}{(\text{All Service Orders completed in the report calendar month})} \times 100$	
Report Structure:	
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate 	
Level of Disaggregation:	
<ul style="list-style-type: none"> • Product Reporting Levels <ul style="list-style-type: none"> ➢ Resale POTS ➢ Resale Design ➢ UNE Loop & Port Combination ➢ UNE Loops • Geographic Scope <ul style="list-style-type: none"> ➢ State 	
Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
<ul style="list-style-type: none"> • Report Month • CLEC Order Number and PON • Order Submission Date • Order Submission Time • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope 	<ul style="list-style-type: none"> • 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	

BellSouth
Enforcement Measurements

MAINTENANCE & REPAIR

Report/Measurement:	
Missed Repair Appointments	
Definition:	
The percent of trouble reports not cleared by the committed date and time.	
Exclusions:	
<ul style="list-style-type: none"> • 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:	
<p>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.)</p> <p>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.</p>	
Calculation:	
$\text{Percentage of Missed Repair Appointments} = \frac{\Sigma (\text{Count of Customer Troubles Not Cleared by the Quoted Commitment Date and Time})}{\Sigma (\text{Total Trouble reports closed in Reporting Period})} \times 100$	
Report Structure:	
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate 	
Level of Disaggregation:	
<ul style="list-style-type: none"> • Product Reporting Levels <ul style="list-style-type: none"> ➢ Resale POTS ➢ Resale DESIGN ➢ UNE Loop & Port Combination ➢ UNE Loops • Geographic Scope <ul style="list-style-type: none"> ➢ State 	
Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
<ul style="list-style-type: none"> • Report Month • CLEC Company Name • Submission Date & Time • Completion Date • Service Type • Disposition and Cause • Geographic Scope 	<ul style="list-style-type: none"> • 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	

BellSouth
Enforcement Measurements

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:	
<ul style="list-style-type: none"> • 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:	
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate. 	
Level of Disaggregation:	
<ul style="list-style-type: none"> • Product Reporting Levels <ul style="list-style-type: none"> ➢ Resale POTS ➢ Resale DESIGN ➢ UNE Loop & Port Combination ➢ UNE Loops • Geographic Scope <ul style="list-style-type: none"> ➢ State 	
Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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	

BellSouth
Enforcement Measurements

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:	
<ul style="list-style-type: none"> • 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 = $\Sigma[(\text{Date and Time of Service Restoration}) - (\text{Date and Time Trouble Ticket was Opened})] / (\text{Total Closed Troubles in the reporting period})$	
Report Structure:	
<ul style="list-style-type: none"> • CLEC Specific • BST Aggregate • CLEC Aggregate 	
Level of Disaggregation:	
<ul style="list-style-type: none"> • Product Reporting Levels <ul style="list-style-type: none"> ➢ Resale POTS ➢ Resale DESIGN ➢ UNE Loop & Port Combination ➢ UNE Loops ➢ IC Trunks • Geographic Scope <ul style="list-style-type: none"> ➢ State 	
Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
<ul style="list-style-type: none"> • Report Month • Total Tickets • CLEC Company Name • Ticket Submission Date & Time • Ticket Completion Date • Service Type • Disposition and Cause • Geographic Scope 	<ul style="list-style-type: none"> • 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	

BellSouth
Enforcement Measurements

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:	
<ul style="list-style-type: none"> • 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:	
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate 	
Level of Disaggregation:	
<ul style="list-style-type: none"> • Product Reporting Levels <ul style="list-style-type: none"> ➢ Resale POTS ➢ Resale DESIGN ➢ UNE Loop & Port Combination ➢ UNE Loops • Geographic Scope <ul style="list-style-type: none"> ➢ State 	
Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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	

BellSouth
Enforcement Measurements

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:	
<ul style="list-style-type: none"> • 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:	
$\text{Invoice Accuracy} = (\text{Total Billed Revenues during current month} - (\text{Absolute Value of Billing Related Adjustments during current month}) / \text{Total Billed Revenues during current month} \times 100$	
Report Structure:	
<ul style="list-style-type: none"> • CLEC Aggregate • BST Aggregate 	
Level of Disaggregation :	
<ul style="list-style-type: none"> • Geographic Scope <ul style="list-style-type: none"> ➢ State 	
Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
<ul style="list-style-type: none"> • Report Month • Invoice Type • Total Billed Revenue • Billing Related Adjustments 	<ul style="list-style-type: none"> • Report Month • Retail Type <ul style="list-style-type: none"> ➢ CRIS ➢ CABS • Total Billed Revenue • Billing Related Adjustments
Retail Analog/Benchmark	
Where BST Billing Accuracy exceeds CLEC Accuracy by more than 5%	

BellSouth
Enforcement Measurements

BILLING

Report/Measurement:	
Mean Time to Deliver Invoices (Billing Timeliness)	
Definition:	
<p>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.</p> <p>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.</p>	
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:	
$\text{Mean Time To Deliver Invoices} = \frac{\sum [(\text{Invoice Transmission Date}) - (\text{Close Date of Scheduled Bill Cycle})]}{(\text{Count of Invoices Transmitted in Reporting Period})}$	
Report Structure:	
<ul style="list-style-type: none"> • CLEC Aggregate • BST Aggregate 	
Level of Disaggregation:	
<ul style="list-style-type: none"> • Geographic Scope <ul style="list-style-type: none"> ➢ Region 	
Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
<ul style="list-style-type: none"> • Report Month • Invoice Type • Invoice Transmission Count • Date of Scheduled Bill Close 	<ul style="list-style-type: none"> • Report Month • Retail Type <ul style="list-style-type: none"> ➢ 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	

BellSouth
Enforcement Measurements

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 = $\Sigma [(Total\ number\ of\ usage\ data\ packs\ sent\ during\ current\ month) - (Total\ number\ of\ usage\ data\ packs\ requiring\ retransmission\ during\ current\ month)] / (Total\ number\ of\ usage\ data\ packs\ sent\ during\ current\ month) \times 100$	
Report Structure:	
<ul style="list-style-type: none"> • CLEC Aggregate • BST Aggregate 	
Level of Disaggregation:	
<ul style="list-style-type: none"> • Geographic Scope <ul style="list-style-type: none"> ➢ Region 	
Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
<ul style="list-style-type: none"> • Report Month • Record Type <ul style="list-style-type: none"> ➢ BellSouth Recorded ➢ Non BellSouth Recorded 	<ul style="list-style-type: none"> • Report Month • Record Type
Retail Analog/Benchmark:	
Where BST Usage Data Delivery Accuracy exceeds CLEC Usage Data Delivery Accuracy by more than 1%	

BellSouth
Enforcement Measurements

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:	
<ul style="list-style-type: none"> • CLEC Aggregate • BST Aggregate 	
Level of Disaggregation:	
<ul style="list-style-type: none"> • Geographic Scope <ul style="list-style-type: none"> ➢ State 	
Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
<ul style="list-style-type: none"> • Report Month • Record Type <ul style="list-style-type: none"> ➢ BellSouth Recorded ➢ Non-BellSouth Recorded 	<ul style="list-style-type: none"> • 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:	
<ul style="list-style-type: none"> ● 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:	
<ul style="list-style-type: none"> ● 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:	
<ul style="list-style-type: none"> ● 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 B
Point A	
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 B
Point A	
Category 9: BellSouth End Office	BellSouth End Office

TRUNK GROUP PERFORMANCE - (Trunk Group Performance – Continued)

Calculation:	
<p>Monthly Average Blocking:</p> <ul style="list-style-type: none"> • 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. <p>Aggregate Monthly Blocking:</p> <ul style="list-style-type: none"> • 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. <p>The difference between the CLEC and BellSouth affecting trunk groups are also calculated for each hour.</p>	
Report Structure:	
<ul style="list-style-type: none"> • CLEC Aggregate • BST Aggregate • State 	
Level of Disaggregation:	
Trunk Group	
Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
<ul style="list-style-type: none"> • Report Month • Total Trunk Groups • Number of Trunk Groups by CLEC • Hourly average blocking per trunk group 	<ul style="list-style-type: none"> • 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.	

BellSouth
Enforcement Measurements

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:
<ul style="list-style-type: none"> • 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: $\frac{\sum [(\text{Disconnect Service Order Completion Date \& Time}) - (\text{'Number Ported' Message Received Date \& Time})]}{\sum (\text{Total Number of Disconnect Service Orders Completed in Reporting Period})}$
Disconnect Timeliness Interval Distribution: $[\sum (\text{Disconnect Service Orders Completed in "X" days}) / (\text{Total Disconnect Service Orders Completed in Reporting Period})] \times 100$
Report Structure:
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate
Level of Disaggregation:
<ul style="list-style-type: none"> • Product Reporting Levels <ul style="list-style-type: none"> ➢ LNP • Geographic Scope <ul style="list-style-type: none"> ➢ State
Retail Analog/Benchmark:
Benchmark

BellSouth
Enforcement Measurements

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:
<ul style="list-style-type: none"> ● 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:
<p>Percent Missed Installation Appointments:</p> $\text{LNP Percent Missed Installation Appointments} = \frac{\sum (\text{Number of Orders with Completion date in Reporting Period past the Original Committed Due Date})}{(\text{Number of Orders Confirmed in Reporting})} \times 100$
Report Structure:
<ul style="list-style-type: none"> ● Mechanized (service orders generated by LSRs submitted via EDI or TAG) ● CLEC Specific ● CLEC Aggregate <p>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.</p>
Level of Disaggregation:
<ul style="list-style-type: none"> ● Product Reporting Levels <ul style="list-style-type: none"> ➢ LNP ● Geographic Scope <ul style="list-style-type: none"> ➢ State
Retail Analog/Benchmark:
Retail Analog

BellSouth
Enforcement Measurements

COLLOCATION

Report/Measurement:
Collocation/Percent of Due Dates Missed
Definition:
Measures the percent of missed due dates for collocation arrangements.
Exclusions:
<ul style="list-style-type: none"> • 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:
$\% \text{ of Due Dates Missed} = \frac{\Sigma (\text{Number of Completed Orders that were not completed w/I ILEC Committed Due Date during Reporting Period})}{\text{Number of Orders Completed in Reporting Period}} \times 100.$
Report Structure:
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate
Level of Disaggregation:
<ul style="list-style-type: none"> • State • Physical
Data Retained:
<ul style="list-style-type: none"> • 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 treated 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.
 - $P(\text{Type I Error}) = P(\text{Type II Error})$ 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 λn 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 trimming¹ 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 = $1, \dots, L$; 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 ; $k = 1, \dots, n_{1j}$
 - X_{2jk} = individual CLEC transactions in cell j ; $k = 1, \dots, n_{2j}$
 - Y_{jk} = individual transaction (both ILEC and CLEC) in cell j
- $$= \begin{cases} X_{1jk} & k = 1, \dots, n_{1j} \\ X_{2jk} & k = n_{1j} + 1, \dots, n_j \end{cases}$$

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

For Mean Performance Measures the following additional notation is needed.

- \bar{X}_{1j} = the ILEC sample mean of cell j
- \bar{X}_{2j} = the CLEC sample mean of cell j
- s_{1j}^2 = the ILEC sample variance in cell j

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} ; $k = 1, \dots, n_{2j}$

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

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

and the corresponding cumulative permutation distribution is

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

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

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

and the cumulative hypergeometric distribution is

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

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

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

and the cumulative binomial distribution is

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

For Ratio Performance Measures the following additional notation is needed.

- U_{ijk} = additional quantity of interest of an individual ILEC transaction in cell j ; $k = 1, \dots, n_{1j}$
- U_{2jk} = additional quantity of interest of an individual CLEC transaction in cell j ; $k = 1, \dots, n_{2j}$
- \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., $\sum_k U_{ijk} / \sum_k X_{ijk}$

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

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

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

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

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

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

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

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 $\text{Var}(Z_j^* | H_0)$.** 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 $\text{Var}(Z_j^* | H_0)$ 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, $\min(n_{1j}, n_{2j}) > 15$ 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

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

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

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

the values of Z_j^* and the probabilities of observing each value, respectively.

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

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

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

Mean Measure

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

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

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

Proportion Measure

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

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

Rate Measure

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

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

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 .

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

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 rule² 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: $\alpha = P(Z^T < c | H_0)$.

Type II Error: $\beta = P(Z^T \geq c | H_a)$.

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.

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

where

$$M(\mu, \sigma) = \mu \Phi\left(\frac{-\mu}{\sigma}\right) - \sigma \phi\left(\frac{-\mu}{\sigma}\right)$$

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

$\Phi(\cdot)$ 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:

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

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

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:

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

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

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 by³

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

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

where

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

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

Recall that the cell test statistic is given by

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

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

$$\begin{aligned}
m_j &= \frac{n_j^2 \pi_j^{(1)} - n_{1j} a_j}{\sqrt{\frac{n_{1j} n_{2j} a_j (n_j - a_j)}{n_j - 1}}}, \text{ and} \\
se_j &= \sqrt{\frac{n_j^3 (n_j - 1)}{n_{1j} n_{2j} a_j (n_j - a_j) \left(\frac{1}{\pi_j^{(1)}} + \frac{1}{\pi_j^{(2)}} + \frac{1}{\pi_j^{(3)}} + \frac{1}{\pi_j^{(4)}} \right)}}
\end{aligned}$$

Rate Measure

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

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

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

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

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

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_{CLEC1}^T (See Exhibit C)
2. 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 $C_{B_{CLEC1}} < z_{CLEC1}^T$, stop here. Otherwise, go to step 4.
4. Calculate the Parity Gap by subtracting the value of step 2. from that of step 1.;
 $z_{CLEC1}^T - C_{B_{CLEC1}}$
5. Calculate the Volume Proportion using a linear distribution with slope of $\frac{1}{4}$. This can be accomplished by taking the absolute value of the Parity Gap from step 4. divided by 4;
 $ABS((z_{CLEC1}^T - C_{B_{CLEC1}}) / 4)$. 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 CLEC₁ 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_{CLEC1}^T	C_B	Parity Gap	Volume Proportion	Affected Volume
State	50000	600	96	9%	16%	-1.92	-0.21	1.71	0.4275	
Cell						<u>Z_{CLEC1}</u>				
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_{CLEC1}^T	C_B	Parity Gap	Volume Proportion	Affected Volume
State	50000	600	600	5days	7days	-1.92	-0.21	1.71	0.4275	
Cell						<u>Z_{CLEC1}</u>				
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
										<hr/> 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

$$= \sum (\text{Affected Volume}_{CLECA} \text{ for each month in quarter}) * \$\$ \text{ from Fee Schedule}$$

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

State	n_i	n_c	I_c	MIA_i	MIA_c	Z_{CLECA}^T	C_B	Parity Gap	Volume Proportion	Affected Volume
Month1	180000	2100	336	9%	16%	-1.92	-0.21	1.71	0.4275	
Cell						<u>Z_{CLECA}</u>				
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
										<u>99</u>

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.

Process	Measures	TIER-3 FAILURE X = Miss			NOT A TIER-3 FAILURE X = Miss		
		Jan	Feb	Mar	Jan	Feb	Mar
	Resale POTS	X	X	X	X		
	Resale Design	X			X	X	X
	UNE Loop & Port Combo		X				
	UNE Loops	X	X	X			
	Resale POTS	X	X	X	X		X
	Resale Design		X	X		X	
	UNE Loop & Port Combo					X	X
	UNE Loops				X		
	Billing Accuracy	X	X	X			
	Billing Timeliness				X	X	X
	Percent Trunk Blockage	X	X	X			
	Percent Missed Collocation Due Dates						

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	Sample Size	Equivalent 90% Benchmark	Equivalent 95% Benchmark
5	60.00%	80.00%	16	75.00%	87.50%
6	66.67%	83.33%	17	76.47%	82.35%
7	71.43%	85.71%	18	77.78%	83.33%
8	75.00%	75.00%	19	78.95%	84.21%
9	66.67%	77.78%	20	80.00%	85.00%
10	70.00%	80.00%	21	76.19%	85.71%
11	72.73%	81.82%	22	77.27%	86.36%
12	75.00%	83.33%	23	78.26%	86.96%
13	76.92%	84.62%	24	79.17%	87.50%
14	78.57%	85.71%	25	80.00%	88.00%
15	73.33%	86.67%	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 CLEC₁ 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 CLEC₁ 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