BEFORE THE TENNESSEE REGULATORY AUTHORITY

NASHVILLE, TENNESSEE

October 2, 2000

IN RE: PETITION FOR ARBITRATION BY ITC^DELTACOM COMMUNICATIONS, INC. WITH BELLSOUTH TELECOMMUNICATIONS, INC. PURSUANT TO THE TELECOMMUNICATIONS ACT OF 1996	))))))	Docket No. 99-00430

FINAL BEST OFFER OF ITC^DELTACOM COMMUNICATIONS, INC.

I. INTRODUCTION

By Order dated April 4, 2000, the Tennessee Regulatory Authority ("TRA"), acting as arbitrators under the Telecommunications Act of 1996 ("Act") directed ITC^DeltaCom Communications, Inc. ("ITC^DeltaCom") and BellSouth Telecommunications, Inc. ("BellSouth" or "BST") to submit Final Best Offers on Issue 1(a). On August 31, 2000, the TRA released its Second Interim Order of Arbitration Award and ordered BST and ITC^DeltaCom to resubmit a final best offer for Issue 1(a). [1]

[1] Subsequent to ITC^DeltaCom's May 22, 2000 Final Best Offer, it joined many other CLECs in an expedited proceeding in Georgia regarding performance measures and remedies. ITC^DeltaCom, along with AT&T of the Southern States ("AT&T"), ICG Telecom Group, Inc. ("ICG"), Intermedia Communications, Inc. ("Intermedia"), Southeastern Competitive Carriers Association ("SECCA"), ITC^DeltaCom Communications, Inc. ("ITC^DeltaCom"), Birch Telecom, Inc. ("Birch"), Dieca Communications, Inc. d/b/a COVAD Communications Company ("COVAD"), e.spire Communications, Inc. ("e.spire"), Broad Slate Networks, Inc. ("Broad Slate"), Media One Telecommunications of Georgia, LLC ("Media One"), Z-Tel Communications, Inc. ("Z-Tel"), Rhythms Link, Inc. ("Rhythms") and MCIWorldCom ("MCI") sponsored one performance remedy plan before the Georgia Public Service Commission on July 5-7, 2000. As presented herein the Georgia CLEC coalition sponsored performance remedy plan complies with the TRA's directives because it provides a mechanism to determine compliance and a two tier enforcement remedy structure and should be adopted in this case.

II. DISCUSSION

BellSouth should be required to comply with performance measures and guarantees for preordering, ordering, resale, and unbundled network elements, provisioning, maintenance, interim number portability, collocation, coordinated conversions, and the bona fide request processes as set forth fully in Attachment A to this pleading

A. TRA's Directives

The TRA directed that the parties develop a Final Best Offer for a Performance Remedy Plan. ITC^DeltaCom's proposed Performance Remedy Plan is attached hereto and specifically addresses the following five items covered by the TRA Order: (1) the electronic medium to be used in providing ITC^DeltaCom access to the performance report and underlying data; (2) the process to be utilized to determine BellSouth's compliance or non-compliance with the standard or benchmark; (3) Standards/benchmarks for each measurement; [2] (4) Enforcement mechanisms [3]; and (5) circumstances that would warrant a waiver request from BellSouth and the time frame for submitting such waiver request.

The TRA ordered that the Parties use BellSouth's SQMs with associated definitions and business rules for the purpose of measurement along with certain specified additions, deletions, and revisions from the "Texas Plan." [4] Specifically, the TRA ordered that the parties use the Texas plan definitions and business rules for the following items:

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[2] Standards must be specific and measurable. Parity or retail analog should include the specific service to which parity will be measured or the retail analog companion. Additionally, a methodology should be provided for defining or calculating the performance standard and/or benchmark, for each measure, such as the method contained in the VSEEMs for each measure

[3] These must be specific and should provide the number of occurrences at which the enforcement mechanism applies (threshold) and the specific enforcement mechanism once the threshold is met. Enforcement mechanisms should be categorized by tiers structured similar to those contained in BellSouth's VSEEMs and should include appropriate caps.

[4] *Investigation of Southwestern Bell Telephone Company's Entry Into The Texas InterLATA Telecommunications Market*, Project No. 16251, Public Utility of Texas, (Oct. 13, 1999).

(a) Remove the SQM on firm order confirmation timeliness

(b) Add percent firm order confirmation returned within specified time frame (Texas Plan Measurement 5).

(c) Add percent mechanized rejects returned within one hour of receipt of reject in LASR (Texas Plan Measurement 10)

(d) Add percent of accurate and complete formatted mechanized bills (Texas Plan Measurement 15)

(e) Add billing completeness (Texas Plan Measurement 17)

(f) Add unbillable usage (Texas Plan Measurement 20)

(g) Add percent busy in the local service center (LSC) Texas Plan Measurement 23)

(h) Add percent busy in the local operations center (LOC) (Texas Plan Measurement 26)

(i) Add percent installations completed within industry guidelines for LNP with loop (Texas Plan Measurement 56)

(j) Add average response time for loop makeup information (Texas Plan Measurement 57)

(k) Add directory assistance average speed of answer (Texas Plan Measurement 80)

(l) Add operator services speed of answer (Texas plan Measurement 82)

(m) Add percentage of LNP only due dates within industry guidelines (Texas Plan Measurement 91)

(n) Add percentage of time the old service provider releases the subscription prior to the expiration of the second nine-hour (T2) timer (Texas Plan Measurement 92)

(o) Add percentage of customer account restructured prior to LNP due date (Texas Plan Measurement 93)

(p) Add percentage premature disconnect for LNP order (Texas Plan Measurement 96)

(q) Add average days required to process request (Texas Plan Measurement 106)

(r) Add cageless collocation to the level of disaggregation on BST's SQM "collocation/average arrangement time."

(s) Add cageless collocation to the level of disaggregation on BST's SQM collocation/percent of due dates missed

(t) Add percentage of updates completed into the DA database within 72 hours for facility based CLECs (Texas Plan Measurement 110)

(u) Add average update interval for DA database for facility based CLECs (Texas Plan Measurement 111)

(v) Add percentage DAT database accuracy for manual update (Texas Plan Measurement 112)

(w) Add percentage of premature disconnects (coordinated cutovers) (Texas Plan Measurement 114)

(x) Add percentage of missed Mechanized INP conversions (Texas Plan Measurement 116)

(y) Add percent NXXs loaded and tested prior to the LERG effective date (Texas Plan Measurement 117)

(z) Add average delay days for NXX loading and testing (Texas Plan Measurement 118)

(aa) Add mean time to repair (Texas Plan Measurement 119)

(bb) Add percentage of requests processed within 30 days (Texas Plan Measurement 120)

(cc) Add percentage of quotes provided for authorized BFRs/special requests within X days (10,30,90) days (Texas Plan Measurement 121)

In accordance with the TRA's order of August 31, 2000, ITC^DeltaCom has not modified BellSouth's 9/15/99 measures nor the business rules and definitions associated with BellSouth's SQMs. ITC^DeltaCom used the 9/15/99 version of BellSouth's SQMs from the record evidence sponsored by BellSouth witness Coon in his direct testimony in this case. ITC^DeltaCom added the requested Texas measures Version 1.6. [5] The performance measures (as ordered by the TRA) and associated standards/benchmarks are provided under Tab 3. Pursuant to the TRA's directive, all measures should provide Tennessee specific data.

[5] Texas has updated its measures and benchmarks in Version 1.7. ITC^DeltaCom would, upon request by the TRA, submit Version 1.7 for incorporation into the performance remedy plan.

B. Final Best Offer

(1) Electronic Medium. The electronic medium to be used in providing access to the performance report and underlying data is described under Tab 1 attached hereto.

(2) Remedy Plan. The TRA should adopt the performance remedy plan described at Tab 2 attached hereto. This is the service plan presented to the Georgia Public Service Commission on June 20, 2000 by a CLEC coalition comprised of AT&T of the Southern States ("AT&T"), ICG Telecom Group, Inc. ("ICG"), Intermedia Communications, Inc. ("Intermedia"), Southeastern Competitive Carriers Association ("SECCA"), Birch Telecom, Inc. ("Birch"), Dieca Communications, Inc. d/b/a COVAD Communications Company ("COVAD"), e.spire Communications, Inc. ("e.spire"), Broad Slate Networks, Inc. ("Broad Slate"), Media One Telecommunications of Georgia, LLC ("Media One"), Z-Tel Communications, Inc. ("Z-Tel"), Rhythms Link, Inc. ("Rhythms"), MCIWorldCom ("MCI") and ITC^DeltaCom. The performance remedy plan includes a formula for determining compliance or non-compliance for parity or benchmark measures and is structured in two tiers.

(3) Standards and Benchmarks. The rationale and sources underlying the proposed remedy plan are sound. The Texas SQMs and benchmarks are primarily from the Texas Plan while the BellSouth benchmarks were primarily adopted from the Georgia CLEC Coalition filing as referenced above or from the Georgia Staff recommendation. These documents are included in Tab 5. The performance measures and the standards/benchmarks are described under Tab 3 attached hereto.

(4) Enforcement Mechanism. In order to be effective, prompt enforcement of appropriate consequences must be assured. Because of the extensive delays inherent in the adjudication and appeals process, CLECs cannot rely solely upon the legal/regulatory process to obtain appropriate remedies for discriminatory ILEC performance. Furthermore, the consequences must provide BST with incentives that exceed the benefits it may derive by inhibiting competition, and such consequences must be immediately imposed upon a demonstration of poor BST performance. The objective is to set the incentives in amounts that encourage BST to take proactive steps to prevent its performance from becoming non-compliant and, when it does reach that level, to correct its performance failures promptly. The TRA specifically ordered that a proposed cap on remedies be provided as part of this final best offer.

ITC^DeltaCom submits that an overall cap should be applied rather than a cap for each measure. An overall cap such as that adopted by the Texas Public Utility Commission is easier to administer and draws a line as to the maximum amount that can be ordered as a remedy in any given year. The Texas Public Utility Commission adopted the following formula: "The annual cap will be determined by SWBT, based on the formula of 36% of Net Return as set forth at 436 and footnote 1332 of the FCC's December 22, 1999 Memorandum Opinion and Order in CC Docket No. 99-295." Footnote 1332 states as follows:

> [1332] To arrive at a total "Net Return" figure that reflects both interstate and intrastate portions of revenue derived from local exchange service, we combined 1915 (the interstate "Net Return" line) with a computed net intrastate return number (total intrastate operating revenues and other operating income, less operating expenses, nonoperating items and all taxes). See ARMIS 43-01 Annual Summary Report, Table 1, Cost and Revenue Table (1998).

IV. CONCLUSION

The Final Best Offer described herein and presented through the attachments hereto represent a practical and sound resolution of Issue 1(a) in this case. The proposal complies with the directives of the arbitrators. The TRA should adopt ITC^DeltaCom's Final Best Offers on Issue 1(a).

Respectfully submitted this 2nd day of October, 2000.

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on the 2nd day of October, 2000, a true and correct copy of the foregoing was served by hand delivery, facsimile transmission, overnight delivery or U. S. Mail, first class postage prepaid, to the following:

Guy Hicks, Esq.
BellSouth Telecommunications, Inc.
333 Commerce Street, Suite 2101
Nashville, TN 37201-3300

H. LaDon Baltimore

TAB ONE

Final Best Offer
For (1) Delivery of Reports/Raw Data

BellSouth shall provide ITC^DeltaCom access to the raw data that underlies ITC^DeltaCom's reported results. In addition, BellSouth shall provide ITC^DeltaCom the actual values used in BellSouth's calculation of its own results specified in the reported performance.

Data should be made available in a readily accessible manner; for example, on the web. In addition, BellSouth should maintain a current and accurate user's manual to support CLECs in accessing and interpreting the raw data. The user's manual should include detailed descriptions of what the data means, i.e., beginning and ending parameters for the fields, and include definitions for the codes used by BellSouth. BellSouth should also provide a knowledgeable single point of contact with whom CLECs can confer to resolve questions about accessing the raw data including, but not limited to, explanations of the fields, parameters, code definitions, file column purposes and headings, etc. BellSouth should be required to provide notice of changes in both raw data presentation and reporting. BellSouth shall provide, via email, notice of any changes in the data.

BellSouth should provide the raw data in a format that can be readily utilized by standard database management tools such as Excel, Access, or Oracle.

The Raw Data Reports and data should be made available on a designated day each month. BellSouth should be prohibited from excluding data from raw data files. If any data are excluded, BellSouth must be required to justify all exclusions before they are made.

If BellSouth or ITC^DeltaCom discovers that raw data records or performance reports exclude data, omit data, are calculated incorrectly, or contain an error of any type, BellSouth should be required to immediately notify affected CLECs. BellSouth should then make arrangements to correct the raw data records or performance reports and submit the corrected report to the CLECs. If BellSouth or CLEC discovers a data error after the report is no longer accessible to CLECs, BellSouth should remain responsible for correcting the error and immediately notifying the CLECs of the error and the measures taken to make the correction. The obligation to correct errors after access to the reports has ended should remain for twelve months after the date the report is no longer accessible to the CLEC, i.e., the date the report is removed from the website.

TAB TWO

ITC^DeltaCom Final Best Offer For

(2) The Process to Be Utilized to Determine BellSouth's Compliance or Non-Compliance With the Standard and/or Benchmark

(4) Enforcement Mechanisms. These must be specific and should provide the number of occurrences at which the enforcement mechanism applies (threshold) and the specific enforcement mechanism once the threshold is met. Enforcement Mechanisms should be categorized by tiers structured similar to those contained in BellSouth's VSEEMs and should include appropriate caps.

Remedy Plan

It is beyond dispute that any system of self-enforcing consequences must be based upon an underlying set of performance measurements that cover the full panoply of ILEC activities upon which CLECs must rely to deliver their own retail service offerings. The Act requires that these activities, which touch upon every aspect of the business relationship between incumbents and CLECs, must be provided in a non-discriminatory manner. Thus, the interconnection agreements between incumbents and CLECs should ideally serve as a source for performance measurements. However, experience in Tennessee and elsewhere has proven that CLECs have generally been unable to individually negotiate a sufficiently robust set of performance measurements.[1] For that reason, the first step in constructing a system of self-enforcing consequences must include careful consideration of the adequacy of the underlying measurement set. At a minimum, the performance measurements must supply each CLEC with reliable data on the incumbent's performance for that CLEC. Such data must be sufficiently discrete (as to the processes monitored) and detailed (to isolate and compare only comparable conditions) so as to permit a CLEC to enforce the terms of its interconnection agreement with the incumbent. In addition, the underlying performance measurement system should demonstrate quality implementation of the following characteristics:

- A comprehensive set of comparative measurements that monitors all areas of support (i.e., pre-ordering, ordering, provisioning, maintenance & repair and billing) without preference to any particular mode of market entry
- Measurements and methodologies that are documented in detail so that clarity exists regarding what will be measured, how it will be

[1] As a starting point, the CLEC industry generally supports the measurement areas as documented in Local Competition Users Group (LCUG) – Service Quality Measurements (SQMs), Version 7.0, August 28, 1998.

measured and in what situations a particular event may be excluded from monitoring (such exclusions must also be tracked and reported)

- Sufficient disaggregation of results, so that only the results for similar operational conditions are compared and, particularly, so that the averaging of results will not mask discrimination[2]

- Pre-specified and pro-competitive performance standards exist. This includes identifying reasonably analogous performance delivered by the incumbent to its own operations[3] or, when such comparative standards are not readily identifiable, then absolute minimum standards for performance (benchmarks) are established[4]

- Sound quantitative methodology is used to compare CLEC experiences to analogous incumbent support[5]

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[2] The importance of sufficient disaggregation is more fully discussed in Attachment A

[3] Analogous performance must be broadly interpreted and consider not only retail operations of the incumbent but also operations of affiliates. Often the incumbent's asserted lack of analogous performance relies upon very narrow (and inappropriate) interpretation of the term "analogous" to mean "precisely identical" rather than "similar in key aspects." Furthermore, if the incumbent delivers different levels of performance to an affiliate and its the retail operations, the CLEC experience should be compared to the better of the two.

[4] In all cases, benchmarks must provide an efficient competitor with a meaningful opportunity to compete.

[5] As a general rule, when benchmarks are employed, statistical comparisons of the measured result for the CLEC to the benchmark are not appropriate. Typically, the standards state a minimum performance level that is required to support effective competition and the minimum success level that must be demonstrated to attain the benchmark. Thus, the typical form of the standard is, for example, "95% installed within 3 days." Note that in the preceding example a 5% deviation from the benchmark is permitted and, as a result, the potential for random variation of the performance is fully addressed. Any further accommodation of variation, as would occur if statistical procedures were employed, would effectively "double count" forgiveness of variability.

Process for Determining Compliance

I. Objectives

A system of self-enforcing consequences must fully implement the following objectives:

- Consequences must be based upon the quality of support delivered on individual measures to individual CLECs
- Total consequences, in the aggregate, must have sufficient impact to motivate compliant performance without the need to apply a remedy repeatedly
- The imposition of financial consequences must be prompt and certain, and consequences should be self-executing so that opportunities for delay through litigation and regulatory review are minimized
- Consequences must escalate as the basis for concluding that a performance failure exists becomes more substantial and/or the performance repeatedly fails to meet the applicable standard
- Additional consequences must apply when non-compliant performance is provided to CLECs on an industry-wide basis
- Exclusions from consequences must be minimized and the exclusions that are provided for must be monitored and limited to assure they do not mask discrimination
- Incumbents must have minimal opportunities to avoid consequences through such means as liability caps, offsetting credits, or a requirement that CLECs must demonstrate an ILEC's intent to harm
- Potential "entanglement" costs must be minimized so that, for example, access to mitigation measures for the incumbent does not

become a means to revert to the legal/regulatory process and delay the application of consequences that should be self-enforcing

II. Structure of Enforcement Remedy Plan

Consequences operating on two tiers are proposed. The first tier addresses the consequences for non-compliant performance delivered to an individual CLEC. The second addresses the consequences for non-compliant performance delivered to the CLEC industry as a whole. In general terms, Tier I provides a form of remedy payable to individual CLECs. Tier II, by contrast, incorporates what can be characterized as regulatory fines that are necessary when the ILEC's service quality affects the competitive market – and consumers -- as a whole.

The total amount of Tier I payments (which are only an estimate of the CLECs' actual damages) is unlikely to provide the ILEC with sufficient incentives to take the actions necessary to eliminate its monopoly. Rather, an ILEC may decide to treat such payments as the price for retaining its monopoly and voluntarily incur them as a cost of doing business. Moreover, the harm that results when the ILEC provides discriminatory support for the CLEC industry in the aggregate has a major impact not only on CLECs but also on the operation of the competitive marketplace in general, which directly affects all Tennessee consumers of telecommunications services. Thus, it is appropriate to establish incentives to prevent this type of harm from occurring (or continuing), and both Tier I and Tier II are necessary and complementary elements of an effective system of consequences. Together, they work in tandem to achieve the goals of the Act.

A. Tier I

A Tier I consequence should be payable to an affected CLEC whenever any performance result indicates support delivered by the ILEC to an individual CLEC fails to meet or exceed the applicable performance standard.[6]

The first step in establishing Tier I consequences is to define the rule for determining if performance for a particular period "passes" or "fails" and, if it fails, whether additional consequences are warranted. Defining "pass/fail" rules requires that the underlying measurements be mapped into one of two classes:

(1) those for which the performance standard is parity with analogous incumbent LEC performance results, and

(2) those for which the performance is an absolute level of required performance (otherwise known as a benchmark)

The differentiation is important because when parity is the standard, statistical procedures are usually necessary to draw conclusions regarding compliance. In such situations, two separate data sets are compared – one for the CLEC and one for the ILEC. Each data set is characterized by a mean and standard deviation. Statistical tests are used to draw a conclusion regarding the likelihood that the data sets with the observed means and standard deviations were drawn from the same population (in this case a support process for CLECs with the same quality and/or timeliness as that employed for the ILEC). The proper test

[6] In the course of establishing Tier I consequences, the rights of an individual CLEC to pursue actual damages must be retained. However, if a CLEC sought to pursue a claim for actual damages, it would be reasonable to offset the damage award by any Tier I payments it received from the ILEC for the same time period and performance areas. In addition, a CLEC must retain the right to waive Tier I claims and pursue its individually negotiated contract remedies (if and only if the claims and remedies are not mutually payable.).

further allows determination that parity does not exist, but it does not quantify "how far out of parity" the process is when parity is not indicated.[7]

In contrast, when a benchmark serves as the performance standard, measurement establishes a performance failure directly and assesses the degree to which performance departs from the standard. As explained below, the detailed mechanism for determining a performance failure differs for each of these types of measurement standards, but the principle governing the application of the Tier I consequence is consistent: the consequence escalates with increasing evidence and level of non-compliant performance.

(1). Determining Compliance for Tier I Remedies (Parity Measurement)

1. Use the Modified z-Statistic to Determine Compliance

The determination of whether performance is compliant (i.e., equal to or better than the appropriate standard) is based on the calculation of the modified z-statistic (z).[8] The calculated modified z-statistic is then compared to the cumulative normal distribution table to determine if parity exists.[9] For any such decision rule, the probability of an erroneous decision is known. For example, if

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[7] Clearly, however, when all other factor are held constant, increased statistical confidence is directly correlated (monotonic) with larger differences in the two sample means being compared and therefore is a reasonable indication of how different ILEC performance was for itself versus that of the CLEC in the period of observation.

[8] See: Local Competition Users Group - Statistical Tests for Local Service Parity, February 6, 1998, Version 1.0 for documentation of the calculation and use of the modified z-statistic, which is included as Attachment B.

[9] The modified z-statistic computation provides for the CLEC mean to be subtracted from the ILEC mean. Thus, a negative z-statistic critical value presumes that worse performance exists when the CLEC mean becomes larger than the ILEC mean. For example, worse performance exists when the order completion interval for the CLEC exceeds that for the ILEC. Thus a negative z-statistic critical value is appropriate. On the other hand, for a metric like "% completed within x days", worse performance for the

the critical value is –3.00 and parity actually exists, the probability of saying it is not is 0.13%.

2. Use Permutation Analysis for Small Samples

Permutation analysis is employed for small data sets (those with 30 or fewer observations in one of the data sets to be compared) to create a probability distribution as an alternative to the cumulative normal distribution.[10] By mutual agreement, permutation analysis can also be employed for larger data sets.

3. Use the Balancing Critical Value

The threshold level to determine whether or not a performance failure exists is established by balancing Type I and Type II error.[11] This balance point is a function of the size of the CLEC data set (assuming the ILEC data set is very large) and the extent to which the means for the two data sets differ (assuming that both data sets are normally distributed). Simulation comparing relatively small data sets (as would be likely for a CLEC) to a much larger data set (as would likely exist for an ILEC) demonstrates that the balancing of Type I and Type II error can reasonably be expected to occur in the range of 25% for "samples" with fewer than 100 data points but is about 5% for samples with 1000

CLEC occurs when the metric result is smaller for the CLEC vis-à-vis the ILEC. In this case a positive z-statistic critical value is appropriate.

[10] See Attachment C for a description of the procedural steps for performing permutation analysis. Again, BST and the CLECs generally concur that permutation analysis is appropriate for data sets of this size.

[11] The key consideration is balancing the probability of drawing erroneous conclusions -- either that performance is "bad" when it is actually "good" (Type I error) or that performance is "good" when it is actually "bad" (Type II error). The former error adversely impacts ILECs and the latter adversely impacts CLECs. Unfortunately, reducing the likelihood of one type of error increases the likelihood of the other type of error occurring. Thus the best means to create an equitable outcome for all parties is to balance the Type I and Type II error.

data points.[12] The statistical methodology developed by AT&T and Ernst & Young in Louisiana and proposed by the CLEC coalition in Georgia is an appropriate method for calculating the critical values which depend on the sample size and balances Type I and Type II error probabilities for each given submeasure. Furthermore, the definition of the alternative hypothesis required to perform the balancing is fundamental to the applicability of the method. The CLEC coalition in Georgia proposed a value of 0.25 for the parameter δ and appropriately corresponding values for ε and ψ.[13][14]

4. Increase Consequences as the Confidence in a "Non-Parity" Conclusion Increases

An appropriate means to take increased confidence into consideration is to provide for higher amounts of monetary consequences as the confidence in the "non-parity" conclusion increases. This is justified because (all other factors held constant) as the difference in the mean performance for the CLEC compared to the ILEC becomes larger, the absolute value of the modified z-statistic also becomes larger for the sample in the time period of interest. Thus, it is appropriate that the performance consequence should escalate based upon the calculated value of the modified z-statistic.

5. After a Failed Parity Test the Consequences Should Escalate and Vary Continuously with Severity of Failure

A parity failure is established for a submeasure by comparing the measured value of the modified z-statistic (z) to the balancing critical value (z*) appropriate

[12] See Response to Question 3 contained in AT&T Ex Parte filed in CC Docket 98-56 dated July 13, 1999.

[13] Statistical Techniques For The Analysis And Comparison Of Performance Measurement Data. Submitted to Louisiana Public Service Commission (LPSC) Docket U-22252 Subdocket C. See Attachment D for a further discussion of this position

for the submeasure's sample size during the given monthly period. Once a submeasure failure is obtained, the calculated remedy should be a continuous function of severity of the failure as measured by the magnitude of the modified z-statistic. In this way small changes in severity lead to small changes in consequences thus assuring that mathematically chaotic behavior is avoided at step thresholds. However, to encourage immediate positive changes in service and quality, the change in consequences should increase with each unit of severity. This form of consequences as a function of severity is most simply accomplished by the use of a quadratic function of the ratio of the measured modified z score to the balancing critical value (z/z^*). Fixing the value of the quadratic or its slope at three points completely determines the function.

Table 1

Range of modified z-statistic value (z)	**Performance Designation**	**Applicable Consequence ($)**
greater than or equal z^*	Compliant	0
less than z^* to $5z^*/3$	Basic Failure	$a(z/z^*)^2 + b(z/z^*) + c$
less than $5z^*/3$ to $3z^*$	Intermediate Failure	
less than $3z^*$	Severe Failure	**25,000**

Table 1 shows the applicable consequences for each Tier I parity submeasure failure for each CLEC. In this table z^* is the (negative) balancing critical value for the submeasure, and the coefficients of the smooth consequence function are:

a = 5625

b = -11250

c = 8125.

Note that the smooth consequences formula is an explicit function of the ratio of the modified z-statistic and the balancing critical value (z/z*). This means that the dollar amount does not depend on the number of observations but only on the degree of violation. If we had 100 times as many observations, with means and standard deviations staying the same, both z and z* will increase by a factor of 10 and the consequences will be unchanged. Note also that both basic and intermediate failures are defined and may occur in the smooth region of the formula. The plan retains these designations to allow for classification of performance for more general performance monitoring such as compliance testing, if needed.

A graph of the applicable consequences as a function of the measured modified z-statistic is given in Attachment G in Figure G-1. The attachment also contains a small step tabulation of the function that approximately represents it in Table G-1.

Examples

Three hypothetical examples of consequence calculations are given in the matrix below.

Example	z*	z	Performance	Consequence
1	-2.00	-1.80	Compliant	$0
2	-2.50	-3.33	Basic Failure	$3,125
3	-3.00	-6.00	Intermediate Failure	$8,125
4	-3.50	-12.00	Severe Failure	$25,000

In example 1 the hypothetical balancing critical value for the submeasure is calculated to be –2.00 on the basis of sample size and equal type I and type II error probabilities. The observed value of the modified z-statistic, based on ILEC and CLEC performance for that submeasure, is –1.80. The ILEC is compliant for this submeasure and no consequences are due to this CLEC.

Example 2 shows a balancing critical value calculated to be –2.50. Furthermore in this example, the measured value of the modified z-statistic is –3.33. This is a Basic Failure and the consequence is calculated to be $3,125 by the formula in Table 1.

In example 3, although the hypothetical balancing critical value is –3.00, the measured value of the modified z-statistic is well below this at –6.00. According to the range of modified z-statistics in Table 1 this is an Intermediate Failure. The same smooth formula is used to calculate the remedy amount as $8,125.

The final example 4 shows a balancing critical value of –3.50, but a very poor measured value of the modified z-statistic of –12.00. According to Table 1 this is classified as a Severe Failure and generates a consequence of $25,000. This is the largest consequence for which the ILEC would be liable for this submeasure this month to this CLEC.

(2). Use a "Bright Line" Test for Determining Compliance for Tier 1 Benchmark Measurements

Previously we discussed the method of determining compliance for Tier 1 parity measurements. A benchmark, however, is set to define the level of performance that is judged essential to permit competition to develop on a going-forward basis. As such, the benchmark level is at the lower range of what a viable competitive support process should be capable of delivering on a routine basis. Indeed, to assume otherwise would imply that the benchmark would not be achieved on a routine basis. In all events, because even the most tightly controlled process will produce performance outside the expected range, some margin of error is typically provided for the ILEC. Thus, the limiting performance is expressed as "B% meet or exceed the benchmark" where "B%" is a proportion figure set less than 100% in order to account for random variation considerations. Accordingly, a performance failure should be declared if the calculated performance is not equal to the "B%" level. For example, if the calculated result for a month was 94.5% of all orders completed within 3 days but the benchmark

was 95% within 3 days, then a performance failure occurred. No subsequent application of a statistical test is appropriate or necessary.

(a). Apply an Adjustment for Small Data Sets When Necessary

Because some measurement results may be calculated using small data sets, some adjustment is warranted. This need arises because the benchmark proportion for a particular measure with few underlying data points may be practically impossible to attain unless the ILEC always performs perfectly. The metric discussed in the prior paragraph can be used to illustrate the point: if only ten orders were completed in the month, then compliance would occur only if all 10 orders were (correctly) completed within three days. One order taking longer than 3 days would mean that, at best, the performance result would be 90% within 3 days, i.e., a failing performance level.

This situation is addressed through application of the following table[15]:

Table 2

CLEC Data Set Size	Benchmark Percentage Adjustments for Small Data Sets (Applicable to Data Sets < 30)		
	85.0%	90.0%	95.0%
5	80.0%	80.0%	80.0%
6	83.3%	83.3%	83.3%
7	85.0%	85.7%	85.7%
8	75.0%	87.5%	87.5%
9	77.8%	88.9%	88.9%
10	80.0%	90.0%	90.0%
20	85.0%	90.0%	95.0%
30	83.3%	90.0%	93.3%

(b). **Increase Consequences for Increasingly Poor Performance**

As with measurements that are judged against a parity standard, those compared to a benchmark standard should be subject to additional consequences as the performance becomes increasingly worse compared to the benchmark. The escalation is as follows (Note that "B" in Table 3, is the Benchmark Percentage as determined from Table 2):

Table 3

Range of Benchmark Result (x)	Performance Designation	Applicable Consequence ($)
Meets or exceeds B%	Compliant	0
Meets or exceeds (1.5B-50)% but worse than B%	Basic Failure	$d[x/(100-B)]^2 + eB[x/(100-B)^2] + f[B/(100-B)]^2 + g$
Meets or exceeds (2B-100)% but worse than (1.5B-50)%	Intermediate Failure	
Worse than (2B-100)%	Severe Failure	25,000

In Table 3 the quantity x is the actually measured proportion and the coefficients are given by:

d = 22500

e = -45000

f = 22500

g = 2500

[15] The table can be expanded to include all possible data set sizes from 1 upward.

A graph of the applicable consequences as a function of the measured benchmark result, x, for B=95% is given in Attachment G in Figure G-2. The attachment also contains a small step tabulation of the function that approximately represents it in Table G-2.

Example:
As an example of this consequence calculation, consider a benchmark with a proportion B=95%. Now if the measured performance is 93%, the first and second columns show that this is a Basic Failure. Plugging this 2% failure of the 95% benchmark proportion into the quadratic equation of the third column in the table gives a calculated consequence of $6,100 for this submeasure and CLEC.

Table 3 is applicable for any benchmark expressed as B% proportion better than L level, and all benchmarks may be easily expressed in this form.

Increase Consequences for Chronic Performance Failures

Regardless of the type of measurement (parity or benchmark), if performance fails to achieve the Compliant level in consecutive reporting periods, then additional consequences should apply. The recommended treatment for chronic failures is to assess a chronic failure over-ride in the third consecutive month of non-compliant performance. When the chronic failure override applies, a consequence equal to a "Severe Failure" ($25,000 per chronic failure per month) should apply until such time as performance for the specific measurement result is again classified as Compliant.[16]

[16] Alternatively, it is possible to institute consequences for repeated failures as early as the second consecutive month of failure. The amount of the consequence under such a structure would escalate more gradually. See Attachment A, Table A of MCI Worldcom and AT&T Joint Remedies Proposal Ex Parte filed in CC Docket 98-56, filed June 2, 1999.

No Additional Protection of the ILEC is needed through Forgiveness Mechanisms or Mitigation Methods

Properly calibrated performance measures and balancing the probabilities of statistical errors eliminate any need for additional forms of protection for incumbents with respect to considerations of random variation.[17] Moreover, language provided in response to Item 5 of the Tennessee Regulatory Authority's order should allay any fears that additional protections are necessary for the ILEC.[18]

B. Tier II

Tier II consequences are intended to enhance the ILEC's incentives to provide performance that complies with its statutory obligations. Tier I consequences only compensate individual CLECs who actually receive discriminatory treatment from the ILEC. Tier II consequences are designed to counterbalance the ILEC's incentive to damage not just individual firms but the competitive marketplace itself. Thus, the two types of consequences are complementary, and both are necessary to achieve the intended results.

The applicability of Tier II consequences should be determined using the aggregate data for all CLECs within a particular sub-measurement result and disaggregation.[19] Except as noted below, identical rules for determining

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[17] See Attachment E for further discussion of random variation and the inappropriateness of providing further mitigation if Type I and Type II error is balanced as recommended in this proposal.

[18] Because the rationale for providing consequence offsets is the possibility of random variation, there is no justification for applying offsets to measurements that are monitored through the use of benchmarks. As explained above, random variability impacts are fully cared for in the structure of the benchmark standard, by permitting in advance a percentage of performance "misses."

[19] Each occurrence counts equally in this calculation. Thus, the individual results for individual CLECs are not averaged together; rather the performance for all CLECs is

compliance should be utilized for Tier II as for Tier I. Thus, virtually the same data and computational processes can be utilized for both tiers. The differences are highlighted below and are due largely to a reduction of the consequence threshold below the balancing critical value. The smaller threshold is recommended because higher consequences are proposed, so the confidence in the decision to apply a consequence should be greater.

Because Tier II consequences reflect harm to the public interest in a competitive marketplace, consequences under Tier II, unlike Tier I payments, should be paid to a public fund identified by the Commission and may be used for competitively neutral public purposes.[20]

(1). Determining Compliance for Tier II (Parity Measures)

The same method of determining compliance under Tier II applies to the aggregate (or pooled) data of the individual CLECs as is employed for the individual CLEC data under Tier I, except a smaller consequence threshold is used.[21] As a result, the applicable consequence table (Table 1 above) is modified as follows:

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pooled for each submeasurement result. Thus the pooled data analysis effectively creates a "super CLEC" for the purposes of determining Tier II consequences.

[20] Thus, under Tier II, individual CLECs are not compensated.

[21] Alternative methodology exists for determining Tier II consequences. See, for example, the June 2, 1999 Joint AT&T and MCI ex parte filing made with the FCC in CC Docket 98-56.

Table 4

Range of modified z-statistic value (z)	Performance Designation	Applicable Consequence ($)
greater than or equal 5z*/3	Indeterminate	0
less than 5z*/3 to 3z*	Market Impacting	$n [a(z/z^*)^2 + b(z/z^*) + c]$
less than 3z*	Market Constraining	n25,000

Here z* is the balancing critical value for the given submeasure aggregated over all the CLECs, and the coefficients of the smooth consequence function are again:

a = 5625

b = -11250

c = 8125.

The quantity n is the market penetration factor explained below.

A graph of the applicable consequences as a function of the measured modified z-score (z) is given in Attachment G in Figure G-3. The attachment also contains a small step tabulation of the function that approximately represents it in Table G-3.

(2) Determining Compliance for Tier II (Benchmark Measurements) Remedies

The same business rules apply under Tier II to the aggregate (or pooled) data of the individual CLECs as are employed for the individual CLEC data under Tier I, except that consequences do not apply until the pooled CLEC performance results degrades to a point that is equivalent to an intermediate failure designation at the Tier I level. As with parity measures, the applicable consequences are adjusted to reflect the broader consequences of poor

performance for the entire CLEC industry and the concomitant effects on the market and consumers

Table 5

Range of Benchmark Result (x)	Failure Designation	Applicable Consequence ($)
Meets or exceeds (1.5B-50)%	Indeterminate	0
Meets or exceeds (2B-100)% but worse than (1.5B-50)%	Market Impacting	$n\{d[x/(100-B)]^2 + eB[x/(100-B)^2] + f[B/(100-B)]^2 + g\}$
Worse than (2B-100)%	Market Constraining	n25,000

For Table 5, x is the actually measured proportion and the coefficients are again given by:

d = 22500
e = -45000
f = 22500
g = 2500

The quantity n is the market penetration factor explained below.

A graph of the applicable consequences as a function of the measured benchmark result, x, for B=95% and n=10 is given in Attachment G in Figure G-4. The attachment also contains a small step tabulation of the function that approximately represents it in Table G-4.

Establishing the Value of "n" for Tier II

For both Tier II tables (Tables 4 and 5), the value for "n" should be determined based upon the most recent data for the state and company under consideration (in this case Tennessee) relating to resold lines (Table 3.1) and UNE loops (Table 3.3) as reported in the most recent Report of Local Competition published by the FCC.[22] In effect, "n" is a multiplier for the Tier II consequence amount that takes into account, in general terms, the extent of competitive penetration within the state.[23]

Table 6

Lines provided to CLECs/Total ILEC and CLEC Lines	Value of "n"
more than 50%	0
more than 40% to less than or equal 50%	1
more than 30% to less than or equal 40%	2
more than 20% to less than or equal 30%	4
more than 10% to less than or equal 20%	6
more than 5% to less than or equal 10%	8
0% to less than or equal 5%	10

Thus, as competition becomes established, the size of the applicable Tier II consequence is reduced to zero if the ILEC no longer provides a majority of the local lines to the CLECs in its serving area.

[22] If a company is not explicitly identified, then the aggregate result for the state would be utilized

III. Setting Appropriate Caps for Enforcement Remedies

The CLEC Coalition in Georgia recommended that no overall cap be set as a primary deterrent to a severe failure to perform. In other words, if you can calculate the financial impact and absorb that impact, the purpose of placing these measures and remedies in effect is undermined. However, to comply with the TRA's order for a Final Best Offer, ITC^DeltaCom renews its recommendation that the TRA follow the path of the New York and Texas Public Service Commissions and adopt a cap based on the following formula:

A maximum annual cap of $137 million shall apply to the aggregate total of any Tier-1 enforcement mechanisms and Tier-2 Assessments made by BellSouth pursuant to any Tennessee interconnection agreement with a performance remedy plan. The annual cap is based on the formula of 36% of Net Return as set forth at 436 and footnote 1332 of the FCC's December 22, 1999 Memorandum Opinion and Order in CC Docket No. 99-295. The monthly cap will be determined by dividing the amount of the annual cap by twelve. A maximum monthly cap of $11.42 million ($137 million ÷ 12) for Tier-1 enforcement mechanisms will apply to all performance payments made by BellSouth under all BellSouth Tennessee interconnection agreements.[24] To the extent in any given month the monthly cap is not reached, the subsequent month's cap will be increased by an amount equal to the unpaid portion of the previous month's cap. At the end of the year, if the

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[23] The calculation for a particular ILEC and state would be based on the most current data reported to the FCC and be as follows: (resold lines + UNE loops)/(total switched lines).

[24] The Texas Public Utility Commission adopted the following formula: "The annual cap will be determined by SWBT, based on the formula of 36% of Net Return as set forth at 436 and footnote 1332 of the FCC's December 22, 1999 Memorandum Opinion and Order in CC Docket No. 99-295." Footnote 1332 states as follows:

> [1332] To arrive at a total "Net Return" figure that reflects both interstate and intrastate portions of revenue derived from local exchange service, we combined 1915 (the interstate "Net Return" line) with a computed net intrastate return number (total intrastate operating revenues and other operating income, less operating expenses, nonoperating items and all taxes). See ARMIS 43-01 Annual Summary Report, Table 1, Cost and Revenue Table (1998).

Thus, the annual cap for BellSouth using the above formula is $137 million dollars using 1999 ARMIS data.

aggregate total of Tier-1 and Tier-2 remedies under all BellSouth Tennessee interconnection agreements equals or exceeds the annual cap, but BellSouth has paid less than that amount due to the monthly cap, BellSouth shall be required to pay an amount equal to the annual cap. In such event, Tier-1 remedies shall be paid first on a pro rata basis, and any remainder within the annual cap, shall be paid as a Tier-2 remedy. In the event the total calculated amount of remedies for the year is less than the annual cap, BellSouth shall be obligated to pay ONLY the actual calculated amount of remedies.

The annual cap shall be calculated on the first day of the month following the annual anniversary of Authority approval of the Parties Agreement, using the most recent publicly available ARMIS data. For purposes of applying the cap, the relevant calendar year shall begin on the first day of the month following the month in which the Authority approved the Parties Agreement.

ADDITIONAL CONSEQUENCES ENFORCE THE OPERATION OF THE PLAN

Additional consequences should be applicable for other BST failures related to performance reporting. At a minimum, consequences for the following areas of non-compliance are appropriate:

Late performance reports - If performance data and associated reports are not available to the CLECs by the due day, BST should be liable for payments of $5,000 to the Tennessee State Treasury for every day past the due date for delivery of the reports and data. BST's liability should be determined based on the latest report delivered to a CLEC.

Incomplete or revised reports - If performance data and reports are incomplete, or if previously reported data are revised, then BST should be liable for payments of $1,000 to the Tennessee State Treasury for every day past the due date for delivery of the original reports.

Inability to access detailed data - If a CLEC cannot access its detailed data underlying BST's performance reports due to failures under the control of BST, then BST should

pay the affected CLEC $1000 per day (or portion thereof) until such data are made available.

Interest on late consequence payments - If BST fails to remit a consequence payment by the 15th business day following the due date of the data and the reports upon which the consequences are based, then it should be liable for accrued interest for every day that the payment is late. A per diem interest rate that is equivalent to BST's rate of return for its regulated services for the most recent reporting year should apply.

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Attachment A

Sufficient Disaggregation Is Essential to Permit Detection of Discrimination

A meaningful system of performance consequences cannot operate without a high-quality system of performance measurements. This requires not only a robust system of performance measurements that monitors all key aspects of market entry and ILEC support but also that the results derived from such measurements are sufficiently discrete to permit meaningful comparisons.[25]

Sufficient disaggregation is absolutely essential for accurate comparison of results to expected performance. This is true regardless of whether parity or a benchmark serves as the performance standard. Inadequate disaggregation of results means that not all key factors driving differences in performance results have been identified, which in turn interjects needless variability into the computed results. Such an outcome has two adverse effects. First, the ability to detect real differences is reduced for parity measures, because the modified z-statistic employs only the incumbent's variance in the denominator, which will increase with inappropriate averaging of dissimilar results (thus causing the calculated z-statistic to be smaller). Second, benchmark standards may be more permissive, both in terms of the absolute standard and the percentage "miss" accepted (to the extent it is factually supported at all), if the factual data underlying them are averages of widely divergent processes. Accordingly, inadequately disaggregated data impose very lenient targets that result in a very low probability that performance requirements will be missed.

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[25] Although some incumbents have raised vague concerns that sufficient disaggregation of results may over-burden regulators, those concerns are unfounded for two reasons. First, careful advance specification of disaggregation requirements will reduce, rather than increase, regulatory burden and permit superior quality decision making. Second, if fewer performance results are desired, statistical procedures for re-aggregating disaggregated results provide a superior approach to reliance upon overly aggregated measurement results.

Only incumbents, such as BellSouth, have access to the highly detailed information regarding their retail performance necessary to determine the level of disaggregation that is required to permit apples-to-apples comparisons. Moreover, there are analytical procedures that allow factual conclusions to be made regarding how much disaggregation is "enough."[26] Indeed, in the limited instances where CLECs have been provided access to ILEC data and at least limited public disclosure of analysis was permitted, the facts showed both that ILECs have very detailed data and that very disaggregated results comparisons are necessary to avoid bias.[27]

Establishing the appropriate level of disaggregation is not a "once-and-done" undertaking. Provision can be made to review, perhaps annually, the appropriateness of the disaggregation contained in the ILEC's performance measurement system. In this review process, an ILEC may demonstrate, through data it has collected pursuant to its performance measurement system, that the existing level of disaggregation is not providing any additional insight to an assessment of its performance quality and nondiscrimination. In that same review process, individual CLECs should also be permitted to request additional disaggregation.[28] The party requesting a change should have the burden of showing why the proposed change is appropriate provided that all parties have equal access to detailed data necessary to support the proposal.

There should not be any presumption that additional disaggregation creates a burden, for either the ILEC or this Commission. For all incumbents in general, additional disaggregation (once correct implementation is validated) simply involves repetitive computation – a task readily and quickly accomplished by today's computers. Such a small and largely one-time effort is a small price to

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[26] For example, regression procedures may provide a workable methodology for establishing the extent of disaggregation required to make accurate comparisons.

[27] See AT&T Ex Parte filed July 20, 1999 in CC Docket 98-56.

[28] In such cases, the requesting CLEC should be required to make its request for further disaggregation to the incumbent LEC at least three months before initiation of the review process.

pay for the vastly improved capability to protect the prospects for competition in Tennessee.

Attachment B

Local Competition Users Group

Statistical Tests for Local Service Parity

February 6, 1998
Membership: AT&T, Sprint, MCI, LCI, WorldCom

Version 1.0

Executive Summary

The Local Competition Users Group has drafted 27 Service Quality Measurements (SQMs) that will be used to measure parity of service provided by incumbent local exchange carriers (ILECs) to competitive local exchange carriers (CLECs). This set of measures includes means, proportions, and rates of various indicators of service quality. This document proposes statistical tests that are appropriate for determining if parity is being provided with respect to these measurements.

Each month, a specified report of the 27 SQMs will be provided by the ILEC, broken down by the requested reporting dimensions. The SQMs are to be systematically developed and provided by the ILECs as specified. Test parameters will be calculated so that the overall probability of declaring the ILEC to be out of parity purely by chance is very small. For each SQM and reporting dimension reported, the difference between the ILEC and CLEC results is converted to a *z*-value. Non-parity is determined if a *z*-value exceeds a selected critical value.

Introduction

Purpose

The Local Competition Users Group (LCUG) is a cooperative effort of AT&T, MCI, Sprint, LCI and WorldCom for establishing standards for the entry of new companies (competitive local exchange carriers, or CLECs) into the local telecommunications market. A key initiative of the LCUG is to establish measures of parity for services provided by incumbent local exchange carriers (ILECs). In short, parity means that the support ILECs provide on behalf of the CLECs is no lesser in quality than the service provided by the ILECs to their own customers.

The LCUG has drafted a document listing service quality measurements (SQMs) that must be reported by the ILECs to insure that CLECs are given parity of support. The SQM document has been submitted to the FCC and made available to PUCs in all 50 states and is pending approval by many of these regulatory agencies. This document has been drafted to describe statistical methodology for determining if parity exists based on the measurements defined in the SQM document.

Service Quality Measurements

The LCUG has identified 27 service quality measurements for testing parity of service. These are:

Category	ID	Description
Pre-Ordering	PO-1	Average Response Interval for Pre-Ordering Information
Ordering and Provisioning	OP-1	Average Completion Interval
	OP-2	Percent Orders Completed on Time
	OP-3	Percent Order Accuracy
	OP-4	Mean Reject Interval
	OP-5	Mean FOC Interval
	OP-6	Mean Jeopardy Interval
	OP-7	Mean Completion Interval
	OP-8	Percent Jeopardies Returned
	OP-9	Mean Held Order Interval
	OP-10	Percent Orders Held >= 90 Days
	OP-11	Percent Orders Held >= 15 Days
Maintenance and Repair	MR-1	Mean Time to Restore
	MR-2	Repeat Trouble Rate
	MR-3	Trouble Rate
	MR-4	Percentage of Customer Troubles Resolved

		Within Estimate
General	GE-1	Percent System Availability
	GE-2	Mean Time to Answer Calls
	GE-3	Call Abandonment Rate
Billing	BI-1	Mean Time to Provide Recorded Usage Records
	BI-2	Mean Time to Deliver Invoices
	BI-3	Percent Invoice Accuracy
	BI-4	Percent Usage Accuracy
Operator Services and Directory Assistance	OSDA-1	Mean Time to Answer
Network Performance	NP-1	Network Performance Parity
Interconnect / Unbundled Elements and Combos	IUE-1	Function Availability
	IUE-2	Timeliness of Element Performance

The Service Quality Measurements document describes the importance of each measure as an indicator of service parity. The SQM document also describes reporting dimensions that will be used to break each measure out by like factors (*e.g.*, major service group).

Why We Need to Use Statistical Tests

The Telecommunications Act of 1996 requires that ILECs provide nondiscriminatory support regardless of whether the CLEC elects to employ interconnection, services resale, or unbundled network elements as the market entry method. It is essential that CLECs and regulators be able to determine whether ILECs are meeting these parity and nondiscriminatory obligations. In order to make such a determination, the ILEC's performance for itself must be compared to the ILEC's performance in support of CLEC operations; and the results of this comparison must demonstrate that the CLEC receives no less than equal treatment compared to that the ILEC provides to its own operations. Where a direct comparison to analogous ILEC performance is not possible, the comparative standard is the level of performance that offers an efficient CLEC a meaningful opportunity to compete.

When making the comparison of ILEC results to CLEC results, it is necessary to employ comparative procedures that are based upon generally accepted statistical procedures. It is important to use statistical procedures because all of the ILEC-CLEC processes that will be measured are processes that contain some degree of randomness. Statistical procedures recognize that there is measurement variability, and assist in translating results data into useful decision-making information. A statistical approach allows for measurement variability while controlling the risk of drawing an inappropriate conclusion (*i.e,* a "type 1" or "type 2" error, discussed in the next section).

Basic Concepts and Terms

Populations and Samples

Statistical procedures will permit a determination whether the support that the ILECs provide to CLECs is indistinguishable from the support provided by the ILECs to their own customers. In statistical terms, we will determine whether two "samples", the ILEC sample and the CLEC sample, come from the same "population" of measurements.

The procedures described in this paper are based on the following assumption: *When parity is provided, the ILEC data and CLEC data can both be regarded as samples from a common population of possible outcomes.* In other words, if parity exists, the measured results for a CLEC should not be distinguishable from the measured results for the ILEC, once
random variability is taken into account. Figure 1 illustrates this concept. On the right side of the figure are histograms of two samples. In this illustration, the ILEC sample contains 200 observations (data values) and the CLEC sample contains 50. Note that the two histograms are not exactly alike. This is due to sampling variation. The assumption that parity exists implies that both samples were drawn from the same population of values. If it were possible to observe this population completely, the population histogram might appear as shown on the left of the Figure. If the samples were indeed taken from this population, histograms drawn for larger and larger samples would look more and more like the population histogram. Figure 1 shows that even when parity is being provided, there will be differences between the samples due to sampling variability. Statistical tests quantify the differences between the two samples and make proper allowance for sampling variability. They assess the chance that the differences that are observed are due simply to sampling variability, if parity is being provided.

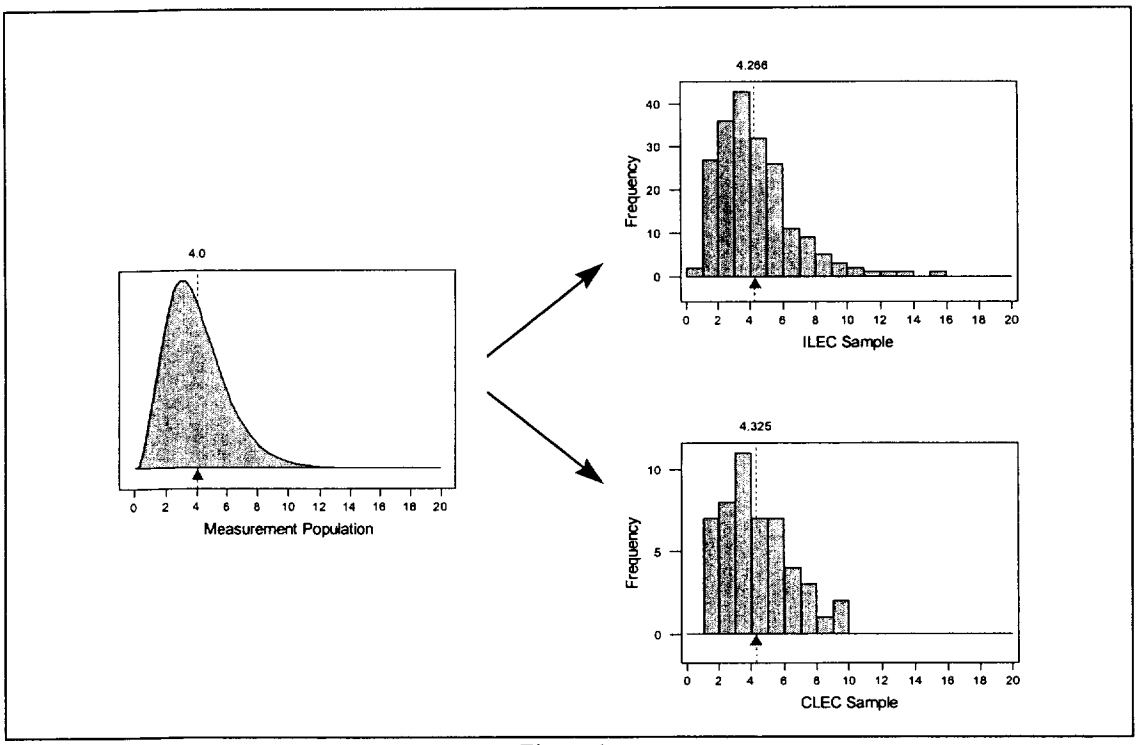

Figure 1.

Measures of Central Tendency and Spread

Often, distributions are summarized using "statistics." For the purpose of this paper, a "statistic" is simply a calculation performed on a sample set of data. Two common types of statistics are known as measures of "central tendency" and "spread."

A measure of central tendency is a summary calculation that describes the middle of the distribution in some way. The most common measure of central tendency is called the "mean" or "average" of the distribution. The mean of a sample is simply the sum of the data values divided by the sample size (number of observations). Algebraically, this calculation is expressed as

$$\bar{x} = \frac{\Sigma x}{n},$$

where x denotes a value in the sample and n denotes the sample size. The mean describes the center of the distribution in the following way: *If the histogram for a sample were a set of weights stacked on top of a flat board placed on top of a fulcrum (a "see-saw"), the mean would be the position along the board at which the board would balance.* (See Figure 1.) The mean in Figure 1 is indicated by the small triangle at approximately the value "4" on the horizontal axis.

A measure of spread is a summary calculation that describes the amount of variation in a sample. A common measure of spread is a called the "standard deviation" of the sample. The standard deviation is the typical size of a deviation of the observations in the sample from their mean value. The standard deviation is calculated by subtracting the mean value from each observation in the sample, squaring the resulting differences (so that negative and positive differences don't offset), summing the squared differences, dividing the sum by one less than the sample size, then taking the square root of the result. Algebraically, this calculation is expressed as

$$\sigma = \sqrt{\frac{\Sigma(x - \bar{x})^2}{n - 1}}.$$

While the notion of mean and standard deviation exists for populations as well as samples, the mathematical definition for the mean and standard deviation for populations is beyond the scope of this paper. However, their interpretation is generally the same as for samples. In fact, for very large samples, the sample mean and sample standard deviation will be very close to the mean and standard deviation of the population from which the sample was taken.

Sampling Distribution of the Sample Mean

In Figure 1 we showed the positions of the means of the population and the two samples with triangular symbols beneath the distributions. If we sample over successive months, we will get new ILEC samples and new CLEC samples each and every month. These samples will not be exactly like the one for the first month; each will be influenced by sampling variability in a different way. In Figure 2, we show how sets of 100 successive ILEC means and 100 successive CLEC means might appear. The ILEC means can be thought of as being drawn from a population of sample means; this population is called the "sampling distribution" of these ILEC means. This sampling distribution is completely determined by the basic population of measurements that we start with, and the number of observations in each sample. The sampling distribution has the same mean as the population.

Figure 2 illustrates two important statistical concepts:

1. The histogram of successive sample means resembles a bell-shaped curve known as the Normal Distribution. This is true even though the individual observations came from a skewed distribution.
2. The standard deviation of the distribution of sample means is much smaller than the standard deviation of the observations themselves. In fact, statistical theory establishes the fact that the standard deviation on the population of means is smaller by a factor $\sqrt{n}$, where n is the sample size. This effect can be seen in our example: the distribution of the CLEC means is twice as broad

as the distribution of the ILEC means, since the ILEC sample size (200) is four times as large as the CLEC sample size (50).

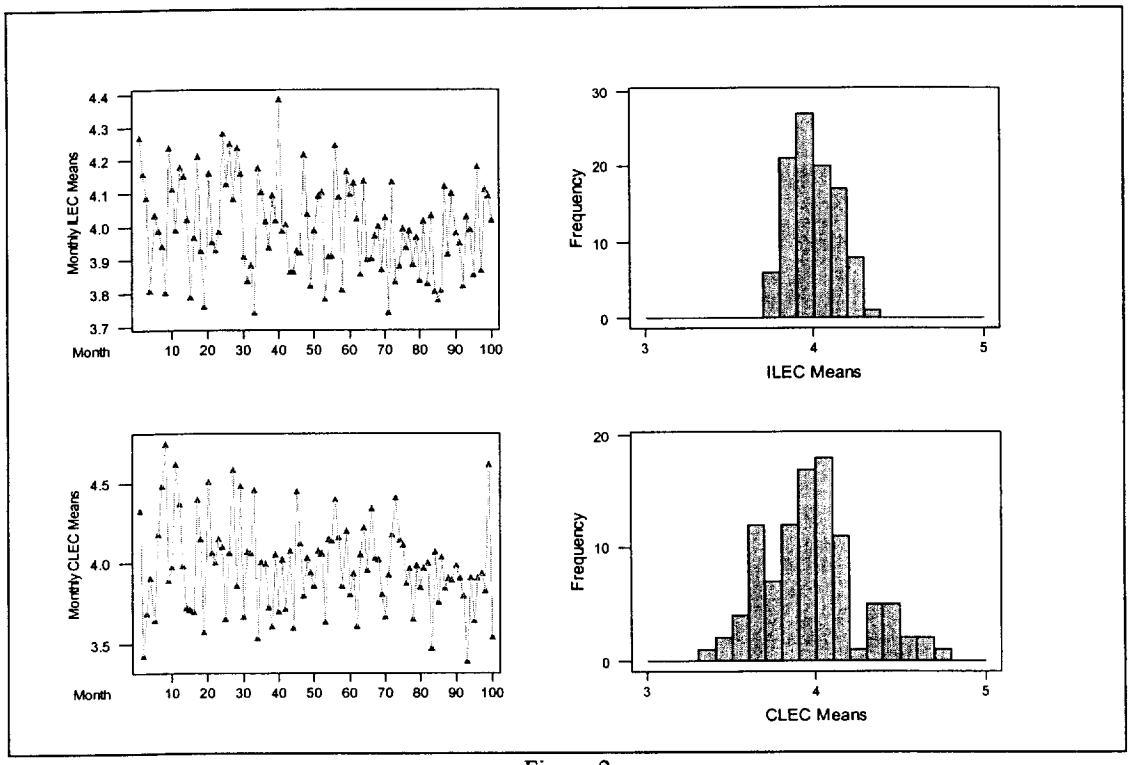

Figure 2.

It is common to call the standard deviation of the sampling distribution of a statistic the "standard error" for the statistic. We shall adopt this convention to avoid confusion between the standard deviation of the individual observations and the standard deviation (standard error) of the statistic. The latter is generally much smaller than the former. In the case of sample means, the standard error of the mean is smaller than the standard deviation of the individual observations by a factor of $\sqrt{n}$.

The Z-test

Our objective is to compare the mean of a sample of ILEC measurements with the mean of a sample of CLEC measurements. Suppose both samples were drawn from the same population; then the difference between these two sample means (*i.e.*, $DIFF = \bar{x}_{CLEC} - \bar{x}_{ILEC}$) will have a sampling distribution which will

(i) have a mean of zero; and
(ii) have a standard error that depends on the population standard deviation and the sizes of the two samples.

Statisticians utilize an index for comparing measurement results for different samples. The index employed is a ratio of the difference in the two sample means (being compared) and the standard deviation estimated for the overall population. This ratio is known as a z-score. The z-score compares the two samples on a standard scale, making proper allowance for the sample sizes.

The computation of the difference in the two sample means is straightforward.

$$DIFF = \bar{x}_{\text{CLEC}} - \bar{x}_{\text{ILEC}}$$

The standard deviation is less intuitive. Nevertheless, statistical theory establishes the fact that

$$\sigma^2_{\text{DIFF}} = \frac{\sigma^2}{n_{\text{CLEC}}} + \frac{\sigma^2}{n_{\text{ILEC}}},$$

where is the standard deviation of the population from which both samples are drawn. That is, the squared standard error of the difference is the sum of the squared standard errors of the two means being compared.[29]

We do not know the true value of the population because the population cannot be fully observed. However, we can estimate given the standard deviation of the ILEC sample ($_{\text{ILEC}}$).[30] Hence, we may estimate the standard error of the difference with

$$\sigma_{\text{DIFF}} = \sqrt{\frac{\sigma^2_{\text{ILEC}}}{n_{\text{CLEC}}} + \frac{\sigma^2_{\text{ILEC}}}{n_{\text{ILEC}}}} = \sqrt{\sigma^2_{\text{ILEC}}\left[\frac{1}{n_{\text{CLEC}}} + \frac{1}{n_{\text{ILEC}}}\right]}$$

If we then divide the difference between the two sample means by this estimate of the standard deviation of this difference, we get what is called a "z-score".

$$z = \frac{DIFF}{\sigma_{\text{DIFF}}}$$

Because we assumed that both samples were in fact drawn from the same population, this z-score has a sampling distribution that is very nearly Standard Normal, *i.e.*, having a mean of zero and a standard error of one. Thus, the z-score will lie between ± 1 in about 68% of cases, will lie between ± 2 in about 95% of cases, and will lie between ± 3 in about 99.7% of cases, always

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[29] Winkler and Hays, *Probability, Inference, and Decision.* (Holt, Rinehart and Winston: New York), p. 370.

[30] Winkler and Hays, *Probability, Inference, and Decision.* (Holt, Rinehart and Winston: New York), p. 338.

assuming that both samples come from the same population. Therefore, one possible procedure for checking whether both samples come from the same population is to compare the z-score with some cut-off value, perhaps +3. For comparisons where the values of z exceed the cutoff value, you reject the assumption of parity as not proven by the measured results. This is an example of a statistical test procedure. It is a formal rule of procedure, where we start with raw data (here two samples, ILEC measurements and CLEC measurements), and arrive at a decision, either "conformity" or" violation".

Type 1 Errors and Type 2 Errors

Each statistical test has two important properties. The first is the probability that the test will determine that a problem exists when in fact there is none. Such a mistaken conclusion is called a type one error. In the case of testing for parity, a type one error is the mistake of charging the ILEC with a parity violation when they may not be acting in a discriminatory manner. The second property is the probability that the test procedure will not identify a parity violation when one does exist. The mistake of not identifying parity violation when the ILEC is providing discriminatory service is called a type two error. A balanced test is, therefore, required.

From the ILEC perspective, the statistical test procedure will be unacceptable if it has a high probability of type one errors. From the CLEC perspective, the test procedure will be unacceptable if it has a high probability of type two errors.

Very many test procedures are available, all having the same probability of type one error. However the probability of a type two error depends on the particular kind of violation that occurs. For small departures from parity, the probability of detecting the violation will be small. However, different test procedures will have different type two error probabilities. Some test procedures will have small type two error when the CLEC mean is larger than the ILEC mean, even if the CLEC standard deviation is the same as the ILEC standard deviation, while other procedures will be sensitive to differences in standard deviation, even if the means are equal. Our proposals below are designed to have small type two error when the CLEC mean exceeds the ILEC mean, whether or not the two variances are equal.

Tests of Proportions and Rates

When our measurements are proportions (*e.g.* percent orders completed on time) rather than measurements on a scale, there are some simplifications. We can think of the "population" as being analogous to an urn filled with balls, each labeled either 0(failure) or 1(success). In this population, the fraction of 1's is some "population proportion". Making an observation corresponds to drawing a single ball from this urn. Each month, the ILEC makes some number of observations, and reports the ratio of failures or successes to the total number of

observations; the ILEC does the same does the same for the CLEC. The situation is very similar to that discussed above; however, rather than a wide range of possible result values, we simply have 0's (failures) and 1's (successes). The "sample mean" becomes the "observed proportion", and this will have a sampling distribution just as before. The novelty of the situation is that now the population standard deviation is a known function of the population proportion[31]; if the population proportion is p, the population standard deviation is $\sqrt{p(1-p)}$, with similar simplifications in all the other formulas.

There is a similar simplification when the observations are of rates, *e.g.*, number of troubles per 100 lines. The formulas appear below.

Proposed Test Procedures: Applying the Appropriate Test

Three z-tests will be described in this section: the "Test for Parity in Means", the "Test for Parity in Rates", and the "Test for Parity in Proportions". For each LCUG Service Quality Measurement (SQM), one or more of these parity tests will apply. The following chart is a guide that matches each SQM with the appropriate test.

Measurement (Corresponding LCUG Number)	*Test*
Preordering Response Interval (PO-1)	**Mean**
Avg. Order Completion Interval (OP-1)	**Mean**
% Orders Completed On Time (OP-2)	**Proportion**
% Order (Provisioning) Accuracy (OP-3)	**Proportion**
Order Reject Interval (OP-4)	**Mean**
Firm Order Confirmation Interval (OP-5)	**Mean**
Mean Jeopardy Interval (OP-6)	**Mean**
Completion Notice Interval (OP-7)	**Mean**
Percent Jeopardies Returned (OP-8)	**Proportion**
Held Order Interval (OP-9)	**Mean**
% Orders Held $\geq$ 90 Days (OP-10)	**Proportion**
% Orders Held $\geq$ 15 Days (OP-11)	**Proportion**
Time To Restore (MR-1)	**Mean**
Repeat Trouble Rate (MR-2)	**Proportion**
Frequency of Troubles (MR-3)	**Rate**
Estimated Time To Restore (MR-4)	**Proportion**
System Availability (GE-1)	**Proportion**
Center Speed of Answer (GE-2)	**Mean**
Call Abandonment Rate (GE-3)	**Proportion**
Mean Time to Deliver Usage Records (BI-1)	**Mean**
Mean Time to Deliver Invoices (BI-2)	**Mean**
Percent Invoice Accuracy (BI-3)	**Proportion**
Percent Usage Accuracy (BI-4)	**Proportion**
OS/DA Speed of Answer (OS/DA-1)	**Mean**
Network Performance (NP-1)	**Mean, Proportion**

[31] Winkler and Hays, *Probability, Inference, and Decision.* (Holt, Rinehart and Winston: New York), p. 212.

Availability of Network Elements (IUE-1)	**Mean, Proportion**
Performance of Network Elements (IUE-2)	**Mean, Proportion**

Test for Parity in Means

Several of the measurements in the LCUG SQM document are averages (*i.e.*, means) of certain process results. The statistical procedure for testing for parity in ILEC and CLEC means is described below:

1. Calculate for each sample the number of measurements (n_{ILEC} and n_{CLEC}), the sample means ($\bar{x}_{ILEC}$ and $\bar{x}_{CLEC}$), and the sample standard deviations ($_{ILEC}$ and $_{CLEC}$).

2. Calculate the difference between the two sample means; if *larger* CLEC mean indicates possible violation of parity, use $DIFF = \bar{x}_{CLEC} - \bar{x}_{ILEC}$, otherwise reverse the order of the CLEC mean and the ILEC mean.

3. To determine a suitable scale on which to measure this difference, we use an estimate of the population variance based on the ILEC sample, adjusted for the sized of the two samples: this gives the standard error of the difference between the means as

$$\sigma_{DIFF} = \sqrt{\sigma^2_{ILEC}\left[\frac{1}{n_{CLEC}} + \frac{1}{n_{ILEC}}\right]}$$

4. Compute the test statistic

$$z = \frac{DIFF}{\sigma_{DIFF}}$$

5. Determine a critical value *c* so that the type one error is suitably small.

6. Declare the means to be in violation of parity if $z > c$.

Example:

c:	3.58	Critical value for the test

ILEC			CLEC			Test	
n	mean	variance	n	mean	variance	z	Violation
250	4.038	1.9547	50	5.154	23.2035	5.15	YES!

Test for Parity in Proportions

Several of the measurements in the LCUG SQM document are proportions derived from certain counts. The statistical procedure for testing for parity in

ILEC and CLEC proportions is described below. It is the same as that for means, except that we do not need to estimate the ILEC variance separately.

1. Calculate for each sample sample sizes (n_{ILEC} and n_{CLEC}), and the sample proportions (p_{ILEC} and p_{CLEC}).

2. Calculate the difference between the two sample means; if *larger* CLEC proportion indicates worse performance, use *DIFF* = $p_{CLEC} - p_{ILEC}$, otherwise reverse the order of the ILEC and CLEC proportions.

3. Calculate an estimate of the *standard error for the difference* in the two proportions according to the formula

$$\sigma_{DIFF} = \sqrt{p_{ILEC}(1 - p_{ILEC})\left[\frac{1}{n_{CLEC}} + \frac{1}{n_{ILEC}}\right]}$$

4. Hence compute the test statistic

$$z = \frac{DIFF}{\sigma_{DIFF}}$$

5. Determine a critical value *c* so that the type one error is suitably small.

6. Declare the means to be in violation of parity if $z > c$.

Example:

c:	3.58	Critical value for the test

ILEC			CLEC			Test	
num	den	p	num	den	p	z	Violation
5	250	2.00%	7	40	17.50%	6.50	YES!

Test for Parity in Rates

A rate is a ratio of two counts, *num/denom*. An example of this is the trouble rate experience for POTS. The procedure for analyzing measurements results that are rates is very similar to that for proportions.

1. Calculate the numerator and the denominator counts for both ILEC and CLEC, and hence the two rates $r_{ILEC} = num_{ILEC}/denom_{ILEC}$ and $r_{CLEC} = num_{CLEC}/denom_{CLEC}$.

2. Calculate the difference between the two sample rates; if *larger* CLEC rate indicates worse performance, use *DIFF* = $r_{CLEC} - r_{ILEC}$, otherwise take the negative of this.

3. Calculate an estimate of the *standard error for the difference* in the two rates according to the formula

$$\sigma_{DIFF} = \sqrt{r_{ILEC}\left[\frac{1}{denom_{CLEC}} + \frac{1}{denom_{ILEC}}\right]}$$

4. Compute the test statistic

$$z = \frac{DIFF}{\sigma_{DIFF}}$$

5. Determine a critical value *c* so that the type one error is suitably small.

6. Declare the means to be in violation of parity if $z > c$.

Example:

c:	3.58	Critical value for the test

ILEC			CLEC			Test	
num	den	rate	num	den	rate	z	Violation
250	610	0.409836	34	30	1.133333	6.04	YES!

Attachment C
Permutation Analysis Procedural Steps

Permutation analysis is applied to calculate the z-statistic using the following logic:

1. Choose a sufficiently large number T.

2. Pool and mix the CLEC and ILEC data sets

3. Randomly subdivide the pooled data sets into two pools, one the same size as the original CLEC data set (n_{CLEC}) and one reflecting the remaining data points, (which is equal to the size of the original ILEC data set or n_{ILEC}).

4. Compute and store the Z-test score (Z_S) for this sample.

5. Repeat steps 3 and 4 for the remaining T-1 sample pairs to be analyzed. (If the number of possibilities is less than 1 million, include a programmatic check to prevent drawing the same pair of samples more than once).

6. Order the Z_S results computed and stored in step 4 from lowest to highest.

7. Compute the Z-test score for the original two data sets and find its rank in the ordering determined in step 6.

8. Repeat the steps 2-7 ten times and combine the results to determine P = (Summation of ranks in each of the 10 runs divided by 10T)

9. Using a cumulative standard normal distribution table, find the value Z_A such that the probability (or cumulative area under the standard normal curve) is equal to P calculated in step 8.

10. Compare Z_A with the desired critical value as determined from the critical Z table. If Z_A > the designated critical Z-value in the table, then the performance is non-compliant.

Attachment D

Statistical Demonstrations of Non-Parity are Sufficient: Notes on "Competitive Significance"

Some incumbents have proposed that, when comparing the CLEC data set to the ILEC data set for a particular performance measurement result, a lack of parity should not be declared unless both the performance difference is statistically significant and the difference has "competitive or economic significance." This notion is contrary to FCC's interpretation of the terms of the 1996 Act (the Act). The FCC has found that the term "nondiscriminatory" as used in the Act is a more stringent standard than the "unjust and unreasonable discrimination" standard set forth in other provisions of the Communications Act.[32] Thus, the term "nondiscriminatory access" means that: (1) the quality of performance must be equal among all carriers requesting the support, and (2) where technically feasible, the support must be no less in quality and timeliness than that which the incumbent provides to itself.[33]

Some ILECs have also argued that, as the number of data points underlying the computed performance result increases (all other factors held constant), smaller differences in means will be statistically significant. This statement is true; nevertheless, as explained in the text, the consequences defined by this plan do

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[32] See FCC Docket No. 96-98, Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, First Report and Order released August 8, 1996, ¶ 217, 859 ("Local Competition Order").

[33] Local Competition Order, ¶315 (access must be provided on terms that are "equal to the terms and conditions under which the incumbent LEC provisions such elements to itself"); Second Order on Reconsideration, Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98 (released December 13, 1996) ¶9 (OSS access "must be equal to" the access that the ILEC provides to itself); FCC CC Docket No. 97-137, In the Matter of Ameritech Michigan Pursuant to Section 271 of the Communications Act of 1934, as amended, To Provide In-Region InterLATA Services in Michigan, Memorandum Opinion and Order released August 19, 1997 ("Ameritech Michigan Order"),¶139 ("BOC must provide access to competing carriers that is equal to the level of access that the BOC provides to itself . . . in terms of

not increase with the number of data points. Therefore, the statistical test and z-score have achieved their exact purposes by *identifying unequal performance* and increasing consequences with *severity* of failure. Furthermore, the term "discriminatory" under the Act should not be confused with direct and provable competitive injury. The language of the Act does not permit the incumbent to discriminate against a CLEC by showing that no specific competitive harm was experienced by the CLEC.[34] Moreover, as a theoretical matter, although statistical science can be used to evaluate the impact of different choices of alternative hypothesis in the balancing methodology, there is not much that an appeal to statistical principles can offer in directing specific choices. These specific choices are best left to telephony experts.

These judgements should consider the financial impact (on the CLECs) of violations of various degrees. As a first approximation, the ILEC has data, generated by its routine management procedures, that could be used to calibrate the effect of various violations. The Commission should require the ILEC to produce evidence, relating to its management procedures, that would help the Commission understand what deviations from target performance routinely signal the need for correction.

It is certainly not sufficient to consider only the resulting critical values or error probabilities.

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quality, accuracy and timeliness"); ¶166 (ILEC "must provide competing carriers access to such OSS function equal to the access that it provides to its retail operations").

[34] Indeed, requiring a CLEC to demonstrate the specific anticompetitive consequences of an ILEC performance failure would effectively render these new protections into mere reiterations of Section II of the Sherman Act. Long experience under antitrust law shows how difficult and protracted such a requirement is in practice.

Attachment E

Mitigation for Potential Impacts of Random Variation is Unnecessary When Type I and Type II Error is Balanced

Random variation is differences in the expected output (or result) of a process that cannot be entirely explained as a result of differences in the inputs to the process. Said another way, running the very same process multiple times using exactly the same key inputs may not (and likely will not) produce exactly the same outcomes. The differences in the outcomes are "explained" as random variation.

There is little debate that the support processes that incumbents utilize to support CLECs tend to be complex and that a variety of factors influence the quantity and quality of the support delivered. As a result, provided the necessary steps have been taken to disaggregate measurement results sufficiently to account for factors correlated with different outcomes, random variation should be accommodated. In doing so, a reasonable balance needs to be struck between (1) protecting the ILEC from consequences that are a result of random variation, and (2) protecting competitors from the adverse effects of discrimination by the ILEC.

As discussed above, the first step in mitigating the effects of random variation is to minimize the risk of making an incorrect decision. In this situation, the two potential incorrect decisions are (1) declaring performance compliant when it is actually discriminatory and (2) declaring performance non-compliant when it is actually within acceptable limits. If these two probabilities are balanced, then, the consequences for "false" failures conceptually offset the consequences for undetected failures. Otherwise stated, the small remedy payment by the ILEC under falsely declared non-compliance is conceptually balanced with the market losses experienced by the CLECs due to falsely declared compliance.

Some regulators have expressed concerns, in light of what they consider to be sizable consequences necessary to motivate compliant ILEC performance and the inability to precisely balance risk, that additional mitigating factors should be instituted. Unfortunately, virtually all the mechanisms discussed are designed to protect the incumbent at the expense of the protecting the competitive process. The following mechanisms have been proposed, but each suffer from serious flaws.

a. Credits for "Better than Required" Performance Permit Gaming

This approach to mitigation is misguided and has the potential to cause extreme harm with little upside potential. In this flawed approach to mitigation, consequences for failed performance could be negated if the incumbent provides "better than required" performance at a different time (or for a different measurement) and thus earns a "credit." For example, the incumbent could deliver bad performance in one area and offset the consequence through performance credits "earned" in a separate but unrelated area or through credits for compliant performance previously (or subsequently) delivered. In all cases, such credits provide incumbents extensive opportunities to "game the system." Credits give ILECs the opportunity to deliver highly variable results that swing between very good and extremely poor performance and still be absolved of any consequence. Likewise, incumbents have the opportunity to temporarily provide compliant performance and then discriminate with impunity. In either case, the CLECs' position in the marketplace compared to the incumbent is harmed. Moreover, because CLECs only learn of "better" performance after the fact (in a performance report), they cannot take practical advantage of such performance. Thus they get no benefit that offsets the real harm they and their customers have actually suffered.

Attachment F

Addressing Measurement Overlap And Correlation

Measurement overlap occurs when one or more measurements effectively measure the same performance. If two measurements overlap, then consequences should attach to only one of them. Note, however, a measurement addressing timeliness and a measurement addressing quality for the same area of performance do not overlap. Also, it should be noted that, given the care taken in defining measurements in LCUG SQM Version 7.0, there are no obvious areas of significant measurement overlap

Measurement correlation is different from measurement overlap. Measurement correlation occurs when one or more measurement results move at the same time. The direction of movement need not be the same. That is, one may improve (e.g., quality) while another deteriorates (e.g., timeliness). As such, measurement correlation does not automatically argue for adjustment to the measurements eligible for consequences. Indeed, an incumbent that is intentionally and pervasively discriminating would be capable of showing a high degree of correlation among all measurement results both within and across months – all results would be deteriorating.

If there are reasons to believe that measurements are somewhat overlapping and correlation is suspected, the solution is not to immediately eliminate one or both measurements. Rather the potentially superior approach is to create "families" for the purpose of applying consequences. Each measurement "family" would be eligible for only a single consequence. Whether and to what degree a family is eligible for a consequence would be determined by the worst performing individual measurement result within the family for the month under consideration. Thus, use of measurement families eliminates the possibility of

consequence "double jeopardy"[35] without making any advance value judgement regarding the usefulness of individual measurements.

Use of measurement families has the potential for significant harm for an otherwise effective consequence plan due because: (1) inappropriate grouping can mask areas of discrimination by placing non-overlapped measurements in the same family; and, (2) by reducing eligible measurements, without adjusting the per measurement consequence, the overall plan incentives are diminished. As a result, establishment of measurement families must be approached with extreme caution and sparingly used. At least the following conditions must be imposed.

(1) measurements that address separate support functionality may not be placed in the same family;

(2) measurements that address different modes of market entry may not be placed in the same family;

(3) measurement families may not be used as a means to avoid disaggregation detail;

(4) measurements that address (a) timeliness, (b) accuracy, and (c) completeness may not be placed within the same family;

(5) measurement families, to the extent used, must be identical across all CLECs;

(6) even if correlation can be demonstrated, measurement families must not be used to combine otherwise independent measurements of a deficient process; and,

(7) establishment of measurement families must not reduce the maximum consequence payable by more than 10% without an offsetting increase in

[35] If the measurements in the family are truly overlapping and correlated they point to the same conclusion (incidents of failure and severity). Measurement families thus treat the incumbent preferentially: either the measurements are effectively the same and only one consequence applies or they were inappropriately grouped and the incumbent avoids one or more consequences that should have been incurred.

the basic, intermediate, and severe consequence payable per failed measurement.

To the extent new measurement families are proposed or a proposal is set forth to eliminate or modify and existing family, the advocate of the change should bear the burden of demonstrating compliance with the above minimum requirements. The consideration should be in a public forum where all interested parties participate, and in the event of a disagreement, the Commission should decide based upon the record established. Prospective changes of measurement families should not affect any prior determinations regarding consequences.

No proposal to establish measurement families should be considered until the consequence plan has been operational and produced at least six months of independently verified data.

Attachment G

Graphs and Tables of Consequence Functions

The consequences as a function of performance are completely calculable from the equations presented in Tables 1,3,4, and 5 of the text. In fact using the equations in these tables directly is the appropriate way to program the computer that will perform the calculations when the plan is implemented. However, in this attachment we give graphical representations of the consequences as a function of performance and also present the functions in tabular form. The latter may be used as a less accurate alternative to the equations in the text tables to look up the consequence amounts.

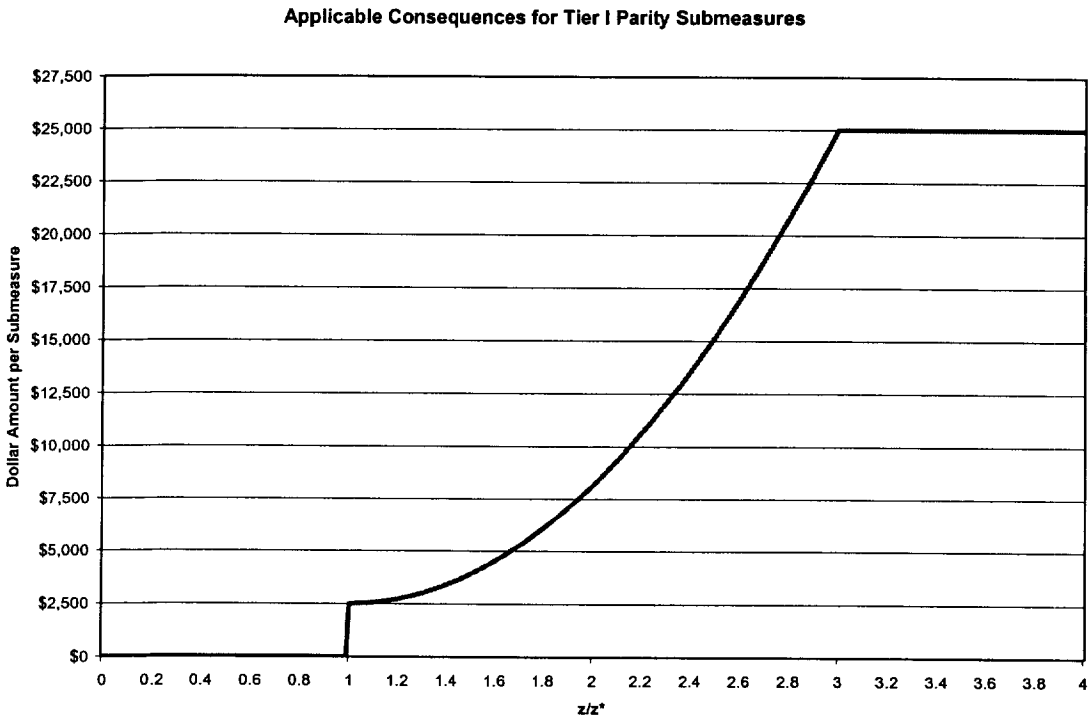
Applicable Consequences for Tier I Parity Submeasures
Dollar Amount per Submeasure
$27,500
$25,000
$22,500
$20,000
$17,500
$15,000
$12,500
$10,000
$7,500
$5,000
$2,500
$0
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
2.2
2.4
2.6
2.8
3
3.2
3.4
3.6
3.8
4
z/z*

Figure G-1

Table G-1 Applicable Tier I Consequences for Parity Submeasures

z/z*	Amount
0.0 or less	$0.00
0.1	$0.00
0.2	$0.00
0.3	$0.00
0.4	$0.00
0.5	$0.00
0.6	$0.00
0.7	$0.00
0.8	$0.00
0.9	$0.00
1.0	$2,500.00
1.1	$2,556.25
1.2	$2,725.00
1.3	$3,006.25
1.4	$3,400.00
1.5	$3,906.25
1.6	$4,525.00
1.7	$5,256.25
1.8	$6,100.00
1.9	$7,056.25
2.0	$8,125.00
2.1	$9,306.25
2.2	$10,600.00
2.3	$12,006.25
2.4	$13,525.00
2.5	$15,156.25
2.6	$16,900.00
2.7	$18,756.25
2.8	$20,725.00
2.9	$22,806.25
3.0 or more	$25,000.00

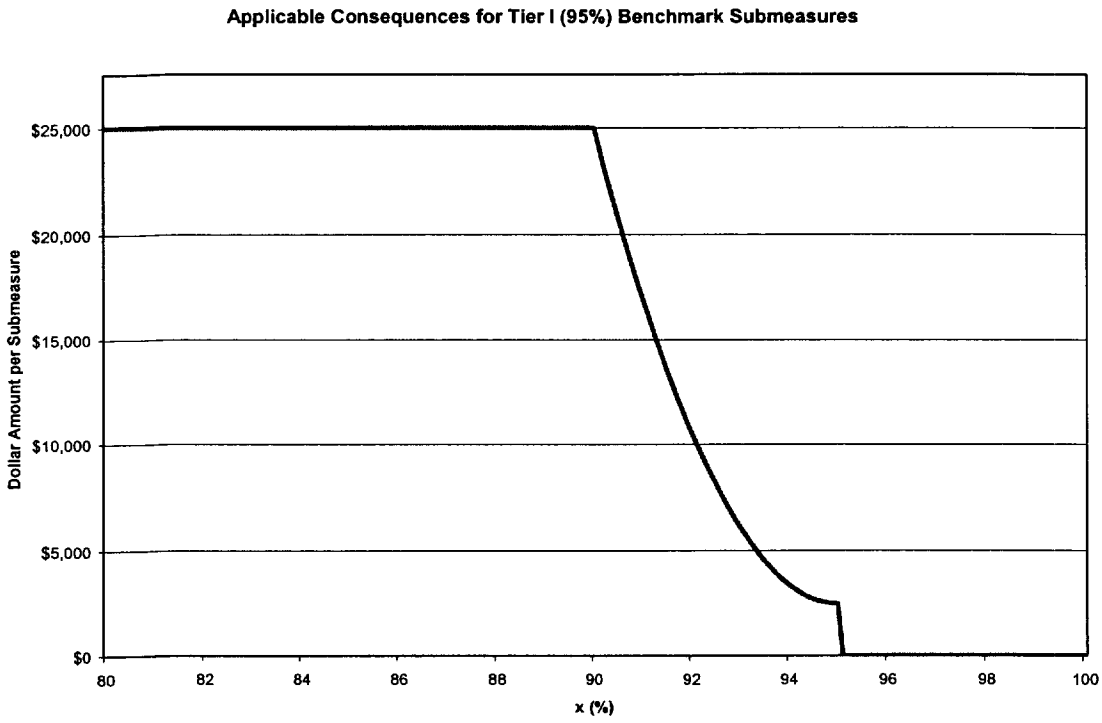
Applicable Consequences for Tier I (95%) Benchmark Submeasures
Dollar Amount per Submeasure
$25,000
$20,000
$15,000
$10,000
$5,000
$0
80
82
84
86
88
90
92
94
96
98
100
x (%)

Figure G-2

Table G-2 Applicable Tier I Consequences for (95%) Benchmark Submeasures

x (%)	Amount
90.0 or less	$25,000.00
90.5	$20,725.00
91.0	$16,900.00
91.5	$13,525.00
92.0	$10,600.00
92.5	$8,125.00
93.0	$6,100.00
93.5	$4,525.00
94.0	$3,400.00
94.5	$2,725.00
95.0	$2,500.00
95.5	$0.00
96.0	$0.00
96.5	$0.00
97.0	$0.00
97.5	$0.00
98.0	$0.00
98.5	$0.00
99.0	$0.00
99.5	$0.00
100.0	$0.00

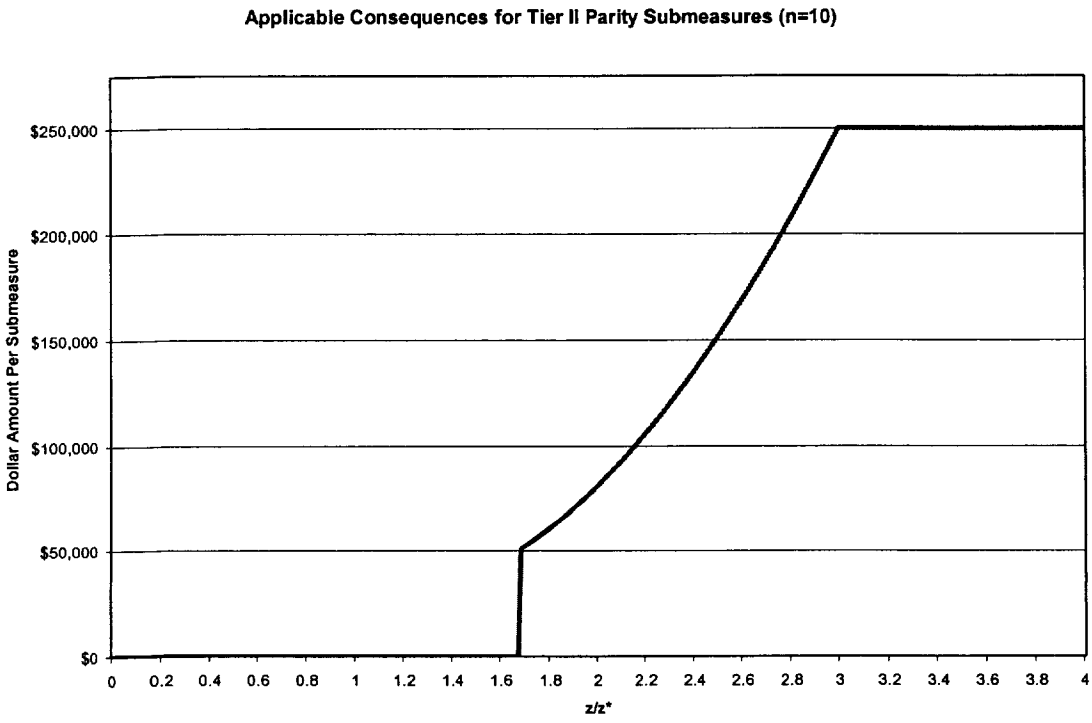
Applicable Consequences for Tier II Parity Submeasures (n=10)
Dollar Amount Per Submeasure
$250,000
$200,000
$150,000
$100,000
$50,000
$0
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
2.2
2.4
2.6
2.8
3
3.2
3.4
3.6
3.8
4
z/z*

Figure G-3

Table G-3 Applicable Tier II Consequences for Parity Submeasures (n=10)

z/z*	Amount
0.0 or less	$0.00
0.1	$0.00
0.2	$0.00
0.3	$0.00
0.4	$0.00
0.5	$0.00
0.6	$0.00
0.7	$0.00
0.8	$0.00
0.9	$0.00
1.0	$0.00
1.1	$0.00
1.2	$0.00
1.3	$0.00
1.4	$0.00
1.5	$0.00
1.6	$0.00
1.7	$52,562.50
1.8	$61,000.00
1.9	$70,562.50
2.0	$81,250.00
2.1	$93,062.50
2.2	$106,000.00
2.3	$120,062.50
2.4	$135,250.00
2.5	$151,562.50
2.6	$169,000.00
2.7	$187,562.50
2.8	$207,250.00
2.9	$228,062.50
3.0 or more	$250,000.00

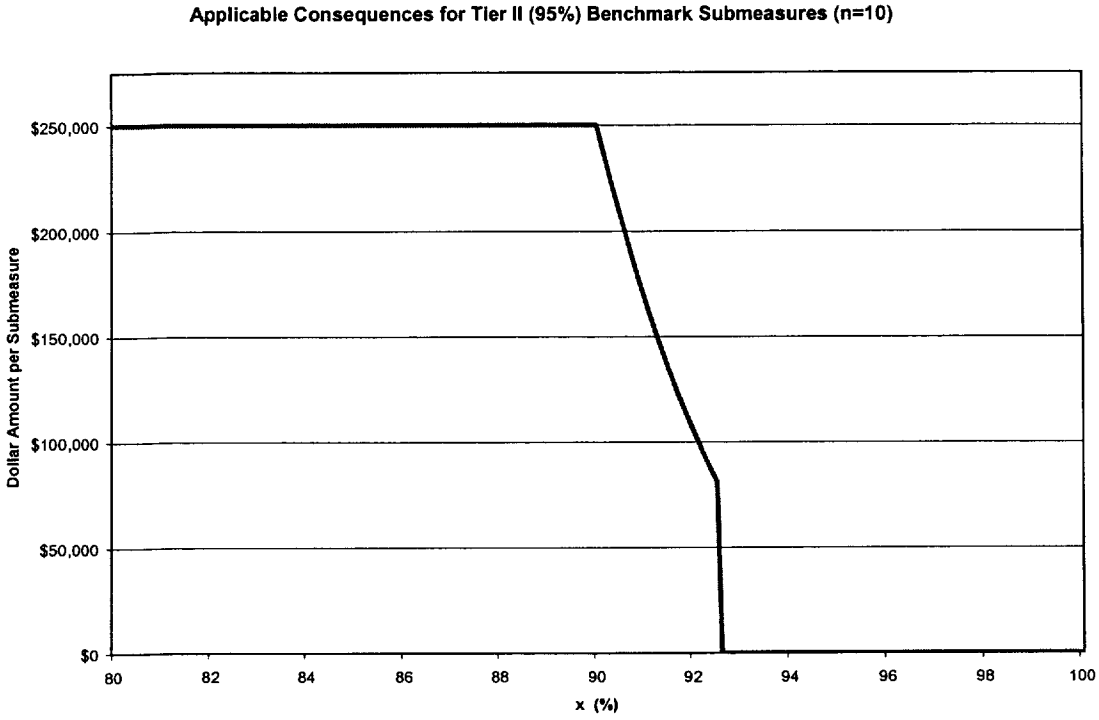
Applicable Consequences for Tier II (95%) Benchmark Submeasures (n=10)
Dollar Amount per Submeasure
$250,000
$200,000
$150,000
$100,000
$50,000
$0
80
82
84
86
88
90
92
94
96
98
100
x (%)

Figure G-4

Table G-4 Applicable Tier II Consequences for (95%) Benchmark Submeasures (n=10)

x (%)	Amount
90.0 or less	$250,000.00
90.5	$207,250.00
91.0	$169,000.00
91.5	$135,250.00
92.0	$106,000.00
92.5	$81,250.00
93.0	$0.00
93.5	$0.00
94.0	$0.00
94.5	$0.00
95.0	$0.00
95.5	$0.00
96.0	$0.00
96.5	$0.00
97.0	$0.00
97.5	$0.00
98.0	$0.00
98.5	$0.00
99.0	$0.00
99.5	$0.00
100.0	$0.00

TAB THREE

CLEC Performance Standards By Measure

CATEGORY	FUNCTION	Standard/Benchmark
Pre-Ordering – OSS	1. Average OSS Response Time and Response Interval 2. OSS Interface Availability	1. Elapsed time is measured in seconds and tenths of seconds rounded to the nearest tenth of a second. Standard: TN Reservations 1-30: 2 seconds and none greater than 5 seconds. TN Reservations 31+: Less than 2 hours. Address validation, due date, LIDB: 2 seconds. CSR: 5 seconds. Dispatch: 8 Seconds. PIC and Directory Listings: Parity 2. Benchmark: 99.5% for any unscheduled downtime. No scheduled downtime during prime time operating hours (7am – 6 pm Eastern)[i]
Ordering	3. Percent Flow-through Service Requests (Summary) 4. Percent Flow-through Service Requests (Detail) 5. Flow-through Error Analysis 6. Percent Rejected Service Requests * 7. Percent Mechanized Rejects Returned Within one hour of receipt of reject 8. Reject Interval *9. Percent Firm Order Confirmation Returned 10. Speed of Answer in Ordering Center *11. Percent Busy in the Local Carrier Service Center (LCSC) *12. Percent Busy in the Repair Center *13. Average Response Time for Loop MakeUp Information	3. Resale Residence – 95%; Resale Business – 90%; UNE- 85%; LNP-85%. 4. Resale Residence – 95%; Resale Business – 90%; UNE- 85%; LNP-85%.[ii] 5. Diagnostic. 6. Diagnostic. 7. 97% within 1 hour of the receipt of a rejected LSR 8. 95% or greater within: (mechanized) 1 hours; (partially mechanized) 5 hours; (non-mechanized) 24 hours. 9. All Res and Bus 95% within 5 hours/ Complex Bus 94% within 24 hours for 200 or less lines and 48 hours for 200 or more lines/ UNE Loop (1-49) 95% within 5 hours / UNE Loop (>50) 94% within 48 hours/ Switch Ports 95% within 5 hours. The Average for the remainder of each measure disaggregated shall not exceed 20% of the established benchmark. 10. Greater than 95% of calls, by center, are answered within 20 seconds. 100% of all calls answered within 30 seconds. 11. Parity with BellSouth's retail Residential and Business Service Centers 12. Parity with BellSouth's repair center. 13. Manual: 3 business day Electronic: Actual Requested, actual received 12.6s and 90% - 15s; 95% - 25s Design requested, design received 10s and 90% - 11.9s; 95% - 20s
	14. Mean Held Order Interval & Distribution Intervals 15. Average Jeopardy Notice Interval & Percentage of Orders Given Jeopardy Notices 16. Percent Missed Installation Appointments 17. Average Completion Interval & Order Completion Interval Distribution 18. Average Completion Notice Interval 19. Coordinated Customer Conversions 20. Percent Provisioning Troubles w/i 30 days 21. Total Service Order Cycle Time *22. Percentage Installations Completed Within Industry Guidelines for LNP	14. See Appendix 1 15. 95%>=48 hours 16. See Appendix 1 17. 95% within "x" days unless otherwise noted - See Appendix 2 18. See Appendix 1 19. 95%<=15 minutes 20. See Appendix 1 21. Diagnostic 22. 95% within "X" days 2 Wire Analog and Digital and INP (1-10) – 3 Days from receipt of FOC; DS1 loop(includes PRI) – 3 Days from receipt of FOC

	*23. Percentage of LNP Only Due Dates within Industry Guidelines *24. Percentage of Time the Old Service Provider Releases the Subscription Prior to the Expiration of the Second 9 Hour Timer *25. Percentage of Customer Accounts Restructured Prior to the LNP Due Date *26. Percentage of Pre-mature Disconnects for LNP Orders *27. Average Days Required to Process a Request *28. Percentage of Premature Disconnects (Coordinated Cutovers) *29. Percentage of Missed Mechanized INP Conversions *30. Percent NXXs loaded and tested prior to the LERG effective date *31. Average Delay Days for NXX Loading and Testing	23. 96.5% 24. 96.5% 25. 96.5% 26. 2% or less premature disconnects starting 10 minutes before scheduled due time 27. 90 % within 35 days 28. 2% or less premature disconnects starting 10 minutes before scheduled time 29. 2% or less premature disconnects starting 10 minutes before scheduled time, 8% or less of BST coordinated conversions beyond 30 minutes, 2% beyond 1 hour from scheduled time or 1% beyond 2 hours. 30. 100% by LERG effective date 31. 100% within 5 calendar days of completion date
Maintenance & Repair	32. Missed Repair Appointments 33. Customer Trouble Report Rate 34. Maintenance Average Duration 35. Percent Repeat Troubles w/i 30 days 36. Out of Service > 24 Hours 37. OSS Interface Availability 38. OSS Response Interval and Percentages 39. Average Answer Time - Repair Centers *40. Mean Time to Repair	32. Standard: 1% missed 33. See Appendix 3 34. See Appendix 3 35. See Appendix 3 36. (1) Out of service conditions where a dispatch is required: 90% resolved within 4 hours 95% resolved within 8 hours 99% resolved within 16 hours. (2) Out of service conditions where no dispatch is required: 85% resolved within 2 hours 95% resolved within 3 hours 99% resolved within 4 hours. (3) All other troubles resolved within 24 hours. 37. 99.5%. 38. Parity with retail (TAFI, CRIS, DLETH, DLR, LMOS, LMOSupd, LNP, MARCH, OSPCM, Predictor, SOCs) 39 Greater than 95% of calls, by center, are answered within 20 seconds. 100% of all calls answered within 30 seconds. 40. Parity with retail.
Billing	41. Invoice Accuracy 42. Mean Time to Deliver Invoices 43. Usage Data Delivery Accuracy 44. Usage Data Delivery Completeness 45. Usage Data Delivery Timeliness 46. Mean Time to Deliver Usage *47. Percent of Accurate and Complete Formatted Mechanized Bills *48. Billing Completeness	41. Parity with retail 42. Parity with retail 43. Parity with retail 44. Parity with retail 45. Parity with retail 46. Parity with retail 47. 99% 48. Parity with BellSouth retail.

	*49. Unbillable Usage	49. Aggregate measurement. No benchmark required.
Operator Services (Toll) and Directory Assistance	50. Average Speed to Answer (Toll) 51. Percent Answered within "X" Seconds (Toll) 52. Average Speed to Answer (DA) 53. Percent Answered within "X" Seconds (DA) *54. Directory Assistance Average Speed of Answer *55. Operator Services Speed of Answer *56. Percentage of Updates Completed into the DA Database within 72 hours for Facility Based CLECs *57. Average Update Interval for DA Database for Facility Based CLECs *58. Percentage DA Database Accuracy for Manual Updates	50. Parity by Design 51. Parity by Design 52. 85% answered within ten seconds. 95% answered within twenty seconds 53. 85% answered within ten seconds. 95% answered within twenty seconds 54. 85% answered within ten seconds. 95% answered within twenty seconds 55. 90% answered within ten seconds. 95% answered within twenty seconds 56. 95% updated within 72 hours 57. 48 hours. Benchmark will be re-evaluated in 6 months.[iv] 58. 97%
E911	59. Timeliness 60. Accuracy 61. Mean Interval	59. Parity by Design 60. Parity by Design 61. Parity by Design
Trunk Group Performance	62. Trunk Group Service Report 63. Trunk Group Service Detail	62. BST to CLEC Trunk Blockage at parity with BST to BST Trunk Blockage 63. BST to CLEC Trunk Blockage at parity with BST to BST Trunk Blockage[v]
Collocation	64. Average Response Time 65. Average Arrangement Time 66. % of Due Dates Missed	64. 95% within 10 calendar days 65. Standard: (1) 90 calendar days Caged Physical Collocation (2) 30 days Cageless Collocation; and (3) 30 calendar days Virtual Collocation 66. Zero misses of committed due date
Bona Fide Requests	*67. Percentage of Requests Processed Within 30 Business Days *68. Percentage of Quotes Provided for Authorized BFRs/Special Requests Within X (10, 30, 90) Days	67. 90% within 30 business days 68. 90% within 10, 30, 90 business days. • New Network Elements that are operational at the time of the request – 10 days • New Network Elements that are Ordered by the FCC– 30 days • New Network Elements not operational at the time of the request - 90 days

* Texas Measurements incorporated into BellSouth's 9/15/99 SQM's.

[i] There are 2 new measures in TX related to Change Management Measures that have not yet been implemented, but they are required by TX and are worthwhile:
123 is Percent of Timely and Compliant Change Management Notices – a diagnosis for now
124 is Timely resolution of significant Software Failures related with Releases with a benchmark of 95% completed within 48 hours or 2 days.

[ii] Measure 13 in TX – If the order falls out because of BellSouth's systems, then it counts as a non-flow through; also, invalid rejects count as non-flow through.

[iii] There is another critical one in TX - #101 – Percent Out of Service < 60 minutes; benchmark is 96.5.

[iv] TX business rules have changed in v. 1.7 – now it is 36 hours.

[v] There are 11 trunking measures in TX. The most important are:
#70 is blocking and criteria is Blocked Calls on Dedicated Trunk Groups not to exceed blocking standard of B.01. [B.01 standard is 1%]

#71 – Common transport trunk blocking – PUC Subst. R.23.61(e)(5)(A) or parity, whichever allows less blocking in a given month. SWBT shall compare common trunk groups exceeding 1% blockage, reported for switch based CLECs, be compared to SWBTs dedicated trunk groups designed for B.01 standard for parity compliance.

#73 – Percentage of Installations Completed Within the Customer Requested Due Date 95% within the customer requested due date or ageed to expedited interval.

#73.1 – Percentage Held Interconnection Trunks – Parity with SWBT interconnected trunks. For purposes of damages, only applicable to trunk orders held greater than 30 days.

#77 – Average Trunk Restoration Interval for Service Affecting Trunk Groups – Tandem trunk groups – 1 hour/Non-Tandem – 2 hours.

Appendix 1

Mean Held Order Interval **Percent Missed Installation Appointments** **Average Completion Notice Interval** **Percent Provisioning Troubles w/i 30 days**	**Benchmark/Analog**
Resale residence	Parity with retail residence
Resale business	Parity with retail business
Resale Design	Parity with retail Design
Resale PBX	Parity with retail PBX
Resale Centrex	Parity with retail Centrex
Resale ISDN	Parity with retail ISDN
2 W Analog Loop Design	Retail Res. And Bus. Dispatch
2 W Analog Loop Non-Design	Retail Res. And Bus. POTS
2 W Analog Loop w/ INP Design	Retail Res. And Bus. Dispatch
2 W Analog Loop w/ INP Non-Design	Retail Res. And Bus. Dispatch
2 W Analog Loop w/ LNP Design	Retail Res. And Bus. Dispatch
2 W Analog Loop w/ LNP Non-Design	Retail Res. And Bus. Dispatch
UNE Digital Loop < DS1	Retail Digital Loop<DS1
UNE Digital Loop>= DS1	Retail Digital Loop>=DS1
UNE xDSL (ADSL, HDSL, UCL)	ADSL provide to retail
UNE ISDN	Retail ISDN- BRI
Line Sharing	ADSL provide to retail
INP Standalone	Retail POTS
LNP Standalone	Retail POTS
Switch ports	Retail POTS
Loop + port combination	Retail Res. And Bus. (POTS)
UNE Combo Other	Retail Res, Bus, & Design (Dispatch)
Local Transport	Retail DS1/DS3 Interoffice
UNE Other Non-Design	Retail Res. & Bus.
UNE Other Design	Retail Design
Local Interconnection Trunks	Parity with retail

Appendix 2

Disaggregation, Analogs and Benchmarks		
G. Product Level Disaggregation for (Ordering, Provisioning, and Maintenance & Repair)	**Benchmark– 95% within x Days unless otherwise noted (resale) for Order Completion Interval**	**Retail analog for other provisioning and maintenance and repair measures**
1 Resold Residence POTS	1 Retail Analog	1. Retail Analog
2. Resold Business POTS	2. Retail Analog	2. Retail Analog
3 Resold BRI ISDN	3 Retail Analog	3 Retail Analog
4. Resold PRI ISDN	4. Retail Analog	4. Retail Analog
5 Resold Centrex/Centrex-like	5 Retail Analog	5 Retail Analog
6. Resold Analog PBX trunks	6. Retail Analog	6. Retail Analog
7 Resold DID Trunks	7 Retail Analog	7 Retail Analog
8. Resold Voice-Grade Private Line	8. Retail Analog	8. Retail Analog
9 Resold DS1 Services	9 Retail Analog	9 Retail Analog
10. Resold DS3 Services	10. Retail Analog	10. Retail Analog
11. Resold >DS3 Services	11. Retail Analog	11. Retail Analog
12. Other Resold Services	12. Retail Analog	12. Retail Analog
13 UNE Platform	13 Retail POTS	13. Retail POTS
14. UNE Channelized DS1 (DS1 loop + multiplexing)	14. 3, 7, and 10 days, for a ,b, and c, volumes respectively	14. DS1
15 Unbundled 8 dB Analog Loops	15 Same as above	15 Retail POTS
16. Unbundled 2-wire Digital Loops	16. Same as above	16. Retail POTS
17 Unbundled 4-wire Digital Loops	17 Same as above	17 Retail POTS
18. Unbundled ADSL Loops	18. Same as above	18. DS1
19 Unbundled HDSL Loops	19 Same as above	19 DS1
20. Unbundled xDSL Loops	20. Same as above	20. DS1
21 Other Unbundled Loops	21. Same as above	21. DS1
22. UNE Analog Switch Port (line side)	22. 2 days	22. POTS
23 UNE BRI Capable Switch Port (line side)	23 3 days	23 ISDN
24. UNE DS1 Switch Port (line side)	24. 5 days	24. DS1
25 UNE PRI Switch Port (trunk side)	25 5 days	25 ISDN
26. UNE DID-capable Switch Port (trunk side)	26. 5 days	26.
27 UNE Message Trunk Port	27 5 days	27 DS1
28. UNE Dedicated DS0 Transport	28. 3, 7, and 10 days, for a ,b, and c, volumes respectively	28. DS1
29 UNE Dedicated DS1 Transport	29 Same as above	29 DS1
30. UNE Dedicated DS3 Transport	30. Same as above	30. DS3
31. Interconnect Trunks (DS0s, DS1s and DS3s,)	31. ILEC Trunks	31. ILEC Trunks
32. Two-Way Trunking, Inbound Augments, separately)	32. ILEC Trunks	32. ILEC Trunks

Disaggregation, Analogs and Benchmarks		
G. Product Level Disaggregation for (Ordering, Provisioning, and Maintenance & Repair)	**Benchmark-- 95% within x Days unless otherwise noted (resale) for Order Completion Interval**	**Retail analog for other provisioning and maintenance and repair measures**
33 ILNP	33 3, 7, and 10 days, for a ,b, and c, volumes respectively	33. Retail POTS
34. PNP or LNP	34 Same as above	34. Retail POTS
35 Line-sharing/High Frequency Spectrum UNE	35 3, 5 and 7 days for a, b and c, volumes	35. Retail POTS
36. Sub-loop unbundling, e.g. network terminating wire	36 5, 7, 10 days for a, b, and c, volumes	36. Retail POTS
37 Loop Modification/Loop Conditioning	37 5, 7, 10 days for a, b,and c volumes.	37. Retail POTS

Appendix 3

Customer Trouble Report Rate Maintenance Average Duration % Repeat Troubles Within 30 Days	**Benchmark/Analog**
Resale Residence	Parity with retail Residence
Resale Business	Parity with retail Business
Resale Design	Parity with retail Design
Resale PBX	Parity with retail PBX
Resale Centrex	Parity with retail Centrex
Resale ISDN	Parity with retail ISDN
LNP (standalone)	Retail POTS
2 W Analog Loop Design	Retail Res. And Bus. Dispatch
2 W Analog Loop Non-Design	Retail Res. And Bus. (POTS)
UNE Switch Ports	Retail POTS
UNE Loop + Port Combo	Retail Residence and Business
UNE Combo Other	Retail Res, Bus, & Design (Dispatch)
UNE xDSL (HDSL, ADSL, & UCL)	ADSL provided to retail
UNE ISDN	Retail ISDN- BRI
UNE Line Sharing	ADSL provided to retail
UNE Other Design	Retail Res & Bus.
UNE Other Non-Design	Retail Design
Local Interconnection Trunks	Parity with retail
Local Transport	Retail DS1/DS3 interoffice

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*Texas Measurements incorporated into BellSouth's SQM's.

PRE-ORDERING - OSS

Report/Measurement :
1. Average OSS Response Time and Response Interval
Definition:
Average response time and response intervals are the average times and number of requests responded to within certain intervals for accessing legacy data associated with appointment scheduling, service & feature availability, address verification, request for Telephone Numbers (TNs), and Customer Service Records (CSRs).
Exclusions:
None
Business Rules:
The average response time for retrieving pre-order/order information from a given legacy system is determined by summing the response times for all requests submitted to the legacy during the reporting period and dividing by the total number of legacy requests for that day X 100. The response interval starts when the client application (LENS or TAG for CLECs and RNS for BST) submits a request to the legacy system and ends when the appropriate response is returned to the client application. The number of legacy accesses during the reporting period, which take less than 2.3 seconds and the number, which take more than 6 seconds are also captured.
Level of Disaggregation:
• RSAG – Address (Regional Street Address Guide- Address) - stores street address information used to validate customer addresses • RSAG – TN (Regional Street Address Guide- Telephone Number) - contains information about facilities available and telephone numbers working at a given address • ATLAS (Application for Telephone Number Load Administration and Selection) - acts as a warehouse for storing telephone numbers that are available for assignment by the system. It enables CLECs and BST service reps to select and reserve telephone numbers. • COFFI (Central Office Feature File Interface) - stores information about product and service offerings and availability • DSAP (DOE Support Application) - provides due date information • HAL (Hands-Off Assignment Logic) - a system used to access the Business Office Customer Record Information System (BOCRIS). It allows BST servers, including LENS, access to legacy systems. • P/SIMS (Product/Services Inventory Management System) - provides information on capacity, tariffs, inventory and service availability. • OASIS (Obtain Available Services Information Systems) - Information on feature and rate availability.
Calculation:
$\sum$[(Date & Time of Legacy Response) – (Date & Time of Request to Legacy)] / (Number of Legacy Requests During the Reporting Period) X 100
Report Structure:
• Not CLEC Specific • Not product/service specific • Regional Level

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

LEGACY SYSTEM ACCESS TIMES FOR RNS

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

LEGACY SYSTEM ACCESS TIMES FOR LENS

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

LEGACY SYSTEM ACCESS TIMES FOR TAG

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

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

OSS Interface Availability

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

Report/Measurement:

3. Percent Flow Through Service Requests (Summary)

Definition:

The percentage of Local Service Requests (LSR) submitted electronically via the CLEC mechanized ordering process that flow through to SOCS without manual intervention

Exclusions:

- Fatal Rejects
- Auto Clarification
- Manual Fallout
- CLEC System Fallout
- Supplements (subsequent versions) to cancel LSRs that are not LESOG eligible

Business Rules:

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

Definitions:

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

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

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

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

* Attached is a list of services, including complex services, and whether LSRs issued for the services are eligible to flow through.

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

Calculation:

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

Description:

Percent Flow Through = (The total number of LSRs that flow through LESOG to SOCS) / the number of LSRs passed from LEO to LESOG) – $\sum$[(the number of LSRs that fall out for manual processing) + (the number of LSRs that are returned to the CLEC for clarification) + (the number of LSRs that contain errors made by CLECs)] X 100.

Report Structure:

- CLEC Aggregate
  - Region

Level of Disaggregation:

- Geography
  - Region
- Product
  - Residence
  - Business
  - UNE
  - Special

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

Report/Measurement:

4. Percent Flow Through Service Requests (Detail)

Definition:

A detailed list by CLEC of the percentage of Local Service Requests (LSR) submitted electronically via the CLEC mechanized ordering process that flow through to SOCS without manual or human intervention.

Exclusions:

- Fatal Rejects
- Auto Clarification
- Manual Fallout
- CLEC System Fallout
- Supplements (subsequent versions) to cancel LSRs that are not LESOG eligible

Business Rules:

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

Definitions:

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

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

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

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

*Attached is a list of services, including complex services, and whether LSRs issued for the services are eligible to flow through.

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

Calculation:

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

Description:

Percent Flow Through = The total number of LSRs that flow through LESOG to SOCS / the number of LSRs passed from LEO to LESOG) – ∑[(the number of LSRs that fall out for manual processing + the number of LSRs that are returned to the CLEC for clarification + the number of LSRs that contain errors made by CLECs)] X 100.

Report Structure:

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

Level of Disaggregation:

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

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

ORDERING

Report/Measurement:	
5. Flow Through Error Analysis	
Definition:	
An analysis of each error type (by error code) that was experienced by the LSRs that did not flow through to SOCS.	
Exclusions:	
Each Error Analysis is error code specific; therefore exclusions are not applicable.	
Business Rules:	
The CLEC mechanized ordering process includes all LSRs, including supplements (subsequent versions) which are submitted through one of the three gateway interfaces (TAG, EDI, and LENS), and flow through to provisioning SOCS without manual intervention. These LSRs can be divided into two classes of service; Business and Residence, and two types of service; Resale and Unbundled Network Elements (UNE). This measurement captures the total number of errors by type. The CLEC mechanized ordering process does not include LSRs, which are, submitted manually (e.g., fax, and courier).	
Calculation:	
$\sum$ of errors by type	
Report Structure:	
• Provides an analysis of each error type (by error code). The report is in descending order by count of each error code and provides the following: ➢ Error Type (by error code) ➢ Count of each error type ➢ Percent of each error type ➢ Cumulative percent ➢ Error Description ➢ CLEC Caused Count of each error code ➢ Percent of aggregate by CLEC caused count ➢ Percent of CLEC by CLEC caused count ➢ BST Caused Count of each error code ➢ Percent of aggregate by BST caused count ➢ Percent of BST by BST caused count	
Level of Disaggregation:	
Region	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Experience:**
• Report month • Total number of LSRs received • Total number of errors by type (by error code) ➢ CLEC caused error	• Report month • Total number of errors by type (by error code) ➢ BST system error

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

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

	BellSouth Service Offered to CLEC via resale or UNE	Flow-through if no BST or CLEC Errors (Yes/No)	Complex Service (Yes/No)	Complex Order (Yes/No)	Design Service (Yes/No)	Can ordering this service cause fall out for a reason other than errors or complex? If so, what reason?
37	DID	No*	Yes	Yes	Yes	* yes with OSS'99
38	Frame Relay	No	Yes	Yes	yes	
39	Megalink	No	Yes	Yes	yes	
40	Megalink-T1	No	Yes	Yes	yes	
41	Native Mode LAN Interconnection (NMLI)	No	Yes	Yes	yes	
42	Pathlink Primary Rate ISDN	No	Yes	Yes	yes	
43	Synchronet	No	Yes	Yes	yes	LSR electronically submitted; no flow through
44	PBX Trunks	No	Yes	Yes	Yes	LSR electronically submitted; no flow through
45	LightGate	No	Yes	Yes	yes	
46	Smartpath	No	Yes	Yes	yes	
47	Hunting	No	Yes	no	no	LSR electronically submitted; no flow through
48	CENTREX	No	Yes	Yes	no	
49	FLEXSERV	No	Yes	Yes	yes	
50	Multiserv	No	Yes	Yes	yes	
51	Off-Prem Stations	No	Yes	Yes	yes	
52	SmartRING	No	Yes	Yes	yes	
53	FX	No	Yes	Yes	yes	
54	Tie Lines	No	Yes	Yes	Yes	
55	WATS	No	Yes	Yes	yes	
56	4 wire analog voice grade loop	No	UNE	Yes	yes-designed, no-non-designed	
57	4 wire DS1 & PRI digital loop	No	UNE	Yes	yes	
58	2 wire ISDN digital loop	No	UNE	Yes	yes	
59	4 wire DS1 & PRI digital loop	No	UNE	Yes	yes	
60	ADSL	No*	UNE	Yes	yes	* yes as of OSS'99
61	HDSL	No	UNE	Yes	yes	
62	2 wire analog DID trunk port	No	UNE	Yes	Yes	
63	2 wire ISDN digital line side port	No	UNE	Yes	yes	
64	4 wire ISDN DSI digital trunk ports	No	UNE	Yes	yes	
65	UNE Combinations	y-loop+port	UNE	Yes	yes	
66	Directory Listings (simple)	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	* captions and indention
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 is unique to the CLEC environment.

ORDERING

Report/Measurement:

6. Percent Rejected Service Requests

Definition:

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

Exclusions:

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

Business Rules:

Fully Mechanized: An LSR is considered "rejected" when it is submitted electronically but does not pass LEO edit checks in the ordering systems (EDI, TAG, LEO, LESOG) and is returned to the CLEC. There are two types of "Rejects" in the Mechanized category:

- A Fatal Reject occurs when a CLEC attempts to electronically submit an LSR but required fields are not populated correctly and the request is returned to the CLEC before it is considered an LSR. Fatal Rejects are included in the calculation for regional reports only.
- An Auto Clarification is a valid LSR, which is electronically submitted but rejected from LESOG because it does not pass further edit checks for order accuracy.

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

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

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

LNP: Under Development

Calculation:

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

Report Structure:

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

Level of Disaggregation:

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

Data Retained Relating to CLEC Experience:	Data Retained Relating to BST Performance:
• Report Month • Total number of LSRs • Total number of Rejects • Total Number of Errors • State and Region	• Report Month • Total number of LSRs • Total number of Errors • Adjusted Error Volume • State and Region

ORDERING

Report/Measurement
7. Percent Mechanized Rejects Returned Within one hour of receipt of rejected LSR
Definition:
Percent mechanized rejects returned within one hour of the receipt of the rejected LSR.
Exclusions:
None
Business Rules:
The start time used is the date and time the LSR is rejected, and the end time is the date and time the reject notice is provided to EDI, TAG or LENS and is
available to the CLEC. A mechanized reject is any reject returned electronically
(without manual intervention) to the CLEC via the electronic interface.
Levels of Disaggregation:
None
Calculation:
(# mechanized rejects returned within1 hour ÷ total rejects) * 100
Report Structure:
Reported for CLEC and all CLECs for the electronic interfaces (EDI, TAG and LENS).

Report/Measurement:

8. Reject Interval

Definition:

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

Exclusions:

Service Requests canceled by CLEC prior to being rejected/clarified

Business Rules:

- **Fully Mechanized**: The elapsed time from receipt of a valid LSR (date and time stamp in ED or TAG) until the LSR is rejected (date and time stamp of reject in LEO). Fatal Rejects and Auto Clarifications are considered in the Fully Mechanized category.
- **Partially Mechanized**: The elapsed time from receipt of a valid LSR (date and time stamp in EDI or TAG) until it falls out for manual handling. The stop time on partially mechanized LSRs is when the LCSC Service Representative clarifies the LSR back to the CLEC via LEO.
- **Total Mechanized**: Combination of Fully Mechanized and Partially Mechanized LSRs.
- **Non-Mechanized**: The elapsed time from receipt of a valid LSR (date and time stamp from FAX stamp) until notice of the reject is returned to the CLEC via LON.
- **LNP**: Under Development

Calculation:

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

Report Structure:

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

Level of Disaggregation:

- Product Reporting Levels
  - Interconnection Trunks
  - Resale – Residence
  - Resale – Business
  - Resale – Design
  - UNE Design
  - UNE Non- Design
  - UNE Loop with and w/o NP
- Geographic Scope
  - State, Region and further geographic disaggregation as required by State Commission Order
- Mechanized: 0-4 minutes, 4-8 minutes, 8-12 minutes, 12-60 minutes, 0-1 hour 1-8 hours, 8-24 hours, >24 hours.
- Non-mechanized: 0-1 hour, 1-4 hours, 4-8 hours, 8-12 hours, 12-16 hours, 16-20 hours, 20-24 hours >24 hours
- Average Interval in Days
- Trunks

Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month	• Report Month
• Reject Interval	• Reject Interval
• Total Number of LSRs	• Total number of LSRs
• Total number of Errors	• Total number of Errors
• State and Region	• State and Region

Report/Measurement:
9. Percent Firm Order Confirmations (FOCs) Returned
Definition:
Percent of FOCs returned within a specified time frame from receipt of a complete and accurate service request to return of confirmation to CLEC.
Exclusions:
• Rejected (manual and electronic) orders. • BST only Disconnect orders. • Orders involving major projects mutually agreed upon by CLECs and BST.
Business Rules:
FOC business rules are established to reflect the Local Carrier Service Center (LCSC) normal hours of operation, which include Monday through Friday, 8:00 a.m.-5:30p.m, excluding holidays and weekends. If the start time is outside of normal business hours, then the start date/time is set to 8:00 a.m. on the next business day. Example: If the request is received Monday through Friday between 8:00 a.m. to 5:30 p.m.; the valid start time will be Monday through Friday between 8:00 a.m. to 5:30 p.m. If the actual request is received Monday through Thursday after 5:00 p.m. and before 8:00 a.m. the next day, the valid start time will be the next business day at 8:00 a.m. If the actual request is received Friday after 5:30 p.m. and before 8:00 a.m. Monday, the valid start time will be at 8:00 a.m. Monday. If the request is received on a holiday (anytime), the valid start time will be the next business day at 8:00 a.m. The returned confirmation to the CLEC will establish the actual end date/time. Provisions are established within the TIRKS (design) or SOCS (non-design) reporting systems to accommodate situations when the LCSC works holidays, weekends, and when requests are received outside normal working hours. For UNE Loop and Port combinations, orders requiring N, C, and D orders, the FOC is sent back at the time the last order that establishes service is distributed. In the event of a post-FOC reject, the originally recorded duration to return the first FOC will not be included in the Percent Firm Order Confirmations (FOCs) Returned reported date.
EDI/TAG/LENS
For EDI, TAG and LENS originated LSRs, the start date and time is the receive date and time that is automatically populated by the interface (EDI, TAG or LENS) with the system date and time. The end date and time is recorded by EDI, TAG and LENS and reflects the actual date and time the FOC is available to the CLEC. This data is extracted daily from EDI, TAG and LENS and is passed to the TIRKS (design) or SOCS (non-design) system, where the end date and time are populated and are used to calculate the FOC measurements. For LSRs where FOC times are negotiated with the CLEC, the data field entry on the SOCS service order is used in the calculation. The request type from the LSR and the Class of Service tables are used to report the LSRs in the various levels of disaggregation. The Class of Service tables are based on the Universal Service Order practice.

VERBAL or MANUAL REQUESTS

Manual service order requests are those initiated by the CLEC either by telephone, fax, or other manual methods (i.e. courier). The receive date and times are recorded and input on the data field on each service order in TIRKS or SOCS for each FOC opportunity. The end times are the actual dates and times the paper faxes are sent back to the CLEC. Fax end times are recorded and input into the TIRKS (design) or SOCS (non-design) systems via an internal Web application. Each FOC opportunity is dynamically established on the Web application via our interface to the BellSouth systems. The LCSC must provide an end date and time for each entry, which depicts the date and time the FOC was actually faxed back to the CLEC. If a CLEC elects to accept an on line FOC and does not require a paper fax the FOC information is provided over the phone. In these instances, the order distribution time is used in the FOC calculation on the related TIRKS or SOCS service order to the appropriate data field entry. These scenarios are identified by data populated on the data field of the service order. The data field is also used when FOC times are negotiated with the CLEC. The LCSC will populate the data field with certain pre-established data entries that are used in the FOC calculation.

Levels of Disaggregation:

Manually submitted:

- Simple Res. And Bus. < 24 Hours
- Complex Business (1-200 Lines) < 24 Hours
- Complex Business (>200 Lines) < 48 Hours
- UNE Loop (1-49 Loops) < 24 Hours
- UNE Loop (> 50 Loops) < 48 Hours
- Switch Ports < 24 Hours

Electronically submitted via EDI, TAG or LENS:

- Simple Res. And Bus. < 5 Hours
- Complex Business (1-200 Lines) < 24 Hours
- Complex Business (>200 Lines) < 48 Hours
- UNE Loop (1-49 Loops) < 5 Hours
- UNE Loop (> 50 Loops) < 48 Hours
- Switch Ports < 5 Hours

Calculation:

(# FOCs returned within "x" hours ÷total FOCs sent) * 100 (x = 5,24,48 hours) depending on type of order.

Report Structure:

Reported for CLEC and all CLECs. This includes mechanized from EDI, TAG and LENS and manual (FAX or phone orders).

ORDERING

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

Report/Measurement
11. Percent Busy in the Local Carrier Service Center (LCSC)
Definition:
Percent of calls which are unable to reach the Local Carrier Service Center (LCSC) due to a busy condition in the ACD. (Automatic Call Distributor)
Exclusions:
Weekends and Holidays
Business Rules:
The clock starts when the customer enters the queue and the clock stops when a BST representative answers the call. The speed of answer is determined by measuring and accumulating the elapsed time from the entry of a CLEC customer call into the BST call management system queue until the CLEC customer call is transferred to BST personnel assigned to handling CLEC calls for assistance. Data is accumulated from 12:00 a.m. on the first calendar day to 11:59 p.m. on the last calendar day of the month for the reporting period. Hours of operation are 8:00 a.m. to 5:30 p.m. Monday through Friday.
Levels of Disaggregation:
None
Calculation:
(Count of blocked calls ÷ total calls offered) * 100
Report Structure:
Reported for all CLECs and BST.

Report/Measurement
12. Percent Busy in the Repair Center
Definition:
Percent of calls which are unable to reach the Repair Center due to a busy condition in the ACD.
Exclusions:
None
Business Rules:
The clock starts when the customer enters the queue and the clock stops when the BST representative answers the call. The speed of answer is determined by measuring and accumulating the elapsed time from the entry of a CLEC customer call into the BST call management system queue until the CLEC customer call is transferred to BST personnel assigned to handling CLEC calls for assistance. Data is accumulated from 12:00 a.m. on the first calendar day to 11:59 p.m. on the last calendar day of the month for the reporting period. The Measure includes calls to the LOC related to provisioning activities, e.g., coordinated conversions, as well as maintenance activities.
Levels of Disaggregation:
None
Calculation:
(Count of blocked calls ÷ total calls offered) * 100
Report Structure:
Reported for all CLECs and BST.

ORDERING

Measurement
13. Average Response Time for Loop Make-Up Information
Definition:
The average time required to provide loop qualification for DSL.
Exclusions:
None
Business Rules:
The time starts when a request is received by the LCSC and ends when the information on the loop qualification has been made available to the CLEC.
Levels of Disaggregation:
Loop Composition (Copper/Fiber - length and wire guage of each) Bridge Taps (total kilofeet) Load Coils (Presence) Pair Gain Devices DAML (Presence) Digital Loop Carrier (DLC) (Presence) Cross Box Identifier
Calculation:
(Date and Time the Loop Qualification is made available to CLEC – Date and Time the CLEC request is received)/Total number of loop qualifications
Report Structure:
CLEC, All CLECs and BST.

PROVISIONING

Report/Measurement:

14. Mean Held Order Interval & Distribution Intervals

Definition:

When delays occur in completing CLEC orders, the average period that CLEC orders are held for BST reasons, pending a delayed completion, should be no worse for the CLEC when compared to BST delayed orders.

Exclusions:

- Any order canceled by the CLEC will be excluded from this measurement.
- Order Activities of BST associated with internal or administrative use of local services.

Business Rules:

Mean Held Order Interval: This metric is computed at the close of each report period. The held order interval is established by first identifying all orders, at the close of the reporting interval, that both have not been reported as completed in SOCS and have passed the currently committed due date for the order. For each such order, the number of calendar days between the committed due date and the close of the reporting period is established and represents the held order interval for that particular order. The held order interval is accumulated by the standard groupings, unless otherwise noted, and the reason for the order being held. The total number of days accumulated in a category is then divided by the number of held orders within the same category to produce the mean held order interval.

CLEC Specific reporting is by type of held order (facilities, equipment, other), total number of orders held, and the total and average days.

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

Calculation:

Mean Held Order Interval:

Σ (Reporting Period Close Date – Committed Order Due Date) / (Number of Orders Pending and Past The Committed Due Date) for all orders pending and past the committed due date.

Held Order Distribution Interval:

(# of Orders Held for ≥ 90 days) / (Total # of Orders Pending But Not Completed) X 100

(# of Orders Held for ≥ 15 days) / (Total # of Orders Pending But Not Completed) X 100

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Level of Disaggregation:

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

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Order Number and PON (PON) • Order Submission Date (TICKET_ID) • Committed Due Date (DD) • Service Type(CLASS_SVC_DESC) • Hold Reason • Total line/circuit count • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • BST Order Number • Order Submission Date • Committed Due Date • Service Type • Hold Reason • Geographic Scope

Report/Measurement:

15. Average Jeopardy Notice Interval & Percentage of Orders Given Jeopardy Notice

Definition:

When BST can determine in advance that a committed due date is in jeopardy, it will provide advance notice to the CLEC.

Exclusions:

- Any order canceled by the CLEC will be excluded from this measurement
- Orders held for CLEC end user reasons
- Orders submitted to BST through non-mechanized methods

Business Rules:

When BST can determine in advance that a committed due date is in jeopardy it will provide advance notice to the CLEC. The number of committed orders in a report period is the number of orders that have a due date in the reporting period.

Calculation:

Average Jeopardy Interval =Σ [(Date and Time of Scheduled Due Date on Service Order) - (Date and Time of Jeopardy Notice)]/[Number of Orders Notified of Jeopardy in Reporting Period).

Percent of Orders Given Jeopardy Notice = Σ [(Number of Orders Given Jeopardy Notices in Reporting Period) / (Number of Orders Confirmed (due) in Reporting Period)

Report Structure:

- CLEC Specific and CLEC Aggregate
- BST Aggregate

Level of Disaggregation:

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

Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report Month • CLEC Order Number and PON • Date and Time Jeopardy Notice sent • Committed Due Date • Service Type **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • CLEC Order Number and PON • Date and Time Jeopardy Notice sent • Committed Due Date • Service Type **NOTE:** Code in parentheses is the corresponding header found in the raw data file.

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

PROVISIONING- Percent Missed Installation Appointments Continued

Level of Disaggregation:

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

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

Report/Measurement :

17. Average Completion Interval (OCI) & Order Completion Interval Distribution

Definition:

The "average completion interval" measure monitors the interval of time it takes BST to provide service for the CLEC or its' own customers. The "Order Completion Interval Distribution" provides the percentage of orders completed within certain time periods.

Exclusions:

- Canceled Service Orders
- Order Activities of BST or the CLEC associated with internal or administrative use of local services
- (Record Orders, Test Orders, etc.)
- D (Disconnect) and F (From) orders. (From is disconnect side of a move order when the customer moves to a new address).
- "L" Appointment coded orders (where the customer has requested a later than offered interval)

Business Rules:

The actual completion interval is determined for each order processed during the reporting period. The completion interval is the elapsed time from when the order is electronically entered into SOCS after the FOC on a CLEC order, or the date time stamp receipt into SOCS by BST on retail orders to the order completion date. The clock starts when a valid order number is assigned by SOCS and stops when the technician or system completes the order in SOCS. Elapsed time for each order is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the associated total number of orders completed

Calculation:

Average Completion Interval:

Σ [(Completion Date & Time) - (Order Issue Date & Time)] / Σ (Count of Orders Completed in Reporting Period)

Order Completion Interval Distribution:

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

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Level of Disaggregation:

- Dispatch/No Dispatch categories applicable to all levels except trunks.
- Residence & Business reported in day intervals = 0,1,2,3,4, 5, 5+
- UNE and Design reported in day intervals = 0-5, 5-10, 10-15, 15-20, 20-25, 25-30, 30+
- All Levels are reported <10 line/circuits; >10 line/circuits
- Product Reporting Levels
  - POTS – Residence
  - POTS – Business
  - DESIGN
  - PBX
  - CENTREX
  - ISDN
  - UNE 2 Wire Loop with NP (Design and Non-Design)
  - UNE 2 Wire Loop without NP (Design and Non-Design)
  - UNE Loop Other with NP (Design and Non-Design)
  - UNE Loop Other without NP (Design and Non-Design)
  - UNE Other (Design and Non-Design)
  - Switching
  - Local Transport
  - Combos
  - NP
  - Local Interconnection Trunks
  - Geographic Scope
  - State, Region, and further geographic disaggregation (MSA) as required by State Commission Order

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • CLEC Company Name • Order Number (PON) • Submission Date & Time (TICKET_ID) • Completion Date (CMPLTN_DT) • Service Type (CLASS_SVC_DESC) • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • CLEC Order Number • Order Submission Date & Time • Order Completion Date & Time • Service Type • Geographic Scope

PROVISIONING

Report/Measurement:
18. Average Completion Notice Interval
Definition:
The Completion Notice Interval is the elapsed time between the BST reported completion of work and the issuance of a valid completion notice to the CLEC.
Exclusions:
• Non-mechanized Orders • Cancelled Service Orders • Order Activities of BST associated with internal or administrative use of local services • D & F orders
Business Rules:
Measurement of interval of completion date and time by a field technician on dispatched orders, and 5PM on the due date for non-dispatched orders; to the release of a notice to the CLEC/BST of the completion status. On all orders (mechanized and non-mechanized) the field technician notifies the CLEC by telephone the work was complete and then he enters the work order completion information and completion time in his computer. This information switches through to the SOCS systems either completing the order or rejecting the order to the Work Management Center (WMC). If the completion is rejected, it is manually corrected and then completed by the WMC. The notice is returned on each individual order submitted and as the notice is sent electronically, it can only be switched to those orders that were submitted by the CLEC electronically.
Calculation:
Σ (Date and Time of Notice of Completion) – (Date and Time of Work Completion) / (Number of Orders Completed in Reporting Period)
Report Structure:
• CLEC Specific • CLEC Aggregate • BST Aggregate
Level of Disaggregation:
• Reporting intervals in Hours: 0-1, 1-2, 2-4, 4-8, 8-12, 12-24, > 24, plus Overall Average Hour Interval • Reported in categories of <10 line/circuits; > 10 line/circuits • Product Reporting Levels ➢ POTS – Residence ➢ POTS – Business ➢ DESIGN ➢ PBX ➢ CENTREX ➢ ISDN ➢ UNE 2 Wire Loop with NP (Design and Non-Design) ➢ UNE 2 Wire Loop without NP (Design and Non-Design) ➢ UNE Loop Other with NP (Design and Non-Design) ➢ UNE Loop Other without NP (Design and Non-Design) ➢ UNE Other (Design and Non-Design) ➢ Switching ➢ Local Transport ➢ Combos ➢ NP ➢ Local Interconnection Trunks ➢ Geographic Scope ➢ State, Region, and further geographic disaggregation (MSA) as required by State Commission Order

PROVISIONING – (Average Completion Notice Interval – Continued)

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

Report/Measurement:
19. Coordinated Customer Conversions
Definition:
This category measures the average time it takes BST to disconnect an unbundled loop from the BST switch and cross connect it to a CLEC's equipment. This measurement applies to service orders with and without NP, and where the CLEC has requested BST to provide a coordinated cutover.
Exclusions:
• Any order canceled by the CLEC will be excluded from this measurement. • Delays due to CLEC following disconnection of the unbundled loop • Unbundled Loops where there is no existing subscriber loop
Business Rules:
Where the service order includes NP, the interval includes the total time for the cutover including the translation time to place the line back in service on the ported line. The interval is calculated for the entire cutover time for the service order and then divided by items worked in that time to give the average per item interval for each service order.
Calculation:
Σ [(Completion Date and Time for Cross Connection of an Unbundled Loop)- (Disconnection Date and Time of an Unbundled Loop)] / Total Number of Unbundled Loop Items for the reporting period.
Report Structure:
• CLEC Specific • CLEC Aggregate
Level of Disaggregation:
• Reported in intervals <=5 minutes; >5,<15 minutes; >15 minutes, plus Overall Average interval • Product Reporting Levels ➢ UNE Loops without NP ➢ UNE Loops with NP ➢ Geographic Scope ➢ State, Region, and further geographic disaggregation as required by State Commission Order

Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• Report Month • CLEC Order Number • Committed Due Date (DD) • Service Type (CLASS_SVC_DESC) • Cutover Start Time • Cutover Completion time • Portability start and completion times (NP orders) • Total Items **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• No BST Analog Exists

PROVISIONING

Report/Measurement:
20. % Provisioning Troubles within 30 days of Service Order Activity
Definition:
Percent Provisioning Troubles within 30 days of Installation measures the quality and accuracy of installation activities.
Exclusions:
• Canceled Service Orders • Order Activities of BST or the CLEC associated with internal or administrative use of local services (R Orders, Test Orders, etc.) • D & F orders
Business Rules:
Measures the quality and accuracy of completed orders. The first trouble report from a service order after completion is counted in this measure. Subsequent trouble reports are measured in Repeat Report Rate. Reports are calculated searching in the prior report period for completed service orders and following 30 days after completion for a trouble report. D & F orders are excluded as there is no subsequent activity following a disconnect.
Calculation:
% Provisioning Troubles within 30 days of Service Order Activity = Σ (Trouble reports on all completed orders ≤ 30 days following service order(s) completion) / (All Service Orders completed in the calendar month) X 100
Report Structure:
• CLEC Specific • CLEC Aggregate • BST Aggregate
Level of Disaggregation:
• Reported in categories of <10 line/circuits; > 10 line/circuits • Dispatch / No Dispatch • Product Reporting Levels ➢ POTS – Residence ➢ POTS – Business ➢ DESIGN ➢ PBX ➢ CENTREX ➢ ISDN ➢ UNE 2 Wire Loop with NP (Design and Non-Design) ➢ UNE 2 Wire Loop without NP (Design and Non-Design) ➢ UNE Loop Other with NP (Design and Non-Design) ➢ UNE Loop Other without NP (Design and Non-Design) ➢ UNE Other (Design and Non-Design) ➢ Switching ➢ Local Transport ➢ Combos ➢ NP ➢ Local Interconnection Trunks ➢ Geographic Scope ➢ State, Region, and further geographic disaggregation (MSA) as required by State Commission Order

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

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

PROVISIONING

Report/Measurement :
21. Total Service Order Cycle Time (TSOCT)
Definition:
The total service order cycle time from receipt of a valid service order request to the completion of the service order.
Exclusions:
• Canceled Service Orders • Order Activities of BST or the CLEC associated with internal or administrative use of local services • (Record Orders, Test Orders, etc.) • D (Disconnect) and F (From) orders. (From is disconnect side of a move order when the customer moves to a new address). • "L" Appointment coded orders (where the customer has requested a later than offered interval) • Orders with CLEC/Subscriber caused delays or CLEC/Subscriber requested due date changes.
Business Rules:
The interval is determined for each order processed during the reporting period. This measurement combines two reports: FOC (Firm Order Confirmation) with Average Order Completion Interval. This interval starts with the receipt of a valid service order request and stops when the technician or system completes the order in SOCS. Elapsed time for each order is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the associated total number of orders completed
Calculation :
Total Service Order Cycle Time
Report Structure:
• CLEC Specific • CLEC Aggregate • BST Aggregate
Level of Disaggregation:
• ISDN Orders included in Non Design • Dispatch/No Dispatch categories applicable to all levels except trunks. • Intervals under development • Product Reporting Levels ➢ Interconnection Trunks ➢ POTS – Residence ➢ POTS – Business ➢ DESIGN ➢ PBX ➢ CENTREX ➢ ISDN ➢ UNE 2 Wire Loop with NP (Design and Non-Design) ➢ UNE 2 Wire Loop without NP (Design and Non-Design) ➢ UNE Loop Other with NP (Design and Non-Design) ➢ UNE Loop Other without NP (Design and Non-Design) ➢ UNE Other (Design and Non-Design) ➢ Switching ➢ Local Transport ➢ Combos ➢ NP ➢ Local Interconnection Trunks • Geographic Scope ➢ State, Region and further geographic disaggregation as required by State Commission Order

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

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
• Report Month • Interval for FOC • CLEC Company Name • Order Number (PON) • Submission Date & Time (TICKET_ID) • Completion Date (CMPLTN_DT) • Service Type (CLASS_SVC_DESC) • Geographic Scope **NOTE:** Code in parentheses is the corresponding header found in the raw data file.	• Report Month • CLEC Order Number • Order Submission Date & Time • Order Completion Date & Time • Service Type • Geographic Scope -

Report/Measurement
22. Percent Installations Completed Within Industry Guidelines for LNP With Loop
Definition:
Percent installations completed within "X" business days excluding customer caused misses and customer requested due date greater than "X" business days.
Exclusions:
• Specials and Interconnection Trunks. • Excludes UNE Combos captured in the POTS or Specials measurements. • Exclude orders that are not N, T, or C. • Excludes customer requested due dates greater than "X" business days as set out below. • Excludes customer caused misses. • CLEC or Customer caused or requested delays. • NPAC caused delays unless caused by BST.
Business Rules:
The FOC return date is the day that BST returns the FOC to the CLEC. The Completion Date is the day that BST personnel complete the service order activity. If the CLEC submits the LSR prior to 3:00 p.m. the CLEC may request a 3 day interval. If the LSR is submitted after 3:00 p.m. the CLEC can request a 4 day interval. The base of items is out of WFA (Work Force Administration) and it is reported at an order level to account for different measurement standards based on the number of circuits per order. Industry guidelines for due dates for LNP are as follows: For Offices in which NXXs are previously opened – 3 Business Days. • New NXX – 5 Business days on LNP capable NXX. The above-noted due dates are from the date of the FOC receipt. For partial LNP conversions that require restructuring of customer account: • 1-30 TNs: Add one additional day to the FOC interval. The LNP due date intervals will continue to be three business days and five business days from the receipt of the FOC depending on whether the NXX has been previously opened or is new. • >30 TNs, including entire NXX: The due dates are negotiated.
Levels of Disaggregation:
UNEs contained in the UNE price schedule, and/or agreed to by parties.
Calculation:
Count of N, T, C orders installed within business "x" business days ÷ total N, T, C orders) * 100
Report Structure:
Reported for CLEC and all CLECs

PROVISIONING

Report/Measurement:
23. Percentage of LNP Only Due Dates within Industry Guidelines
Definition:
Percentage of LNP Due date interval that meets the industry standard established by the North American Numbering Council (NANC).
Exclusions:
• CLEC or Customer caused or requested delays. • NPAC caused delays unless caused by BST.
Business Rules:
Industry guidelines for due dates for LNP are as follows: • For Offices in which NXXs are previously opened – 3 Business Days. • New NXX – 5 Business days on LNP capable NXX. The above-noted due dates are from the date of the FOC receipt. For partial LNP conversions that require restructuring of customer account: • 1-30 TNs: Add one additional day to the FOC interval. The LNP due date intervals will continue to be three business days and five business days from the receipt of the FOC depending on whether the NXX has been previously opened or is new. • >30 TNs, including entire NXX: The due dates are negotiated.
Levels of Disaggregation:
NXXs previously opened and NXX new (1-30 TNs and greater than 30 TNs)
Calculation:
(Count of LNP TNs implemented within Industry guidelines ÷ total number of LNP TNs) *100
Report Structure:
Reported for CLEC and all CLECs.

Report/Measurement:
24. Percentage of Time the Old Service Provider Releases the Subscription Prior to the Expiration of the Second 9 Hour Timer
Definition:
Percentage of time the old service provider releases subscription(s) to NPAC within the first or the second 9-hour timers.
Exclusions:
• Customer caused or requested delays. • NPAC caused delays unless caused by BST. • Cases where BST did the release but the New Service Provider did not respond prior to the expiration of the second timer. This sequence of events causes the NPAC to send a cancel of BST's release request. In these cases, BST may have to re-work to release the TN so it can be ported to meet the due date.
Business Rules:
Number of LNP TNs for which subscription to NPAC was released prior to the expiration of the second 9-hour timer.
Levels of Disaggregation:
None
Calculation:
(Number of LNP TNs for which subscription to NPAC was released prior to the expiration of the second 9-hour timer ÷ total number of LNP TNs for which the subscription was released) *100
Report Structure:
Reported for CLEC and all CLECs.

PROVISIONING

Report/Measurement:
25. Percentage of Customer Account Restructured Prior to LNP Due Date
Definition:
Percentage of accounts restructured within the LNP order due date established by the industry standard guidelines, and/or negotiated due date for orders that contain more than 30 TNs.
Exclusions:
None
Business Rules:
Industry guidelines for due dates for LNP are as follows: • For Offices in which NXXs are previously opened – 3 Business Days. • New NXX – 5 Business days on LNP capable NXX. The above-noted due dates are from the date of the FOC receipt. For partial LNP conversions that require restructuring of customer account: • 1-30 TNs: Add one additional day to the FOC interval. The LNP due date intervals will continue to be three business days and five business days from the receipt of the FOC depending on whether the NXX has been previously opened or is new. • >30 TNs, including entire NXX: The due dates are negotiated.
Levels of Disaggregation:
None
Calculation:
(Number of LNP orders for which customer accounts were restructured prior to LNP due date) ÷ (total number of LNP orders that require customer accounts to be restructured) *100
Report Structure:
Reported for CLEC and all CLECs.

PROVISIONING:

Report/Measurement:
26. Percentage Pre-mature Disconnects for LNP Orders
Definition:
Percentage of LNP cutovers BST prematurely removes the translations, including the 10 digit trigger, prior to the scheduled conversion time.
Exclusions:
Coordinated Conversions
Business Rules:
The count of incidents, on a TN basis, where the translations are removed prior to the scheduled conversion. Count the number of cutovers that are prematurely disconnected (10 minutes before scheduled conversion time).
Levels of Disaggregation:
LNP only and LNP with Loop.
Calculation:
Count of premature disconnects ÷ total LNP conversions * 100
Report Structure:
Reported by CLEC and all CLECs disaggregated by LNP and LNP with UNE loop.

PROVISIONING

Report/Measurement:
27. Average Days Required to Process a Request
Definition:
The average time it takes to process a request for access to poles, conduits, and right-of-ways.
Exclusions:
None
Business Rules:
The clock starts upon the receipt date of the application for access to poles, conduits and right-of-ways and the clock stops upon response date of the application granting or denying access to poles, conduits and right-of-ways.
Levels of Disaggregation:
None
Calculation:
Σ (Date request returned to CLEC – date request received from CLEC) ÷ total number of requests
Report Structure:
Reported for individual CLEC and all CLECs

PROVISIONING:

Report/Measurement:
28. Percentage of Premature Disconnects (Coordinated Cutovers)
Definition:
Percentage of coordinated cutovers where BST prematurely disconnects the customer prior to the scheduled conversion.
Exclusions:
None
Business Rules:
A premature disconnect occurs any time BST disconnects the CLEC customer prior to the CLEC authorization.
Levels of Disaggregation:
None
Calculation:
(Count of prematurely disconnected customers ÷ total coordinated conversion customers) * 100
Report Structure:
Reported by CLEC and all CLECs disaggregated by INP and INP with loop, LNP and LNP with loop.

PROVISIONING

Report/Measurement:
29. Percentage of Missed Mechanized INP Conversions
Definition:
Percentage of mechanized INP conversions not loaded in the switch within 10 minutes prior to or 30 minutes after the scheduled due time.
Exclusions:
None
Business Rules:
The clock starts on the Due Date and Frame Due Time and the clock stops on the Switch Date and Time.
Levels of Disaggregation:
None
Calculation:
(Count of mechanized INP conversions not loaded in the switch within 10 minutes prior to or 30 minutes after scheduled due time (Frame Due Time)) ÷ total mechanized INP conversions) * 100
Report Structure:
Reported by CLEC and all CLECs.

PROVISIONING:

Report/Measurement:
30. Percent NXXs loaded and tested prior to the LERG effective date
Definition:
The percent of NXXs loaded and tested prior to the LERG effective date.
Exclusions:
None
Business Rules:
Data for the initial NXX(s) in a local calling area will be based on the LERG effective date or completion of the initial interconnection trunk group(s), whichever is longer. Data for additional NXXs in the local calling area will be based on the LERG effective date.
Levels of Disaggregation:
State and Region
Calculation:
(Count of NXXs loaded and tested by LERG date ÷ total NXXs loaded and tested) * 100
Report Structure:
Reported by CLEC, all CLECs and BST.

PROVISIONING:

Report/Measurement:
31. Average Delay Days for NXX Loading and Testing
Definition:
Average calendar days from due date to completion date on company missed NXX orders.
Exclusions:
None
Business Rules:
Data for the initial NXX(s) in a local calling area will be based on the LERG effective date or completion of the initial interconnection trunk group(s), whichever is longer. Data for additional NXXs in the local calling area will be based on the LERG effective date.
Levels of Disaggregation:
State and Region
Calculation:
Σ (Completion Date - LERG date) ÷ (number of BST caused late orders)
Report Structure:
Reported for CLEC, all CLECs and BST.

Report/Measurement:

32. Missed Repair Appointments

Definition:

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

Exclusions:

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

Business Rules:

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

Calculation:

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

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Level of Disaggregation:

ISDN Troubles included in Non-Design – GA ONLY

- Product Reporting Levels
  - POTS – Residence, Business
  - Design
  - PBX, CENTREX and ISDN
  - UNE 2 Wire Loop (Design and Non – Design)
  - UNE Loop Other (Design and Non Design)
  - UNE Other (Design and Non – Design)
  - Switching, Local Transport and Combos
  - Local Interconnection Trunks
- Dispatch/No Dispatch categories applicable to all product levels
- Geographic Scope

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

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

MAINTENANCE & REPAIR

Report/Measurement:

33. Customer Trouble Report Rate

Definition:

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

Exclusions:

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

Business Rules:

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

Calculation:

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

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Level of Disaggregation:

ISDN Troubles included in Non Design

- Product Reporting Levels
  - POTS Residence and Business
  - Design
  - PBX, CENTREX, and ISDN
  - UNE 2 Wire Loop (Design and Non – Design)
  - UNE Loop Other (Design and Non – Design)
  - UNE Other (Design and Non – Design)
  - Switching , Local Transport, and Combos
  - Local Interconnection Trunks
- Dispatch/No Dispatch categories applicable to all product levels
- Geographic Scope
  - State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area - MSA)

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

Report/Measurement:

34. Maintenance Average Duration

Definition:

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

Exclusions:

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

Business Rules:

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

Calculation:

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

Report Structure:

- CLEC Specific
- BST Aggregate
- CLEC Aggregate

Level of Disaggregation:

ISDN Troubles included in Non Design

- Product Reporting Levels
  - POTS– Residence and Business
  - Design
  - PBX, CENTREX, and ISDN
  - UNE 2 Wire Loop (Design Non – Design)
  - UNE Loop Other (Design Non – Design)
  - UNE Other (Design Non – Design)
  - Switching, Local Transport and Combos
  - Local Interconnection Trunks
- Dispatch/No Dispatch categories applicable to all product levels
- Geographic Scope
  - State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area – MSA)

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

Report/Measurement:

35. Percent Repeat Troubles within 30 Days

Definition:

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

Exclusions:

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

Business Rules:

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

Calculation:

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

Report Structure:

- CLEC Specific
- CLEC Aggregate
- BST Aggregate

Level of Disaggregation:

ISDN Troubles included in Non Design

- Product Reporting Levels
  - POTS Residence and Business
  - Design
  - PBX, CENTREX and ISDN
  - UNE 2 Wire Loop (Design and Non – Design)
  - UNE Loop Other (Design and Non – Design)
  - UNE Other (Design Non – Design)
  - Switching, Local Transport and Combos
  - Local Interconnection Trunks
- Dispatch/No Dispatch categories applicable to all product levels
- Geographic Scope
  - State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area - MSA)

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

Report/Measurement:

36. Out of Service (OOS) > 24 Hours

Definition:

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

Exclusions:

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

Business Rules:

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

Calculation:

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

Report Structure:

- CLEC Specific
- BST Aggregate
- CLEC Aggregate

Level of Disaggregation:

ISDN Troubles included in Non Design

- Product Reporting Levels
  - POTS Residence and Business
  - Design
  - PBX and CENTREX and ISDN
  - UNE 2 Wire Loop (Design and Non – Design)
  - UNE Loop Other (Design and Non – Design)
  - UNE Other (Design and Non – Design)
  - Switching, Local Transport and Combos
  - Local Interconnection Trunks
  - ISDN PRI and BRI
- Dispatch/No Dispatch categories applicable to all product levels
- Geographic Scope
  - State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area - MSA)

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

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

Report/Measurement:	
38. OSS Response Interval and Percentages	
Definition:	
The response intervals are determined by subtracting the time a request is received on the BST side of the interface until the response is received from the legacy system. Percentages of requests falling into each interval category are reported, along with the actual number of requests falling into those categories.	
Exclusions:	
Queries received during scheduled system maintenance time.	
Business Rules:	
This measure is designed to monitor the time required for the CLEC and BST interface system to obtain from BST's legacy systems the information required to handle maintenance and repair functions. The clock starts on the date and time when the request is received and the clock stops when the response has been transmitted through that same point to the requester.	
Calculation:	
OSS Response Interval = (Query Response Date and Time for Category "X") - (Query Request Date and Time for Category "X") / (Number of Queries Submitted in the Reporting Period) where, "X" is 0-4, $\geq$ 4 to 10, $\geq$ 10, $\geq$ 30 seconds.	
Report Structure:	
• CLEC • BST Residence • BST Business by interface for each legacy system and function as appropriate.	
Level of Disaggregation:	
• Region	
Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• CLEC Transaction Intervals	• BST Business and Residence transaction Intervals

Report/Measurement:	
39. Average Answer Time – Repair Centers	
Definition:	
This measure demonstrates an average response time for the CLEC representative to contact a BST representative. The average time a CLEC Rep is in queue waiting for the LCSC or UNE Center Rep to answer.	
Exclusions:	
None	
Business Rules:	
This measure is designed to measure the time required for CLEC & BST from the time of the ACD choice to the time of being answered. The clock starts when the CLEC Rep makes a choice to be put in queue for the next repair attendant and the clock stops when the repair attendant answers the call.	
Level of Disaggregation:	
• Region. CLEC/BST Service Centers and BST Repair Centers are regional.	
Calculation:	
Average Answer Time for BST's Repair Centers = (Time BST Repair Attendant Answers Call) – (Time of entry into queue until ACD Selection) / (Total number of calls by reporting period)	
Report Structure:	
• CLEC Aggregate • BST Aggregate • CLEC Aggregate	
Data Retained Relating to CLEC Experience	**Data Retained Relating to BST Experience**
• CLEC Average Answer Time	• BST Average Answer Time

Report/Measurement:
40. Mean Time to Repair
Definition:
Average duration of NXX trouble reports from the receipt of the customer trouble report to the time that the trouble report is cleared.
Exclusions:
None
Business Rules:
The start time is when the report is received. The stop time is when the report is cleared.
Levels of Disaggregation:
State and Region.
Calculation:
(Date and time trouble report is cleared with the customer – Date and time trouble report is received) ÷ (number of NXX trouble reports)
Report Structure:
Reported for CLEC, all CLECs and BST.

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

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

BILLING

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

Report/Measurement:	
44. 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 = $\sum$(Total number of Recorded usage records delivered during the current month that are within thirty (30) days of the message recording date) / $\sum$ (Total number of Recorded usage records delivered during the current month) X 100	
Report Structure	
• CLEC Specific • CLEC Aggregate • BST Aggregate	
Level of Disaggregation:	
• Geographic Scope ➢ Region	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Record Type ➢ BellSouth Recorded ➢ Non BellSouth Recorded	• Report Monthly • Record Type

BILLING

Report/Measurement:	
45. 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 =$\sum$ (Total number of usage records sent within six (6) calendar days from initial recording/receipt) /$\sum$ (Total number of usage records sent) X 100	
Report Structure:	
• CLEC Aggregate • CLEC Specific • BST Aggregate	
Level of Disaggregation:	
• Geographic Scope ➢ Region	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Record Type ➢ BellSouth Recorded ➢ Non-BellSouth Recorded	• Report Monthly • Record Type

BILLING

Report/Measurement:	
46. 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 = $\sum$ (Record volume X estimated number of days to deliver the Usage Record) / total record volume	
Report Structure:	
• CLEC Aggregate • CLEC Specific • BST Aggregate	
Level of Disaggregation:	
• Geographic Scope ➢ Region	
Data Retained Relating to CLEC Experience:	**Data Retained Relating to BST Performance:**
• Report Month • Record Type ➢ BellSouth Recorded ➢ Non-BellSouth Recorded	• Report Monthly • Record Type

BILLING

Report/Measurement:
47. Percent of Accurate and Complete Formatted Mechanized Bills
Definition:
The percent of monthly bills sent to the CLECs via the mechanized EDI process that are accurate and complete.
Exclusions:
None
Business Rules:
EDI Billing accuracy is based upon three factors: totaling, formatting, and syntax. In other words, does the bill total up correctly, does the EDI Billing data conform to the format outlined in the BST Electronic Commerce Guide for EDI Billing, and is the EDI Billing data syntactically correct? For completeness, EDI checks that the sum of all itemized calls equals the total for the itemized calls bill section, and the sum of all OC&C charges should equal the total for the OC&C section. Similar audits are performed for total current charges and the amount due.
Levels of Disaggregation:
• None
Calculation:
(Count of accurate and complete formatted mechanized bills via EDI ÷ total # of mechanized bills via EDI.) * 100
Report Structure:
Reported for CLEC and all CLECs.

Report/Measurement:
48. Billing Completeness
Definition:
Percent of service orders completed within the billing cycle that post in the CRIS or CABS billing systems prior to the customer's bill period.
Exclusions:
None.
Business Rules:
The Billing Completeness Measure includes all orders which have been completed for the bill period. It should detail orders for which billing has been delayed due to errors which did not allow billing to occur. Exclusions should include effective billing dates requested by customers. Billing should be executed for service with a bill date minus one. The billing completeness measure calculation is for each CLEC, for all CLECs and for all retail/wholesale service orders. Calculation should be based on completion date, post to billing system date, and bill period.
Levels of Disaggregation:
CLEC and non-CLEC
Calculation:
(Count of on-time service orders included in current applicable bill period ÷ total service orders in current applicable billing period) *100
Report Structure:
Reported for CLEC, all CLECs and BST.

BILLING

Report/Measurement:
49. Unbillable Usage
Definition:
The percent usage data that is unbillable.
Exclusions:
None
Business Rules:
For CRIS billing, the total dollars for A.M.A/ECS written off is divided by the total CRIS A.M.A/ECS billing. For CABS, the total CABS uncollectible dollars is divided by total CABS billing. The end of the month cycle date is used as the start/stop time for the reporting period.
Levels of Disaggregation:
None
Calculation:
(Total unbillable usage ÷ total billed usage) * 100
Report Structure:
Reported for the aggregate of BST and CLECs.

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

Report/Measurement:
51. Speed to Answer Performance/Percent Answered within "X" Seconds – Toll
Definition:
Measurement of the percent of toll calls that are answered in less than "X" seconds. The number of seconds represented by "X" is thirty (30).
Exclusions:
Calls abandoned by customers are not reflected in the average speed to answer but are reflected in the conversion tables where the percent answered within "X" seconds is determined.
Business Rules:
The call waiting measurement scan starts when the customer enters the queue and ends when a BST representative answers the call. The average speed to answer is determined by measuring and accumulating the seconds of wait time from the entry of a customer into the BST call management system queue until the customer is transferred to a BST representative. No distinction is made between CLEC customers and BST customers.
Calculation:
The Percent Answered within "X" Seconds measurement for toll is derived by using the BellCore Statistical Answer Conversion Tables, to convert the Average Speed to Answer measure into a percent of calls answered within "X" seconds. The BellCore Conversion Tables are specific to the defined parameters of work time, number of operators, max queue size and call abandonment rates.
Report Structure:
Reported for the aggregate of BST and CLECs • State
Level of Disaggregation:
None
Data Retained (on Aggregate Basis)
For the items below, BST's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP. • Month • Call Type (Toll) • Average Speed of Answer

OPERATOR SERVICES AND DIRECTORY ASSISTANCE

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

OPERATOR SERVICES AND DIRECTORY ASSISTANCE

Report/Measurement:
53. 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 (20).
Exclusions:
Calls abandoned by customers are not reflected in the average speed to answer but are reflected in the conversion tables where the percent answered within "X" seconds is determined.
Business Rules:
The call waiting measurement scan starts when the customer enters the queue and ends when a BST representative answers the call. The average speed to answer is determined by measuring and accumulating the seconds of wait time from the entry of a customer into the BST call management system queue until the customer is transferred to a BST representative. No distinction is made between CLEC customers and BST customers.
Calculation:
The Percent Answered within "X" Seconds measurement for DA is derived by using the BellCore Statistical Answer Conversion Tables, to convert the Average Speed to Answer measure into a percent of calls answered within "X" seconds. The BellCore Conversion Tables are specific to the defined parameters of work time, number of operators, max queue size and call abandonment rates.
Report Structure:
Reported for the aggregate of BST and CLECs • State
Level of Disaggregation:
None
Data Retained (on Aggregate Basis)
For the items below, BST's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP. • Month • Call Type (DA) • Average Speed of Answer

Report/Measurement:
54. Directory Assistance Average Speed Of Answer
Definition:
The average time a customer is in queue.
Exclusions:
None
Business Rules:
The clock starts when the customer enters the queue and the clock stops when a BST representative answers the call or the customer abandons the call. The length of each call is determined by measuring and accumulating the elapsed time from the entry of a CLEC customer call into the BST call management system queue until the CLEC customer call is transferred to BST personnel assigned to handling CLEC calls for assistance during hours of operation.
Levels of Disaggregation:
None
Calculation:
Total queue time ÷ total calls answered
Report Structure:
Reported for the aggregate of BST and CLECs.

OPERATOR SERVICES AND DIRECTORY ASSISTANCE

Report/Measurement:
55.Operator Services Speed Of Answer
Definition:
The average time a customer is in queue.
Exclusions:
None
Business Rules:
The clock starts when the customer enters the queue and the clock stops when a BST representative answers the call or the customer abandons the call. The length of each call is determined by measuring and accumulating the elapsed time from the entry of a CLEC customer call into the BST call management system queue until the CLEC customer call is transferred to BST personnel assigned to handling CLEC calls for assistance during hours of operation.
Levels of Disaggregation:
None
Calculation:
Total queue time ÷ total calls answered.
Report Structure:
Reported for the aggregate of BST and CLECs.

Report/Measurement:
56. Percentage of Updates Completed into the DA Database within 72 Hours for Facility Based CLECs
Definition:
The percentage of DA database updates completed within 72 hours of receipt of the update from the CLEC for directory change only and within 72 hours of the completion date on the provisioning service order where a provisioning order is required.
Exclusions:
Excludes Weekends and Holidays.
Business Rules:
The date and time stamp on fax updates starts the clock and the date and time when the listing is updated stops the clock. For directory changes that also have a provisioning order, the clock starts when the provisioning order completes and ends when the listing is updated. The update clerks work hours are 6:30 a.m. to 3:00 p.m. Monday through Friday. On requests received after 3:00 p.m. the clock will start at 6:30 a.m. the following day.
Levels of Disaggregation:
None
Calculation:
(Count of updates completed within 72 hours ÷ total updates) * 100
Report Structure:
Reported by CLEC and all CLECs for facility based providers.

Report/Measurement:
57. Average Update Interval for DA Database for Facility Based CLECs
Definition:
The average update interval for DA database changes for facility based CLECs.
Exclusions:
None
Business Rules:
The date and time stamp on fax updates starts the clock and the date and time when the listing is updated stops the clock. For directory changes that also have a provisioning order, the clock starts when the provisioning order completes and ends when the listing is updated. The update clerks work hours are 6:30 a.m. to 3:00 p.m. Monday through Friday. On requests received after 3:00 p.m. the clock will start at 6:30 a.m. the following day.
Levels of Disaggregation:
None
Calculation:
(8:00 a.m. of the day following the input into the DA database – Time update received from CLEC) ÷ total updates
Report Structure:
Reported by CLEC and all CLECs for facility based providers.

Report/Measurement:
58. Percentage DA Database Accuracy For Manual Updates
Definition:
The percentage of DA records that were updated by BST in error. The data required to calculate this measurement will be provided by the CLEC. The CLEC will provide the number of records transmitted and the errors found. BST will verify the records determined to be in error to validate that the records were input by BST incorrectly.
Exclusions:
None
Business Rules:
The date and time stamp on fax updates starts the clock and the date and time when the listing is updated stops the clock. For directory changes that also have a provisioning order, the clock starts when the provisioning order completes and ends when the listing is updated. The update clerks work hours are 6:30 a.m. to 3:00 p.m. Monday through Friday. On requests received after 3:00 p.m. the clock will start at 6:30 a.m. the following day.
Levels of Disaggregation:
None
Calculation:
(Number of BST caused update errors ÷ Total number of updates) *100
Report Structure:
Reported by CLEC and all CLECs for facility based providers.

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

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

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

TRUNK GROUP PERFORMANCE

Report/Measurement:

62. Trunk Group Service Report

Definition:

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

Exclusions:

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

Business Rules:

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

Calculation:

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

Report Structure:

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

Level of Disaggregation:

State

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

TRUNK GROUP PERFORMANCE

Report/Measurement:

63. Trunk Group Service Detail

Definition:

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

Exclusions:

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

Business Rules:

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

Calculation:

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

Report Structure:

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

Level of Disaggregation:

State

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

COLLOCATION

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

COLLOCATION

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

COLLOCATION

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

BONA FIDE REQUESTS

Report/Measurement:
67. Percentage of Requests Processed Within 30 Business Days
Definition:
Percentage of Bona fide/Special requests processed within 30 business days.
Exclusions:
Excludes weekends and holidays.
Business Rules:
The clock starts when BST receives a complete and accurate application. The clock stops when BST completes application processing for Network Elements that are not operational at the time of the request.
Levels of Disaggregation:
• None
Calculation:
(Count of number of requests processed within 30 days ÷ total number of requests) * 100
Report Structure:
Reported by CLEC and all CLECs.

BONA FIDE REQUESTS

Report/Measurement:
68. Percentage of Quotes Provided for Authorized BFRs/Special Requests Within X (10,30,90) Days
Definition:
Percentage of quotes provided in response to bona fide/Special requests for within X (10,30,90) days.
Exclusions:
Requests that are subject to pending arbitration.
Business Rules:
The clock starts when BST receives a complete and accurate application. The clock stops when BST responds back to the application request with a quote.
Levels of Disaggregation:
• New Network Elements that are operational at the time of the request. • New Network Elements that are ordered by the FCC. • New Network Elements that are not operational at the time of the Request.
Calculation:
(Count of number of requests processed within X (10, 30, 90) days ÷ total number (10, 30, 90 Days) of requests) * 100
Report Structure:
Reported by CLEC and all CLECs.

Appendix A: Reporting Scope*

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

Appendix A: Reporting Scope

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

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

Appendix B: Glossary of Acronyms and Terms

A	**ACD**	Automatic Call Distributor - A service that provides status monitoring of agents in a call center and routes high volume incoming telephone calls to available agents while collecting management information on both callers and attendants.
	AGGREGATE	Sum total of all items in like category, e.g. CLEC aggregate equals the sum total of all CLECs' data for a given reporting level.
	ASR	Access Service Request - A request for access service terminating delivery of carrier traffic into a Local Exchange Carrier's network.
	ATLAS	Application for Telephone Number Load Administration System - The BellSouth Operations System used to administer the pool of available telephone numbers and to reserve selected numbers from the pool for use on pending service requests/service orders.
	ATLASTN	ATLAS software contract for Telephone Number
	AUTO CLARIFICATION	The number of LSRs that were electronically rejected from LESOG and electronically returned to the CLEC for correction.
B	**BILLING**	The process and functions by which billing data is collected and by which account information is processed in order to render accurate and timely billing.
	BOCRIS	Business Office Customer Record Information System - A front-end presentation manager used by BellSouth organizations to access the CRIS database.
	BRC	Business Repair Center – The BellSouth Business Systems trouble receipt center which serves large business and CLEC customers.
	BST	BellSouth Telecommunications, Inc.
C	**CKTID**	A unique identifier for elements combined in a service configuration
	CLEC	Competitive Local Exchange Carrier
	CMDS	Centralized Message Distribution System - BellCore administered national system used to transfer specially formatted messages among companies.
	COFFI	Central Office Feature File Interface - A BellSouth Operations System database which maintains Universal Service Order Code (USOC) information based on current tariffs.

C	**COFIUSOC**	COFFI software contract for feature/service information
	CRIS	Customer Record Information System - The BellSouth proprietary corporate database and billing system for non-access customers and services.
	CRSACCTS	CRIS software contract for CSR information
	CSR	Customer Service Record
	CTTG	Common Transport Trunk Group - Final trunk groups between BST & Independent end offices and the BST access tandems.
D	**DESIGN**	Design Service is defined as any Special or Plain Old Telephone Service Order which requires BellSouth Design Engineering Activities
	DISPOSITION & CAUSE	Types of trouble conditions, e.g. No Trouble Found, Central Office Equipment, Customer Premises Equipment, etc.
	DLETH	Display Lengthy Trouble History - A history report that gives all activity on a line record for trouble reports in LMOS
	DLR	Detail Line Record - All the basic information maintained on a line record in LMOS, e.g. name, address, facilities, features etc.
	DOE	Direct Order Entry System - An internal BellSouth service order entry system used by BellSouth Service Representatives to input business service orders in BellSouth format.
	DSAP	DOE (Direct Order Entry) Support Application - The BellSouth Operations System which assists a Service Representative or similar carrier agent in negotiating service provisioning commitments for non-designed services and UNEs.
	DSAPDDI	DSAP software contract for schedule information
E	**E911**	Provides callers access to the applicable emergency services bureau by dialing a 3-digit universal telephone number.
	EDI	Electronic Data Interchange - The computer-to-computer exchange of inter and/or intra company business documents in a public standard format.
F	**FATAL REJECT**	The number of LSRs that were electronically rejected from LEO, which checks to see of the LSR has all the required fields correctly populated
	FLOW-THROUGH	In the context of this document, LSRs submitted electronically via the CLEC mechanized ordering process that flow through to the BST OSS without manual or human intervention.
	FOC	Firm Order Confirmation - A notification returned to the CLEC confirming that the LSR has been received and accepted, including the specified commitment date.

G		
H	**HAL**	"Hands Off" Assignment Logic - Front end access and error resolution logic used in interfacing BellSouth Operations Systems such as ATLAS, BOCRIS, LMOS, PSIMS, RSAG and SOCS.
	HALCRIS	HAL software contract for CSR information
I	**ISDN**	Integrated Services Digital Network
K		
L	**LCSC**	Local Carrier Service Center - The BellSouth center which is dedicated to handling CLEC LSRs, ASRs, and Preordering transactions along with associated expedite requests and escalations.
	LEGACY SYSTEM	Term used to refer to BellSouth Operations Support Systems (see OSS)
	LENS	Local Exchange Negotiation System - The BellSouth LAN/web server/OS application developed to provide both preordering and ordering electronic interface functions for CLECs.
	LEO	Local Exchange Ordering - A BellSouth system which accepts the output of EDI, applies edit and formatting checks, and reformats the Local Service Requests in BellSouth Service Order format.
	LESOG	Local Exchange Service Order Generator - A BellSouth system which accepts the service order output of LEO and enters the Service Order into the Service Order Control System using terminal emulation technology.
	LMOS	Loop Maintenance Operations System - A BellSouth Operations System that stores the assignment and selected account information for use by downstream OSS and BellSouth personnel during provisioning and maintenance activities.
	LMOS HOST	LMOS host computer
	LMOSupd	LMOS updates
	LNP	Local Number Portability - In the context of this document, the capability for a subscriber to retain his current telephone number as he transfers to a different local service provider.
	LOOPS	Transmission paths from the central office to the customer premises.
	LSR	Local Service Request – A request for local resale service or unbundled network elements from a CLEC.
M	**MAINTENANCE & REPAIR**	The process and function by which trouble reports are passed to BellSouth and by which the related service problems are resolved.
	MARCH	A BellSouth Operations System which accepts service orders, interprets the coding contained in the service order image, and constructs the specific switching system Recent Change command messages for input into end office switches.

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

Q		
R	**RNS**	Regional Negotiation System - An internal BellSouth service order entry system used by BellSouth Consumer Services to input service orders in BellSouth format.
	RRC	Residence Repair Center - The BellSouth Consumer Services trouble receipt center which serves residential customers.
	RSAG	Regional Street Address Guide - The BellSouth database, which contains street addresses validated to be accurate with state and local governments.
	RSAGADDR	RSAG software contract for address search
	RSAGTN	RSAG software contract for telephone number search
S	**SOCS**	Service Order Control System - The BellSouth Operations System which routes service order images among BellSouth drop points and BellSouth Operations Systems during the service provisioning process.
	SOIR	Service Order Interface Record - any change effecting activity to a customer account by service order that impacts 911/E911.
T	**TAFI**	Trouble Analysis Facilitation Interface - The BellSouth Operations System that supports trouble receipt center personnel in taking and handling customer trouble reports.
	TAG	Telecommunications Access Gateway – TAG was designed to provide an electronic interface, or machine-to-machine interface for the bi-directional flow of information between BellSouth's OSSs and participating CLECs.
	TN	Telephone Number
	TOTAL MANUAL FALLOUT	The number of LSRs which are entered electronically but require manual entering into a service order generator.
U	**UNE**	Unbundled Network Element
V		
W	**WTN**	A unique identifier for elements combined in a service configuration
X		
Y		
Z		
Σ		Sum of:

TAB FOUR

ITC^DeltaCom Final Best Offer For

(5) Waiver Request Process

BellSouth should not be denied protection from extraordinary impacts not anticipated in the construction of the enforcement remedy plan.[1] These events include: a Force Majeure event; an act or omission by ITC^DeltaCom that is contrary to any of its obligations under its interconnection agreement with BellSouth or under the Act or Tennessee law or is in bad faith; or non-BellSouth problems associated with third-party systems or equipment, which could not have been avoided by BST in the exercise of reasonable diligence. Provided, however, the third party exclusion will not be raised more than three times within a calendar year. BellSouth will not be excused from payment of enforcement mechanisms on any other grounds, except by application of the procedural threshold provided for below. Any dispute regarding whether a BST performance failure is excused under this paragraph will be resolved with the Authority through a dispute resolution proceeding or, if the parties agree, through binding commercial arbitration with the American Arbitration Association. BellSouth will have the burden in any such proceeding to demonstrate that its noncompliance with the Service quality measurement and remedy was excused on one of the grounds set forth herein. If a Force Majeure event or other excusing event only suspends BellSouth's ability to timely perform an activity subject to Service quality measurement, the applicable time frame in which BellSouth's compliance with the parity or benchmark criterion is measured will be extended on an

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[1] Root cause analysis should not defer payments of consequences. BellSouth must be liable to pay any consequences for poor performance. Completion of root cause analysis must not be a prerequisite for the delivery of payments to either the CLEC(s) or to the designated Tier II fund. Root cause analyses tend to be time consuming to conduct. While root cause analysis is desirable for long range performance improvement purposes, it is antithetical to self-enforcing consequences. Finally, the provisions set forth in the immediately preceding section provide a procedural mechanism available to BellSouth should after-the-fact root cause analysis indicate that a consequence was misapplied from BellSouth's perspective.

hour-for-hour or day-for-day basis, as applicable, equal to the duration of the excusing event.

As a result, if such events occur, BellSouth should be permitted to pursue relief according to the following:

(1) BellSouth should notify the Commission, using written and verifiable means of notice, of the intent to pursue an exception. Such notification must be provided before the applicable consequence is payable; otherwise BellSouth waives its rights.

(2) All consequences not at issue under the exception petition must be immediately payable as provided for elsewhere in the plan. Those that are subject of the potential exemption shall be paid into an interest bearing escrow account no later than the due date applicable to the consequences that are at issue.

(3) No later than 15 calendar days following the due date of the consequences for which an exemption is sought, the incumbent shall submit to the Commission and all other affected parties all factual evidence supporting the exemption. To the extent BellSouth seeks proprietary protection of the information submitted, it shall employ a standard nondisclosure form, approved by the commission, before the plan is put into operation. BellSouth may not rely upon the lack of the proprietary form as a basis to delay the submission to the Commission, nor may the incumbent delay access to information by any CLEC that agrees to sign the standard nondisclosure form.

(4) By the later of 30 calendar days following notice by the incumbent or 15 calendar days following BellSouth's compliance with (3) above, interested CLECs shall file comments regarding the requested exemption. By mutual agreement, this period may be extended up to 15 calendar days.

(5) Following closure of the comment period provided in (4), if BellSouth and CLEC(s) have not reached a mutually agreeable settlement, the Commission shall either

(a) render a decision regarding the requested exemption, or

(b) seek further comment. The Commission shall render its decision regarding the exemption, which shall be binding on all parties, within 90 calendar days of the payment due date of the consequences at issue.

(6) Payout of the consequences shall be according to Commission direction and liquidate the entire escrow account, including accrued interest. In addition, BellSouth should be responsible for reimbursing reasonably incurred legal fees of the CLECs. Such amounts should be reimbursed in the following proportion:

[1-(amount returned to the incumbent)]/total escrow balance at liquidation

TAB FIVE
REFERENCE MATERIALS

TAB FIVE
GEORGIA STAFF RECOMMENDATION

CATEGORY	MEASURES AND SUB-METRICS	BENCHMARK/ANALOG
PRE-ORDERING	**Percent Response Received within"X" Seconds (LENS & TAG)** Customer Service Record Due Date Availability Address Validation Product and Service Availability Telephone No. Availability	Parity
	Service Inquiry with Firm Order (Manual)	95% in 7 business days
	Loop Makeup Inquiry (Manual) ADSL HDSL UCL Other DSL Line Sharing	95% in 3 business days
	Loop Makeup Inquiry (Electronic: EDI, TAG and LENS) ADSL HDSL UCL Other DSL Line Sharing	90% in 5 minutes 6 months after going into production 95% in 1 minute
	OSS Interface Availability (All Systems)	99.5%
ORDERING	**Acknowledgment Timeliness (Electronic)**	EDI: 90% in 30 mins. TAG: 95% in 30 mins. **6 months** EDI: 95% in 30 mins.
	Acknowledgement Completeness (Fully Mechanized, Partially Mechanized & Total Mechanized	95% Returned
	Percent Flow Through Service Request Resale Residence Resale Business UNE LNP	 95% 90% 85% 85%
	Percent Rejected Service Request (Mechanized, Partially Mechanized & Non- Mechanized)	Diagnostic
	Reject Interval (Mechanized) Resale Residence Resale Business Resale Design Resale PBX Resale Centrex Resale ISDN 2W Analog Loop Design 2W Analog Loop Non-Design 2W Analog Loop w/ INP Design	97% within 1hour

CATEGORY	MEASURES AND SUB-METRICS	BENCHMARK/ANALOG
	2W Analog Loop w/ INP Non- Design 2W Analog Loop w/ LNP Design 2W Analog Loop w/ LNP Non- Design UNE xDSL (ADSL, HDSL, UCL) Line Sharing INP Standalone LNP Standalone Switch Ports Loop + Port Combinations Local Transport UNE Other Non- Design UNE Other Design Local Interconnection Trunks	
	Reject Interval (Partially Mechanized) Resale Residence Resale Business Resale Design Resale PBX Resale Centrex Resale ISDN 2W Analog Loop Design 2W Analog Loop Non-Design 2W Analog Loop w/ INP Design 2W Analog Loop w/ INP Non- Design 2W Analog Loop w/ LNP Design 2W Analog Loop w/ LNP Non- Design UNE xDSL (ADSL, HDSL, UCL) Line Sharing INP Standalone LNP Standalone Switch Ports Loop + Port Combinations Local Transport UNE Other Non- Design UNE Other Design Local Interconnection Trunks	85% within 10 hours
	Reject Interval (Non- Mechanized) **(Same as above)** Local Interconnection Trunks	85% within 24 hours 85% within 4 days
	Firm Order Confirmation Timeliness **Mechanized** **Partially Mechanized** **Non-Mechanized** Local Interconnection Trunks	95% within 3 hours 85% within 10 hours 85% within 36 hours 95% within 10 days
	Firm Order Confirmation and Reject Response Completeness	95% Returned
	Speed of Answer in Ordering Center	Parity with retail

CATEGORY	MEASURES AND SUB-METRICS	BENCHMARK/ANALOG
PROVISIONING	**Mean Held Order Interval**	
	Resale Residence	Parity with retail Residence
	Resale Business	Parity with retail Business
	Resale Design	Parity with retail Design
	Resale PBX	Parity with retail PBX
	Resale Centrex	Parity with retail Centrex
	Resale ISDN	Parity with retail ISDN
	2W Analog Loop Design	Retail Res. and Bus. Dispatch
	2W Analog Loop Non-Design	Retail Res. and Bus. (POTS)
	2W Analog Loop w/ INP Design	Retail Res. and Bus. Dispatch
	2W Analog Loop w/ INP Non- Design	Retail Res. and Bus. Dispatch
	2W Analog Loop w/ LNP Design	Retail Res. and Bus. Dispatch
	2W Analog Loop w/ LNP Non- Design	Retail Res. and Bus. Dispatch
	UNE Digital Loop < DS1	Retail Digital Loop < DS1
	UNE Digital Loop >= DS1	Retail Digital Loop ≥ DS1
	UNE xDSL (ADSL, HDSL, UCL)	ADSL provided to retail
	UNE ISDN	Retail ISDN- BRI
	Line Sharing	ADSL provide to retail
	INP Standalone	Retail POTS
	LNP Standalone	Retail POTS
	Switch Ports	Retail POTS
	Loop + Port Combinations	Retail Res. and Bus. (POTS)
	UNE Combo Other	Retail Res, Bus &Design (Dispatch)
	Local Transport	Retail DS1/DS3 Interoffice
	UNE Other Non-Design	Retail Res. & Bus.
	UNE Other Design	Retail Design
	Local Interconnection Trunks	Parity with retail
	Percent Orders given Jeopardy Notice (Electronic)	
	Resale Residence	Parity with retail Residence
	Resale Business	Parity with retail Business
	Resale Design	Parity with retail Design
	Resale PBX	Parity with retail PBX
	Resale Centrex	Parity with retail Centrex
	Resale ISDN	Parity with retail ISDN
	2W Analog Loop Design	Retail Res. and Bus. Dispatch
	2W Analog Loop Non-Design	Retail Res. and Bus. (POTS)
	2W Analog Loop w/ INP Design	Retail Res. and Bus. Dispatch
	2W Analog Loop w/ INP Non- Design	Retail Res. and Bus. Dispatch
	2W Analog Loop w/ LNP Design	Retail Res. and Bus. Dispatch
	2W Analog Loop w/ LNP Non- Design	Retail Res. and Bus. Dispatch
	UNE Digital Loop < DS1	Retail Digital Loop < DS1
	UNE Digital Loop >= DS1	Retail Digital Loop ≥ DS1
	UNE xDSL (ADSL, HDSL, UCL)	ADSL provided to retail
	UNE ISDN	Retail ISDN- BRI
	Line Sharing	ADSL provide to retail
	INP Standalone	Retail POTS
	LNP Standalone	Retail POTS
	Switch Ports	Retail POTS
	Loop + Port Combinations	Retail Residence and Business
	UNE Combo Other	Retail Res, Bus &Design

CATEGORY	MEASURES AND SUB-METRICS	BENCHMARK/ANALOG
	Local Transport UNE Other Non-Design UNE Other Design Local Interconnection Trunks	(Dispatch) Retail DS1/DS3 Interoffice Retail Res. & Bus. Retail Design Parity with retail
	Order Completion Interval Resale Residence Resale Business Resale Design Resale PBX Resale Centrex Resale ISDN 2W Analog Loop Design 2W Analog Loop Non-Design 2W Analog Loop w/ INP Design 2W Analog Loop w/ INP Non- Design 2W Analog Loop w/ LNP Design 2W Analog Loop w/ LNP Non- Design UNE Digital Loop < DS1 UNE Digital Loop >= DS1 UNE xDSL (ADSL, HDSL, UCL) UNE ISDN Line Sharing INP Standalone LNP Standalone Switch Ports Loop + Port Combinations UNE Combo Other Local Transport UNE Other Non-Design UNE Other Design Local Interconnection Trunks	Parity with retail Residence Parity with retail Business Parity with retail Design Parity with retail PBX Parity with retail Centrex Parity with retail ISDN Retail Res. and Bus. Dispatch Retail Res. and Bus. (POTS) Retail Res. and Bus. Dispatch Retail Res. and Bus. Dispatch Retail Res. and Bus. Dispatch Retail Res. and Bus. Dispatch Retail Digital Loop < DS1 Retail Digital Loop ≥ DS1 7 bus days (w/o conditioning) 14 bus days (w/conditioning) Retail ISDN- BRI ADSL provide to retail *Retail POTS* *Retail POTS* Retail POTS Retail Residence and Business Retail Res, Bus &Design (Dispatch) Retail DS1/DS3 Interoffice Retail Res. & Bus. Retail Design Parity with retail
	Average Jeopardy Notice Interval (Electronic) Same Dissagregation as above.	95%>= 48 hours
	Percent Missed Installation Appointments **Average Completion Notice Interval (Electronic)** **% Provisioning Troubles within 30 days**	Same analog and benchmarks as Held Orders
	Total Service Order Cycle Time	Diagnostic
	Cooperative Acceptance Testing ADSL HDSL	95% of requested lines tested

CATEGORY	MEASURES AND SUB-METRICS	BENCHMARK/ANALOG
	UCL Other DSL	
MAINTENANCE & REPAIR	**Missed Repair Appointments** **Customer Trouble Report Rate** **Maintenance Average Duration** **% Repeat Troubles within 30 days** **Out of Service > 24 hours** Resale Residence Resale Business Resale Design Resale PBX Resale Centrex Resale ISDN LNP (Standalone) 2W Analog Loop Design 2W Analog Loop Non-Design UNE Switch Ports UNE Loop + Port Combo UNE Combo Other UNE xDSL (HDSL, ADSL & UCL) UNE ISDN UNE Line Sharing UNE Other Design UNE Other Non-Design Local Interconnection Trunks Local Transport	Parity with retail Residence Parity with retail Business Parity with retail Design Parity with retail PBX Parity with retail Centrex Parity with retail ISDN Retail POTS Retail Res. and Bus. Dispatch Retail Res. and Bus. (POTS) Retail POTS Retail Residence and Business Retail Res, Bus &Design (Dispatch) ADSL provided to retail Retail ISDN- BRI ADSL provide to retail Retail Res. & Bus. Retail Design Parity with retail Retail DS1/DS3 Interoffice
	OSS Response Interval TAFI (Front End) CRIS DLETH DLR LMOS LMOSupd LNP MARCH OSPCM Predictor SOCS	Parity with retail Parity by design
	Average Answer time - Repair Center	Parity with retail
BILLING	**Invoice Accuracy** **Mean time to Deliver Invoices** **Usage Data Delivery Timeliness** **Usage Data Delivery Completeness** **Mean time to Deliver Usage**	Parity with retail
	Recurring and Non-Recurring Charge Completeness Resale UNE	Parity 90%

CATEGORY	MEASURES AND SUB-METRICS	BENCHMARK/ANALOG
	Interconnection	90%
OPERATOR SERVICES	Average Speed to Answer	Parity by design
	% Answered in "X" Seconds	Parity by design
DA	Average Speed to Answer	Parity by design
	% Answered in "X" Seconds	Parity by design
E911	Timeliness Accuracy Mean Interval	Parity by design
LNP	Average Disconnect Timeliness	95% within 15 minutes
CUSTOMER COORDINATED CONVERSIONS	Coordinated Customer Conversions- UNE Loops w LNP Coordinated Customer Conversions- UNE Loops w/o LNP	95% <= 15 minutes

CLEC SQM PROPOSALS	STAFF RECOMMENDATION
Average Response time for LMU information (MANUAL)	A) Disaggragation: ADSL, HDSL, Other DSL and Line Sharing. B) LMU Information: BST shall deliver all the information it has on the makeup of the loop. This list may be updated pending the outcome of Docket 11900-U C) Benchmark 95% in 3 business days
Average Response time for LMU information (ELECTRONIC)- EDI, TAG, LENS & RoboTAG.	A) Disaggragation: ADSL, HDSL, Other DSL and Line Sharing. B) LMU Information: BST shall deliver all the information it has on the makeup of the loop. This list may be updated pending the outcome of Docket 11900-U. C) Benchmark 90% within 5 minutes. 6 months – 95% within 1 minute.
Acknowledgement Timeliness (ELECTRONIC)	A) Functional Acknowledgement Response Interval Definition: The measurement provides the average response interval from the time an LSR is electronically submitted via EDI or TAG until an acknowledgement notice is received by the CLEC. B) Exclusions: none C) Benchmark: 6 Months EDI- 90% within 30 minutes. 95% within 30 minutes. TAG- 95% within 30 minutes.
Acknowledgement Completeness (Fully Mechanized, Partially Mechanized and Total Mechanized)	A) Percent of Functional Acknowledgements Returned. Definition: This measurement provides the percent of LSRs submitted via EDI or TAG, which are acknowledged and sent by the system. B) Exclusions: none C) Benchmark: 100% Returned
Firm Order Confirmation and Reject Response Completeness.	Adopt the CLEC SQM. Deletions: Business Rules: Everything after and including ILEC Results. Calculation –Multiple or Differing FOC/Reject

	Responses. Level of Disaggregation: Volume Benchmark: 95 % Returned
Timeliness of Response to Request for BST- to CLEC Trunks Mean Time to Provide Response % Within 7 days % Negative Responses	DO NOT ADOPT AT THIS TIME. Please provide the Commission with the BellSouth's detailed process for Trunk Augmentation.
Percent Completion/ Attempts without notice or with Less than 24 hours notice	Adopt the CLEC SQM. Do not report by MSA. Benchmark: DIAGNOSTIC
Percent Service Loss for Early Cuts Percent Service Loss for Late Cuts	DO NOT ADOPT AT THIS TIME. ADOPT BST MEASURE P-6A. Coordinated Customer Conversion- Hot Cut Timelines % within Interval and Average Interval.
Percent Orders Cancelled or Supplemented at the request of the ILEC.	DO NOT ADOPT AT THIS TIME.
Percent of Coordinated Cuts Not Working as Initially Provisioned.	DO NOT ADOPT AT THIS TIME. THIS INFORMATION WILL BE CAPTURED IN BST PROPOSED PROVISIONING TROUBLES WITHIN 7DAYS OF HOT CUT COMPLETION.
Average Recovery Time for Coordinated Cuts	Adopt the CLEC SQM with the following deletions or additions: 1) Exclusion: add Cutovers where service disruptions are due to end-user or CLEC caused reasons. 2) Delete the business rule For ILEC Results. 3) Delete BST Aggregate 4) Delete MSA and Volume Category. 5) This measure is Diagnostic.
Mean Time to Restore a Customer to ILEC Percent of Customers Restored to ILEC	DO NOT ADOPT AT THIS TIME.
Cooperative Acceptance Testing (What percentage of xDSL Loops are tested)	Adopt the following measure: Title: % of cooperative testing attempts for xDSL lines to cooperative line tests requested. Definition: The loop will be considered cooperatively tested when the BellSouth tech places a call to the CLEC representative to initiate cooperative testing and jointly perform the test with the CLEC. Exclusions: a) xDSL lines requested for testing by the CLEC but the CLEC contact number is incorrect for the CLEC representative is not available or not ready for testing. b) XDSL lines of CLEC who do not request cooperative testing. Business Rules: When a BellSouth tech finishes delivering

	an xDSL Loop at the customer premise, he is to call a toll free number to the CLEC's testing center. The tech and the CLEC rep. At the center then test the line. As an example of the type of testing performed, the testing center may ask the tech to put a short on the line, so that the center can run a test to see if it can identify the short. Calculation: (Total number of successful xDSL cooperative test for xDSL lines where cooperative testing was requested)/ (Total number of xDSL line tests requested by he CLEC and scheduled in the reporting period. Report Structure: CLEC Aggregate CLEC Specific Specific as to the loop type Level of Disaggregation: Region State ADSL HDSL UCL Other DSL Benchmark: 95% of requested lines tested.
Percent Completion of Loop Modification/Conditioning on xDSL Loops.	DO NOT ADOPT AT THIS TIME. The time to perform loop modification/conditioning is included in the Order Completion interval for the xDSL Loops.
Percent Billing Errors Corrected in X Days	DO NOT ADOPT AT THIS TIME.
Usage Timeliness	DO NOT ADOPT AT THIS TIME.
Recurring and Non-recurring Charge Completeness	Adopt CLEC SQM
Percent On-Time Mechanized Local Services Invoice Delivery.	DO NOT ADOPT AT THIS TIME.
Meantime To Notify CLEC of Network Outages	Adopt the CLEC SQM with the following deletions: Level of Disaggregation: Delete By Switch and Tandem. Retail Analog/ Benchmark: Parity by design.
Average Database Update Interval Percent Database Update Accuracy NXX and LRN(s) Loaded by LERG Effective Date ✓	Adopt CLEC SQM
Notification of Interface Outages	Adopt CLEC SQM.
Timeliness of Change Management Notices Timeliness of Final Versions of Documents Associated w/ Change Average Delay Days for Notices Average Delay Days for Documentation	Adopt the BST SQM of Timeliness of Change Management Notice with Average Delay Days. 30 days after this order Change Management Team shall file with the Commission the interval to include in this measure.

% ILEC vs. CLEC Changes Made Accuracy of Change Notices Percent Software Certification Failures Software Problem Resolution Timeliness Software Problem Resolution Avg. Delay Days	DO NOT ADOPT AT THIS TIME.
Percent Response Commitments Met (On-Time)	DO NOT ADOPT AT THIS TIME.
Percentage of Request Processed within 30 Business Days (TX)	Adopt CLEC SQM with following change: Exclusions: Excludes weekends and holidays
Percentage of Quotes provided for Authorized BFR/Special requests Within X (10, 30, 60) days. (TX)	Adopt the CLEC SQM with the following changes. Exclusions: Requests that are subject to pending arbitration. Retail analog/Benchmark: Change calendar days to business days.

BST PROPOSED SQMS
(If the SQM is not mentioned below it is recommended for approval)

BST Proposed SQMs	Staff Recommendation
Service Inquiry with Firm Order (Manual)	Adopt BST SQM: Benchmark: 95% returned within 5 business days.
Loop Make Up Inquiry (Manual and Electronic)	See Average Response Time to LMU Information Above for Manual and Electronic).
Timeliness of Change Management Notices and Documentation	Adopt this BST SQM. 30 days after this order Change Management Team shall file with the Commission the interval to include in this measure.
Percent FAs Returned On Time	See Acknowledgement Timeliness Above.
Percent Troubles Within 7 days of a HOT CUT.	Adopt BST SQM.
OSS-1 Avg. Response Time and Response Interval	Adopt this SQM with the following Business Rule change: 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 CLEC interface.
P-1 Percent Flow Through Service Request	Adopt this SQM with the following addition: Add the following measure to the flow-through report: BellSouth Achieved Flow-Through Issued Service Orders Total Mech. LSR's- [(Auto Clarify)+(CLEC fallout)] x 100 The Commission includes the current CLEC Error Excluded Calculation in the VSEEM III Plan.

	BST and the CLECs shall form an Improvement Task Force. This Task force shall jointly prepare an implementation report, that includes implementation target dates to eliminate the high BellSouth Caused Failures and the designed manual fallout for electronically submitted LSR's. This report shall be filed with the Commission 3 months after the date of this Commission Order. BST is ordered to resume reporting its retail business flow-through results and provide data back to May of 2000.
O-6 Reject Interval	Adopt this SQM with the following amendments: Fully Mechanized: The elapsed time form receipt of a valid electronically submitted LSR (date and time stamp in EDI, LENS or TAG) until the LSR is rejected (date and time stamp or reject in *EDI, TAG OR LENS).* Auto Clarifications are considered in the Fully Mechanized Category. Partially Mechanized: The last sentence should read: "The stop time on partially mechanized LSRs is when the LCSC Service Representative clarifies the LSR back to the CLEC via (LENS, EDI or TAG)."
O-7 FOC Timeliness	The stop time is meant to represent the time that BST actually returns the FOC to the CLEC.
O-9 LNP- Percent Rejected Service Requests O-10 LNP- Reject Interval Distribution& Average Reject Interval O-11 LNP- FOC Timeliness Interval Distribution&FOC Average Interval P-10 LNP Missed Installation Appointments P-2 Average Jeopardy Notice Interval & % of Orders Given a Jeopardy Notice P-5 Average Completion Notice Interval P-11 LNP Disconnect Timeliness P-12 LNP Total Service Order Cycle Time	These measures **should not exclude** Non-Mechanized LSRs.
P-5 Average Completion Notice Interval	Adopt the SQM with the following change: Business Rules: 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 Interface (LENS, EDI or TAG).
P-8 Total Service Order Cycle Time	Adopt the SQM with the following changes: Definition: This report measures the total service order cycle time from receipt of a valid service order request to the return of a completion notice to the CLEC Interface. Business Rules: This measurement combines three reports: FOC Timeliness, Average Order Completion Interval and Average Completion Notice Interval. This interval starts with the receipt of a valid service order request and stops when a completion notice is sent to the CLEC Interface (LENS, TAG or EDI).

MR-3 Maintenance Average Duration	Adopt the SQM with the following Change: Exclusions: Delete Trouble Reports greater than 10 days.
P-9 Service Order Accuracy	Adopt the SQM with the following Change: Benchmark: 95% Accurate
C-1 Average Response Time	Adopt with the following changes: Definition: Measures the average time (counted in calendar days) from receipt of a complete and accurate collocation application (including receipt of application fees) to the date BellSouth responds in writing. Within 10 calendar days after having received a bona fide application for physical collocation, BellSouth must respond as to whether space is available or not. Level of Disaggregation: Caged/Cageless shall be added. Benchmark: Now Virtual- 20 Calendar Days Physical- 30 Calendar Days Caged/Cageless- 30 Calendar Days 6 Months Virtual- 10 Calendar Days Physical- 20 Calendar Days Caged/Cageless- 20 Calendar Days
C-2 Average Arrangement Time	Adopt with the following changes: Definition: Measures the average time from receipt of a complete and accurate Bona Fide firm order (including receipt of appropriate fee) to the date BST completes the collocation arrangement and notifies the CLEC (counted in calendar days). Level of Disaggregation: Caged/Cageless shall be added Benchmark: Virtual: 50 Calendar Days (Ordinary) 75 Calendar Days (Extraordinary) Physical: 90 Calendar Days Caged/Cageless: 60 Calendar Days (Ordinary) 90 Calendar Days (Extraordinary)
C-3 Percent Due Dates Missed	Adopt with the following changes:

	Level of Disaggregation: Caged/Cageless shall be added Benchmark: 95% on time

PERFORMANCE MEASURMENTS AUDIT

Adopt the BST recommendation with the following change: Revise (2000-2005) to (2001-2005).

VOLUNTARY SELF ENFORCEMENT MECHANISMS (VSEEMS)

1) Staff Recommends adoption of the Truncated–Z Methodology using the balancing critical value.
2) This remedy plan shall go into effect 45 days after the Commission issues an order in the case. This time will allow BST to put statistical methods and the remedy plan into production.
3) Staff recommends Delta values as follows: **.50 for individual CLECs** and **.35 for CLEC Aggregate.**
4) This plan shall have a procedural cap of 44% of revenues, which equals about $340 million dollars. Within 30 days of exceeding the cap, BST must file a petition with the Commission for an expedited hearing showing why it should not be required to pay remedies in excess of the procedural cap.
5) The Commission reserves the right to modify the enforcement plan or SQMs at any time it deems necessary.
6) Tier II and III measures should be determined on a 3-month rolling basis.
7) Tier III contains 26 submetrics. When any 12 of the 26 experience failures for 3 consecutive months, Tier III is triggered. For a Tier III failure, BST may begin marketing long distance when all 12 of the 26 failed sub-metrics show favorable results for 3 consecutive months.
8) Below are the Metrics that are recommended in each Tier of enforcement: (The Performance Measures below represent the same SQMs, analogs/benchmarks approved in the SQM Plan).

VSEEM III SUBMETRICS

TIER I AND TIER II SUBMETRICS

- Percent Response Received within "X" seconds
- Interface Availability (All Systems)
- Average Response Time for LMU Information (Non- Mechanized & Electronic)

- Percent Flow-Through Service Request (Electronic- Residence, Business, UNE and LNP)
- Reject Interval (Mechanized)
- FOC Timeliness (Mechanized, Partially Mechanized and Non-Mechanized)
- Acknowledgement Timeliness
- Acknowledgement Completeness
- FOC and Reject Completeness
- Order Completion Interval
  - Resale POTS
  - Resale Design
  - Loop + Port Combo
  - UNE Loops
  - UNE xDSL
  - UNE Line Sharing
  - Interconnection Trunks
- Percent Cooperative Testing for xDSL Loops
- Percent Missed Installation Appointments
  - Resale POTS
  - Resale Design
  - Loop + Port Combo
  - UNE Loops
  - UNE xDSL
  - UNE Line Sharing
  - Interconnection Trunks
- Percent Provisioning Troubles within 30 days
  (Same disaggregation as Order Completion Interval)
- Missed Repair Appointments
  (Same disaggregation as Order Completion Interval)
- Customer Trouble Report Rate
  (Same disaggregation as Order Completion Interval)
- Percent Troubles within 7 days of Hot Cut
- Coordinated Customer Conversion- Hot Cut Timeliness % within Interval and Average Interval
- Coordinated Customer Conversion
- Maintenance Average Duration
  (Same disaggregation as Order Completion Interval)
- Percent Repeat Troubles Within 30 Days
  (Same disaggregation as Order Completion Interval)
- LNP Disconnect Timeliness
- LNP Missed Installation Appointments
- Invoice Accuracy
- Mean Time to Deliver Invoices
- Usage Data Delivery Accuracy
- Trunk Group Performance
  Aggregate

CLEC Specific

- Percent Missed Collocation Due Dates
- Timeliness of Change Management Notices and Documentation

TIER III SUBMETRICS

- Order Completion Interval
  - Resale POTS
  - Resale Design
  - Loop + Port Combo
  - UNE Loops
  - UNE xDSL
  - UNE Line Sharing
  - Interconnection Trunks
- Percent Missed Installation Appointments
  - Resale POTS
  - Resale Design
  - Loop + Port Combo
  - UNE Loops
  - UNE xDSL
  - UNE Line Sharing
  - Interconnection Trunks
- Percent Missed Repair Appointments
  - (Same disaggregation as Percent Missed Installation Appointments)
- Invoice Accuracy
- Mean Time to Deliver Invoices
- Trunk Group Performance-Aggregate
- Timeliness of Change Management Notice and Documentation
- Percent of Collocation Due Dates Missed

9) BST shall pay the following for late and incomplete reports:

Late performance reports - If performance reports are not available to the CLECs by the due day, BST should be liable for payments of $2,000 for every day past the due date of the reports posting on the web.

Incomplete or revised reports – If performance reports are incomplete, or if previously reported data are revised, then BST should be liable for payments of $400 for every day past the due date of the original reports posting on the web.

10) BST should implement a market penetration adjustment for new and advanced services as follows:

1 In order to ensure parity and benchmark performance where CLECs order low volumes of advanced and nascent services, BST will make additional voluntary payments to the Georgia State Treasury. These additional payments will only apply when there are more than 10 and less than 100 observations for those measures listed below on average statewide for a three- month period.

- Percent Missed Installation Appointments
  - UNE Loop+Port Combo
  - UNE xDSL
  - UNE Line Sharing
- Average Completion Interval
  - UNE Loop+Port Combo
  - UNE xDSL
  - UNE Line Sharing
- Missed Repair Appointments
  - UNE Loop+Port Combo
  - UNE xDSL
  - UNE Line Sharing
- Maintenance Average Duration
  - UNE Loop+Port Combo
  - UNE xDSL
  - UNE Line Sharing
- Average Response Time for Loop Make-Up Information
  - UNE Loop+Port Combo
  - UNE xDSL
  - UNE Line Sharing

2 The additional payments referenced in 1 will be made if BST fails to provide parity for the above measurements as determined by the use of the Truncated Z-Test and the balancing critical value for 3 consecutive months.

3 If for three months that are utilized to calculate the rolling average, there were 100 observations or more on average for the sub-metric, then no additional voluntary payments will be made to the State Treasury. However, if during the same time frame there is an average of more than 10 but less than 100 observations for a sub metric on statewide basis, then BST shall calculate the additional payments to the State Treasury by trebling the normal Tier II remedy and applying the method of calculating affected volumes ordered by the Commission.

4 Any payments made are subject to the cap ordered by the Commission.

11) If a measure fails twice, in 3 consecutive months, in a calendar year. BST must perform a "root cause analysis" and file with the Commission a corrective action plan within 30 days after the failure. The Commission will recommend to the Change Control Committee the priority to be given to the corrective action plan.

12) Staff proposes a 6 month review of the SQMs as follows:

1 8 months after the date of a Commission order and every 6 months thereafter, the Commission Staff shall conduct a review of the measurements, benchmarks and analogues applicable to the performance of BellSouth. This review shall be for the purpose of modifying the SQMs and applicable analogues and benchmarks as deemed necessary by the Commission.

2 BellSouth shall file any proposed revisions to the SQMs, benchmarks and analogues 1 month prior to the beginning of each review period.

3 CLECs shall be allowed to submit comments on BellSouth's proposed changes and to submit any proposed additions.

4 The Commission Staff shall prepare a recommendation as to appropriate action to be taken by the Commission, if any, in connection with the review and shall submit this recommendation to the Commission for formal adoption.

5 The Commission Staff reserves the right to modify this schedule at any time with written notice.

TAB FIVE
GEORGIA CLEC COALITION

CLEC Performance Standards By Measure

Measure	Standard/Benchmark
1. Average Response Time and Response Interval (Pre-Ordering) 2. Interface Availability (Pre-Ordering) 3 Interface Availability (Maintenance & Repair) 4. Response Interval (Maintenance & Repair)	(See Section D above re: interface, company, and geographic disaggregation) 1 Retail analogs by function. See Section A of disaggregation. 2. 99.5 % availability for all OSS interfaces. 3 99.5% availability for all OSS interfaces. 4 Retail analogs by function. See Section B of disaggregation.
1. Percent Flow-through Service Requests 2. Order Acknowledgement Timeliness 3. Order Acknowledgement Completeness 4. Percent Rejected Service Requests 5 Reject Interval 6. Firm Order Commitment Timeliness 7 Firm Order Commitment/Rejection Response Completeness 8. Speed of Answer in Ordering Center 9 Percent Order Accuracy	(See Section G above re: products) (See Section D above re: interface, company, and geographic, and volume disaggregation) 1. 98% flow-through, with an improvement plan if BST's current methodology is not rejected by the Commission. 2. 100% of all Mechanized Acknowledgements Are Returned Within 15 Minutes of Receiving LSR 3 Mechanized Acknowledgements Are Sent 100% of Time 4. Diagnostic 5 95% or greater within: mechanized-- 1 hour, partially mechanized—5 hours, non-mechanized--24 hours 6. 95% or greater within: mechanized-- 1 hour, partially mechanized—5 hours, non-mechanized--24 hours 7 Firm Order Commitments or Reject Responses are Returned on 100% of LSRs. 8. 95% within 20 seconds, 100% within 30 seconds 9 99% of Completed CLEC Orders Are Accurate
1. Mean Held Order Interval & Distribution Intervals 2. Average Jeopardy Notice Interval & % of Orders Given Jeopardy Notices 3. Percent Orders Completed On Time 4. Average Completion Interval 5 Average Completion Notice Interval 6. Provisioning Notification Completeness 7 Coordinated Customer Conversions 8. % Provisioning Troubles w/i 30 days of Service Order Activity	(See Section G above for product specific benchmark or retail analog) (See Section D above re: company, and geographic, dispatch, and volume disaggregation) 1 Retail Analog 2. Retail Analog 3 Retail Analog 4 Benchmark 5 Retail Analog 6. Completion notification sent for 98% of completed service orders 7 <10 lines – 100% within 1 hour

Measure	Standard/Benchmark
9 Percent Completions/Attempts without Notice or with Less Than 24 Hours Notice 10. Percent Service Loss from Early Cuts 11. Percent Service Loss from Late Cuts 12. Percent of Orders Cancelled or Supplemented at the Request of the ILEC 13. Percent of Hot Cuts Not Working as Initially Provisioned 14. Average Recovery Time 15 Mean Time to Restore a Customer to the ILEC	>11 lines – 100% within 2 hours 8. Retail analog 9 ≥ 98 percent of completions and completion attempts should receive more than 24 hours notice via a FOC 10. 100% of coordinated cutovers begin no earlier than 15 minutes prior to committed due date and time on FOC 11 100 % of coordinated cutovers complete no later than 1 hour past the committed due date and time on FOC for 1-10 lines and no later than 2 hours for greater than 10 lines. 12. < 1.0% Supped or Cancelled at Request of ILEC 13 < 1.0% of All Coordinated Cuts Not Working as Initially Provisioned 14. 98% of Customer Recoveries Done Within 1 Hour/ 100% of Customer Recoveries Done Within 2 Hours 15 98% of Customer Restorral to the ILEC Completed Within 1 Hour and 100% Within 2 Hours
1. Customer Trouble Report Rate 2. Maintenance Average Duration 3 Percent Repeat Troubles w/i 30 days) 4. Average Answer Time - Repair Centers 5 Mean Jeopardy Interval for Maintenance & Trouble Handling 6. Percent Customer Troubles Resolved Within Estimate	(See Section G above for product specific retail analog) (See Section D above re: company, and geographic, dispatch, and volume disaggregation) 1. Retail Analog 2. Retail Analog 3 Retail Analog 4. 95% within 20 seconds, 100% within 30 seconds 5 Retail Analog 6. > 99% Resolved Within Estimate
1. Call Abandonment Rate 2. Mean Time To Answer Calls(Service Center)	(See Section D above re: center) 1. < 1% of calls abandoned from queue 2. > 95% of calls, by center, are answered within 20 seconds All calls are answered within 30 seconds
1. Percent Mechanized Billing Format Accuracy 2. Percent Process Accuracy of Current Billing Activity 3 Percent Switched Local Billing Accuracy 4. Percent On-Time Mechanized Local Services Invoice Delivery 5 Percent On-Time Service Order Billing 6. Percent On-Time Correction/Adjustment Dollars	(See Section D above re: interface and company disaggregation) 1. Retail Analog 2. Retail Analog 3 Retail Analog 4. Retail Analog 5 Retail Analog

Measure	Standard/Benchmark
7 Percent On-Time Switched Local Charges 8. Usage Data Delivery Accuracy 9 Mean Time to Deliver Usage	6. Retail Analog 7 Retail Analog 8. Retail Analog 9 Retail Analog
1. Mean Time To Answer(OS/DA) 2. Mean Time Allotted to Proof Listing Updates Before Publication(Disaggregated by Directory)	((See Section D above re: company and center) 1. >90% of Calls Answered by a Live Agent in 10 Seconds 2. Review Time May be no More than 4 Hours Less Than the ILECs' review time
1. Database Average Update Interval 2. Database Percent Update Accuracy	(See Section d above re: company) 1. 99.99% Completed in 24 Hours 3 > 99.99% Accurate
1. Percent Call Completion	1 Dedicated trunk groups not to exceed blocking standard of B.01. Common Trunk Groups: Where CLEC/LD traffic share common ILEC trunks: No more than 1% of end offices may have more than 2% blockage a month based on Erlang B.01 scale. Where CLEC traffic traverses a separate common network from ILEC traffic: No more than 2% of end offices may have more than 2% blocking.
1. Collocation Average Response Time 2. Collocation Average Arrangement Time 3 Collocation % of Due Dates Missed	(See Section D above re: company and geographic disaggregation and Section C re: collocation disaggregation) 1. 95% within 10 calendar days 2. Physical-90 calendar days, virtual 60 calendar days 3. 0 misses of committed due date

EXHIBIT 8
Comparison of State Measurements and Benchmarks

Measure	New York Bell Atlantic	Texas SBC-Southwestern Bell	Georgia BellSouth	CLECs
Average Response Time for OSS Queries	Parity + 4s CSR Due Date Address Product & Service TN Loop Qualif. Rejected Query Timeouts (.33%)	Address: 4.7s. 90%-8s; 95%-12s TN: 4.5s. 90%-7s; 95%-9.5s CSR: 6.6s. 90%-8s; 95%-13s Service Available: 6.6s. 90%-12s; 95%-16s Due Date: 1s. 90%-1s; 95%-2s Dispatch: 12.6s. 90%-15s; 95%-25s PIC. 19.1s. 90%-27s; 95%-41s	Parity + 4s CSR Schedule Due Date Address Validation Service & Product Availability TN	Parity
Average Response Time for Loop Make-up Information	TBD	MANUAL – 3 bd ELECTRONIC. Actual requested, actual rec'd 12.6s and 90% -15s; 95% - 25s Actual requested, design rec'd 23s and 90% - 25s; 95% - 35s Design requested, design rec'd 10s and 90% - 11.9s; 95% - 20s	MANUAL – 95% in 7 bd ELECTRONIC. 85% in 4 hours	MANUAL – 95% in 72 hours ELECTRONIC. 98% in TBD
Percent Systems/OSS Availability	99.5%	99.5%	99.5%	99.5%
Service Inquiry with Firm Order			Manual: 95% in 7 bd	
Center Availability – Speed of Answer	80% in 30s	LSC. Parity LOC Maintenance: Parity LOC Provisioning DSL: 90% - 20s LOC Provision. Other: 90% - 20s	Parity	95% in 20s 100% in 30s

EXHIBIT 8
Comparison of State Measurements and Benchmarks

Measure	New York Bell Atlantic	Texas SBC-Southwestern Bell	Georgia BellSouth	CLECs
Percent of Change Management Notices On-Time	95% Delay days 8	90%	95% Delay days 8	98% Delay days 5
Acknowledgement Timeliness	95% in 2 hours		EDI: 75% in 90 minutes TAG. 95% in 30 minutes	98% in 15 minutes
Average Time to Return FOC	95% POTS (pre-qual) Flow through: 2 hr <10: 24 hrs >10: 72 hrs Complex POTS/ISDN: 72 hr Special Services <10: 48 hrs > 10: 72 hrs Trunks <192. 10 bd >192: TBD Manual Orders: +24 hours	Electronic Simple Res/Bus: 95% - 5 hours Complex Business 1-200 lines: 94% in 24 hours 200+ lines: 94% in 48 hrs UNE Loop 1-49 loops: 95% in 5 hours 50+ loops: 94% in 48 hours Switch Ports: 95% in 5 hours Interconnection Trunks: 7 bd DSL. 95% in 6, 14 days DS3 unbundled transport: 5 bd DS1 unbundled transport: 1 bd LNP: 94/95% in 5, 24, or 48 hrs Line-sharing: TBD after 3 mos Manual: 24, 48 hours	Electronic 95% in 3 hours Partially Electronic/Manual 85% in 36 hours Interconnection Trunks 24 days	Electronic 95% in 1 hour Partially Electronic 95% in 5 hours Manual 95% in 24 hours Interconnection Trunks Included in benchmarks abc
Reject Interval	95% according to product interval guide for FOCs	Electronic 97% in 1 hr of LSR receipt Manual 97% in 6 hours	Electronic 95% in 1 hour; LNP 97% - 1 hr Partially Electronic/Manual 85% in 24 hours Trunks 4 days	Electronic 95% in 1 hour Partially Electronic 95% in 5 hours Manual 95% in 24 hours
Percent Rejects	Diagnostic	Diagnostic	Diagnostic	Diagnostic

EXHIBIT 8
Comparison of State Measurements and Benchmarks

Measure	New York Bell Atlantic	Texas SBC-Southwestern Bell	Georgia BellSouth	CLECs
Completion Notice Interval	95% by noon next bd Coord. Conversions acceptance at turn-up	97% in 1 day of work completion	Parity	30 minutes after work completion
Percent Flow Through	99%	Parity (designed) DSRs 97% Diagnostic (total)	Resale Res: 90% Resale Bus: 80% UNEs: 80%	98%
Order Accuracy	95%	Parity	TBD	98%
Average Completion Interval	Parity For UNEs: see product interval guide	Resale POTS, Resale Specials, UNE Loop and Port Combos Parity UNEs: Product Interval Guide Interconnection Trunks: 20 bd	Parity	Parity (non-DSL) ADSL: 3 bd HDSL. 3 bd xDSL: 3 bd UCL: 3 bd Loop Modification: 5 bd Line Sharing: 2 bd
Percent Missed Appointments/ Due Dates/Delay Days or Held Orders	Parity	Parity (includes orders canceled after due date) DSL Loops no line-sharing: TBD Trunks: Parity	Parity	Parity
Percent Installation Troubles within 30 Days	Parity (also 7 days)	Parity DSL Loops no line sharing: TBD	Parity	Parity
Percent Jeopardies or Average Jeopardy Notice Interval	Resale UNE 100% in 24 hours with facilities; 100% in 48 hours without facilities; 2 days for Interconnection Trunks	Diagnostic	Notify: 95% in 48 hours Percent Orders: Parity	Parity
Average Response Time for M&R OSS Queries	Create: 6.5s Status: 8.9s Modify: 5.0s Cancel: 5.9s History: 12.4s Test POTS: 73.5s		Parity	Parity
Trouble Report Rate	Parity	Parity DSL Loops no line-sharing: TBD	Parity	Parity

EXHIBIT 8
Comparison of State Measurements and Benchmarks

Measure	New York Bell Atlantic	Texas SBC-Southwestern Bell	Georgia BellSouth	CLECs
Repeat Trouble Report Rate	Parity	Parity DSL Loops no line-sharing: TBD	Parity	Parity
Percent Missed Repair Appointments	Parity	Parity	Parity	Parity
Mean Time to Repair	Parity	Parity DSL Loops no line-sharing: TBD Trunks Service Affecting Tandem – 1 hour Non-tandem – 2 hours	Parity	Parity
Out of Service Intervals	Parity	Parity	Parity	Parity
Trunk Group Blocking or Percent Call Completion	Parity (Common Trunks) Blocking should not be for 3 consecutive months (Individual Trunks) Final Trunk Group Blockages: 3%	Dedicated trunks: 1% Common trunks: 1% or parity, whichever allows less blocking	Parity + 0.5% for any 2 hours in a 24 hour period	2% Local & IntraLATA Toll 1% Local Tandem, Local Dir Office Final, IntraLATA interexchange, 911, DA, DA complete 0.5% OS, IntraLATA Tandem Meet Point
Mean Time to Provide Daily Usage Feed	95% in 4 bd	95% in 6 bd	Parity	
Mean Time to Deliver Invoices	98% in 10 bd	95% in 6bd	Parity	Switched Access: 95% in 5 d Resale/UNEs: Parity
Percent Billing Accuracy	Parity (Diagnostic)	Parity	Parity	99.99%
Percent Usage Accuracy		95%	Parity	99.99%
Usage Completeness			Parity	
OS/DA Mean Time to Answer	Parity	DA. 5.9s OS. 3.3s	Parity	90% in 10s

EXHIBIT 8
Comparison of State Measurements and Benchmarks

Measure	New York Bell Atlantic	Texas SBC-Southwestern Bell	Georgia BellSouth	CLECs
Average Database Update Interval		911. Parity DA: 48 hrs DA facility providers: 95% in 72 hrs	E911 only: Parity	E911/911, DA Listings, OS/D/ LIDB, ALI, MSAG 99.99% in 24 hours
Percent Database Update Accuracy		911: Parity DA. 97%	E911 only: Parity	99.99%
Percent NXXs Loaded and Tested Prior to the LERG Effective Date		Parity		100%
Mean Time to Respond to Collocation Request	95% on time Virtual: 14 days Physical: 8 days	90% processed in tariffed intervals	Virtual: 20 days Physical: 30 days	
Percent Collocation Due Dates Missed	95% on time	95% within due date	10%	0%
Mean Time to Provide Collocation Arrangement	95% on time 76 days (Physical) 105 days (Virtual)	95% within due date	Ordinary Virtual: 90 days Ordinary Physical: 120 days Extraordinary Virtual: 120 days Extraordinary Physical: 180 days	
Percent Hot Cut I-Reports	2% in 7 days	Parity	5% in 7 days	2% in 10 days
Coordinated Conversions/Hot Cuts Average Delay Days for Missed Due Dates or Percent	Partial delay 95% on time	Parity	95% in 24 hours	0 Days

EXHIBIT 8
Comparison of State Measurements and Benchmarks

Measure	New York Bell Atlantic	Texas SBC-Southwestern Bell	Georgia BellSouth	CLECs
Coordinated Customer Conversions/Hot Cut Interval	LNP = 95% on time Hot Cuts 1-9: 1 hour 10-49: 2 hours 50-99: 3 hours 100-199: 4 hours 200+ 8 hours	1-9: 90% in 1 hour 10-24. 90% in 2 hours	95% in 15 minutes	1-10; 100% in 1 hour 11+ 100% in 2 hours
Coordinated Conversions/Hot Cut Timeliness Percent Service Loss from Early Cuts and Percent Service Loss from Late Cuts	95% according to window Hot Cuts 1-9: 1 hour 10-49: 2 hours 50-99: 3 hours 100-199: 4 hours 200+: 8 hours	Early 2% starting 10 minutes before scheduled time Late 8% > 30 minutes 2% > 1 hour 1% > 2 hours	95% in +/- 15 minutes	Early: 100% in 15 minutes
CLEC ADDITIONAL MEASURES				
Average Notification of Interface Outage	20 minutes			97% in 15 minutes
Mean Time to Notify CLEC of Network Outages	Parity			Parity
Percent Software Validation	5%			No more than 0.1% of test deck transactions should result in CLEC problems
Software Problem Resolution Timeliness	95% in 48 hours no work around 95% in 10 days with work around	95% in 48 hours		24 hours no work around Delay days 100% in 48 hours 72 hours with work around Delay days 100% in 5 days

EXHIBIT 8
Comparison of State Measurements and Benchmarks

Measure	New York Bell Atlantic	Texas SBC-Southwestern Bell	Georgia BellSouth	CLECs
Percent Response Commitments Met (On-Time)				Billing: 100% in 24 hours of request PO/OR. 98% within provided response commitment Other: 95% within provided response commitment 100% in 3 bd
Acknowledgement Completeness	99%			100%
FOC/Reject Response Completeness	95% in 3 bd			100%
Percent Completions/ Attempts without Notice or with Less than 24 hours notice	Parity			<0.11%
Percent Billing Errors Corrected in X Days				Severity 1. 90% in 24 hours, 100% in 5 bd Severity 2: 90% in 3 bd, 100% in 10bd Carrier Wholesale: 100% in 45 days
Recurring Charge Completeness		Parity		Resale/UNE: Parity Facilities/Interconnection/UNE Specials: 90%
Percent Non-Recurring Charge Completeness				Resale: Parity Facilities/Interconnection/UNE Specials: 90%
Provisioning Troubles Prior to Loop Acceptance		UNE-P: Diagnostic UNES: Parity CHC/FDT. TBD		No more than 1% of lines cut over will have troubles. No mor than 1 trouble per 100 cutovers.

EXHIBIT 8
Comparison of State Measurements and Benchmarks

Measure	New York Bell Atlantic	Texas SBC-Southwestern Bell	Georgia BellSouth	CLECs
Timeliness of Response to Requests for BST to CLEC Trunks/Mean Time to Provide Response				95% in 7 days
Percent Orders Cancelled or Supplemented at BST's Request				1%
Percent Coordinated Cuts not working as initially Provisioned				1%
Average Recovery Time for Coordinated Cuts				98% in 1 hour 100% in 2 hours
Mean Time to Restore Customer to ILEC				98% in 1 hour 100% in 2 hours
Percent of Customers Restored to ILEC				0.1%
Cooperative Acceptance Testing				100%
Percent Completion of Timely DSL Loop Modification/De-Conditioning				95% in 5 bd
Percent on-time Mechanized Local Service Invoice Delivery				98% in 10 days

TAB FIVE
TEXAS PLAN

TABLE OF CONTENTS
PERFORMANCE MEASURES

APPENDIX
PERFORMANCE MEASUREMENT BUSINESS RULES (VERSION 1.6)
RESALE POTS, RESALE SPECIALS AND UNES

Pre-Ordering/Ordering

1. Measurement	
Average Response Time For OSS Pre-Order Interfaces	
Definition:	
The average response time in seconds from the SWBT side of the Remote Access Facility (RAF) and return for pre-order interfaces (Verigate, DataGate and EDI where the pre-order functionality is integrated) by function.	
Exclusions:	
None	
Business Rules:	
The clock starts on the date/time when the request is received by SWBT, and the clock stops on the date/time when SWBT has completed the transmission of the response to the CLEC. Timestamps are taken at the DataGate and Verigate servers and do not include transmission time through the LRAF. Response time is accumulated for each major query type, consistent with the specified reporting dimension, and then divided by the associated total number of queries received by SWBT during the reporting period. The response time is measured only within the published hours of interface availability. Published hours of interface availability are documented on the CLEC web site. (SWBT will not schedule system maintenance during normal business hours (8:00 a.m. to 5:30 p.m. Monday through Friday).	
Levels of Disaggregation:	
• Address Verification • Request For Telephone Number • Request For Summary Customer Service Record (CSR) < = 30 WTNs (Also broken down for Lines as required for DIDs). • Request For Summary Customer Service Record (CSR) > 30 WTNs (Also broken down for Lines as required for DIDs). • Request for Detailed Customer Service Request (CSR) • Service Availability • Service Appointment Scheduling (Due Date) • Dispatch Required • PIC	
Calculation:	**Report Structure:**
Σ[(Query Response Date & Time) - (Query Submission Date & Time)] ÷ (Number of Queries Submitted in Reporting Period)	Reported on a CLEC and all CLECs basis by interface for DATAGATE and VERIGATE.

Measurement Type:

Tier 1 – Low
Tier 2 – Medium

Benchmark:

Benchmarks for summary CSR applies to < = 30 WTNs. Benchmarks for diagnostic measurements will be evaluated at the six months review.

Measurement	EDI/Datagate	Verigate
Address Verification	4.7 seconds	4.7 seconds
Request For Telephone Number	4.5 seconds	4.5 seconds
Request For Customer Service Record (CSR)	6.6 seconds	6.6 seconds
Service Availability	6.6 seconds	6.6 seconds
Service Appointment Scheduling (Due Date)	1.0 second	1.0 second
Dispatch Required	12.6 seconds	12.6 seconds
PIC	28.0 seconds	To be determined at six month revision period

2. Measurement		
Percent Responses Received within "X" seconds – OSS Interfaces		
Definition:		
The percent of responses completed in "x" seconds for pre-order interfaces (Verigate, DataGate, and EDI where the pre-order functionality is integrated) by function.		
Exclusions:		
See Measurement No. 1		
Business Rules:		
See Measurement No. 1		
Levels of Disaggregation:		
See Measurement No. 1		
Calculation:	**Report Structure:**	
(# of responses within each time interval ÷ total responses) * 100	Reported on a company basis by interface for DATAGATE and VERIGATE.	
Measurement Type:		
Tier 1 – Low Tier 2 – Medium		
Benchmark:		
Measurement	**EDI/Datagate**	**Verigate**
Address Verification	90% in = 8.0 seconds 95% in = 12.0 seconds	80% in = 5.0 seconds 90% in = 7.0 seconds
Request For Telephone Number	90% in = 7.0 seconds 95% in = 9.5 seconds	80% in = 4.0 seconds 90% in = 6.0 seconds
Request For Customer Service Record (CSR)	90% in = 8.0 seconds 95% in = 13 seconds	80% in = 7.0 seconds 90% in = 10.0 seconds
Service Availability	90% in = 12.0 seconds 95% in = 16.0 seconds	80% in = 11.0 seconds 90% in = 13.0 seconds
Service Appointment Scheduling (Due Date)	90% in = 1 seconds 95% in = 2.0 seconds	80% in = 2.0 seconds 90% in = 3.0 seconds
Dispatch Required	90% in = 15.0 seconds 95% in = 25.0 seconds	80% in = 17.0 seconds 90% in = 19.0 seconds
PIC	90% in = 39 seconds 95% in = 60 seconds	To be determined at six month revision period

3. Measurement	
EASE Average Response Time	
Definition:	
Average screen to screen response from the SWBT side of the Remote Access Facility (RAF) and return.	
Exclusions:	
None	
Business Rules:	
The response time for a query is measured from the point in time when the CLEC customer service agent submits the query for information through a function key option on their keyboard into the OSS until the time when the OSS releases the information to the CLEC customer service agent by unlocking the keyboard for a new transaction. Response time is a combination of Network time, Host time and Fasterm time. Response time is accumulated for each query and then divided by the associated total number of queries received by SWBT during the reporting period.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
Σ[(Query Response Date & Time) - (Query Submission Date & Time)] ÷ (Number of Queries Submitted in Reporting Period)	Reported for all CLECs and SWBT by division name (CPU platform).
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Parity. However, a Benchmark will be used until such time that SWBT has the ability to calculate sum of the squares in order to provide the parity comparison. The benchmark will be SWBT performance for the given month plus .05 seconds, and no z-test or modified z-test will be applied.	

4. Measurement	
OSS Interface Availability	
Definition:	
Percent of time OSS interface is available compared to scheduled availability.	
Exclusions:	
None	
Business Rules:	
The total "number of hours functionality to be available" is the cumulative number of hours (by date and time on a 24 hour clock) over which SWBT plans to offer and support CLEC access to SWBT's operational support systems (OSS) functionality during the reporting period. "Hours Functionality is Available" is the actual number of hours, during scheduled available time, that the SWBT interface is capable of accepting or receiving CLEC transactions or data files for processing through the interface and supporting operational support systems (OSS). The actual time available is divided by the scheduled time available and then multiplied by 100 to produce the "Percent system availability" measure. SWBT will not schedule normal maintenance during business hours (8:00 a.m. to 5:30 p.m. Monday through Friday). When interfaces experience partial unavailability, an availability factor is applied to the calculation of downtime. This factor is stated as a percentage and represents the impact to the CLEC. Determination of the availability factor is governed by SWBT's Availability Team on a case by case basis. SWBT's availability team shall provide to CLECs the information supporting the use of any availability factor multiplier used in reporting this measurement. SWBT shall calculate the availability time rounded to the nearest minute.	
Levels of Disaggregation:	
• EASE reported for Geographic Regions • EDI reported by protocol	
Calculation:	**Report Structure:**
[(Hours functionality is available during the scheduled available hours) ÷ Scheduled system available hours)] * 100	Reported on an aggregate CLEC basis by interface, e.g. EASE, DATAGATE, VERIGATE, LEX, EDI and TOOLBAR. The RAF will be reported on an individual CLECs basis.
Measurement Type:	
Tier 1 – None Tier 2 – High	
Benchmark:	
99.5%. The critical Z allowance does not apply on this measurement.	

5. Measurement:

Percent Firm Order Confirmations (FOCs) Returned

Definition:

Percent of FOCs returned within a specified time frame from receipt of a complete and accurate service request to return of confirmation to CLEC.

Exclusions:

- Rejected (manual and electronic) orders.
- SWBT only Disconnect orders.
- Orders involving major projects mutually agreed upon by CLECs and SWBT.
- Upon implementation of Performance Measurement 94, LNP and LNP With Loop will be excluded from this measure.

Business Rules:

FOC business rules are established to reflect the Local Service Center (LSC) normal hours of operation, which include Monday through Friday, 8:00 a.m.-5:30p.m, excluding holidays and weekends. If the start time is outside of normal business hours, then the start date/time is set to 8:00 a.m. on the next business day. Example: If the request is received Monday through Friday between 8:00 a.m. to 5:30 p.m.; the valid start time will be Monday through Friday between 8:00 a.m. to 5:30 p.m. If the actual request is received Monday through Thursday after 5:00 p.m. and before 8:00 a.m. the next day; the valid start time will be the next business day at 8:00 a.m. If the actual request is received Friday after 5:30 p.m. and before 8:00 a.m. Monday; the valid start time will be at 8:00 a.m. Monday. If the request is received on a holiday (anytime); the valid start time will be the next business day at 8:00 a.m. The returned confirmation to the CLEC will establish the actual end date/time. Provisions are established within the DSS reporting systems to accommodate situations when the LSC works holidays, weekends, and when requests are received outside normal working hours. For UNE Loop and Port combinations, orders requiring N, C, and D orders; the FOC is sent back at the time the last order that establishes service is distributed In the event of a post-FOC reject, the originally recorded duration to return the first FOC will not be included in the Measurement No. 5 reported date.

LEX/EDI

For LEX and EDI originated LSRs, the start date and time is the receive date and time that is automatically populated by the interface (EDI or LEX) with the system date and time.. The end date and time is recorded by both LEX and EDI and reflect the actual date and time the FOC is **available** to the CLEC. This data is extracted daily from LEX and EDI and passed to the DSS (Decision Support System), where the end date and time are populated and are used to calculate the FOC measurements. For LSRs where FOC times are negotiated with the CLEC, the ITRAK entry on the SORD service order is used in the calculation. The request type from the LSR and the Class of Service tables are used to report the LSRs in the various levels of disaggregation. The Class of Service tables are based on the Universal Service Order practice.

VERBAL or MANUAL REQUESTS

Manual service order requests are those initiated by the CLEC either by telephone, fax, or other manual methods (i.e. courier). The receive date and times are recorded and input on the SM-FID on each service order in SORD for each FOC opportunity. The end times are the actual dates and times the paper faxes are sent back to the CLEC. Fax end times are recorded and input into the DSS systems via an internal Web application. Each FOC opportunity is dynamically established on the Web application via our interface to SORD. The LSC must provide an end date and time for each entry, which depicts the date and time the FOC was actually faxed back to the CLEC. If a CLEC elects to accept an on line FOC and does not require a paper fax the FOC information is provided over the phone. In these instances, the order distribution time is used in the FOC calculation on the related SORD service order to the appropriate SM-FID entry. These scenarios are identified by data populated on the ITRAK-FID of the service order. The ITRAK-FID is also used when FOC times are negotiated with the CLEC. The LSC will populate the ITRAK-FID with certain pre-established data entries that are used in the FOC calculation.

Levels of Disaggregation:

Manually submitted:

- Simple Res. And Bus. < 24 Hours
- Complex Business (1-200 Lines) < 24 Hours
- Complex Business (>200 Lines) < 48 Hours
- UNE Loop (1-49 Loops) < 24 Hours
- UNE Loop (> 50 Loops) < 48 Hours
- Switch Ports < 24 Hours

Electronically submitted via LEX or EDI:

- Simple Res. And Bus. < 5 Hours
- Complex Business (1-200 Lines) < 24 Hours
- Complex Business (>200 Lines) < 48 Hours
- UNE Loop (1-49 Loops) < 5 Hours
- UNE Loop (> 50 Loops) < 48 Hours
- Switch Ports < 5 Hours

Calculation:	Report Structure:
(# FOCs returned within "x" hours ÷ total FOCs sent) * 100	Reported for CLEC and all CLECs. This includes mechanized from EDI and LEX and manual (FAX or phone orders).

Measurement Type:

Tier 1 – Low
Tier 2 – Medium

Benchmark:

All Res and Bus 95% / Complex Bus 94% / UNE Loop (1-49) 95% / UNE Loop (>50) 94% / Switch Ports 95%, the Average for the remainder of each measure disaggregated shall not exceed 20% of the established benchmark.

6. Measurement:	
Average Time To Return FOC	
Definition:	
The average time to return FOC from receipt of complete and accurate service request to return of confirmation to CLEC.	
Exclusions:	
• Rejected Orders. • SWBT only Disconnect orders. • Orders involving major projects. • Upon implementation of Performance Measurement 94, LNP and LNP Without Loop will be excluded from this measure.	
Business Rules:	
See Measurement No. 5	
Levels of Disaggregation:	
• All Res. And Bus. < 24 Hours • Complex Business (1-200 Lines) < 24 Hours • Complex Business (>200 Lines) < 48 Hours • UNE Loop (1-49 Loops) < 24 Hours • UNE Loop (> 50 Loops) < 48 Hours • Switch Ports < 24 Hours	
Calculation:	**Report Structure:**
Σ[(Date and Time of FOC) - (Date and Time of Order Received by SWBT)]/(# of FOCs)	Reported for CLEC and all CLECs.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
No Benchmark	

7. Measurement	
Percent Mechanized Completions Available Within one hour of Completion in SORD	
Definition:	
Percent mechanized completions Available within one hour for EDI and LEX.	
Exclusions:	
None	
Business Rules:	
The elapsed time for an LSR is calculated based on the time of the last service order, which establishes service, being completed in SORD to the actual time LEX or EDI received the SOC notification and it is available to the client. For example, if a multi-line, LSR has 10 lines, the stop time would be when the last of the 10 orders is completed in SORD.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(# mechanized completions available to CLEC within 1 hour of completion on SORD ÷ total mechanized completions) * 100	Reported for CLEC and all CLECs for the electronic interfaces (EDI and LEX).
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
97%	

7.1 Measurement	
Percent Mechanized Completions Available Within one Day of Work Completion	
Definition:	
Percent Mechanized Completions Available Within one Day	
Exclusions:	
None	
Business Rules:	
Days are calculated by subtracting the date the SOC was Available to the CLEC minus the order completion date.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(# mechanized completions returned to the CLEC within 1 day of work completion ÷ total mechanized completions) * 100	Reported for CLEC and all CLECs for the electronic interfaces (EDI and LEX).
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
97%	

8. Measurement	
Average Time to Return Mechanized Completions	
Definition:	
Average time required to return a mechanized completion.	
Exclusions:	
See Measurement No. 7	
Business Rules:	
See Measurement No. 7	
Levels of Disaggregation:	
See Measurement No. 7	
Calculation:	**Report Structure:**
Σ[(Date and Time of Notice Of Completion Issued to the CLEC) - (Date and Time of Work Completion)] ÷ Total Mechanized Completions)	Reported on CLEC and all CLECs for the electronic interfaces (EDI and LEX).
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
No Benchmark	

9. Measurement	
Percent Rejects	
Definition:	
The number of rejects compared to the issued unique LSRs and SUPPs for the electronic interfaces (EDI and LEX).	
Exclusions:	
None	
Business Rules:	
A reject is anything that is received via LEX or EDI that does not pass LASR edit checks or other edits prior to the order being distributed and is returned electronically to the CLEC.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(# of rejects ÷ total unique LSRs and SUPPs) * 100	Reported on CLEC and all CLECs for the electronic interfaces (EDI and LEX).
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Measurement is diagnostic. No benchmark required.	

10. Measurement	
Percent Mechanized Rejects Returned Within one hour of receipt of reject in LASR	
Definition:	
Percent mechanized rejects returned within one hour of the receipt of the reject in LASR.	
Exclusions:	
None	
Business Rules:	
The start time used is the date and time the reject is available to LASR; and the end time is the date and time the reject notice is provided to EDI or LEX and is available to the CLEC. A mechanized reject is any reject returned electronically (without manual intervention) to the CLEC via LASR.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(# mechanized rejects returned within 1 hour ÷ total rejects) * 100	Reported for CLEC and all CLECs for the electronic interfaces (EDI and LEX).
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
97% within 1 hour of the receipt of a reject in LASR	

10.1 Measurement:	
Percent Manual Rejects Received Electronically and Returned Within Five Hours	
Definition:	
Percentage of manual rejects received electronically and returned within five hours of the receipt of LSR from CLEC.	
Exclusions:	
• Manual rejects received through manual process i.e. via mail, fax or courier	
Business Rules:	
The start time is the time the LSR is received electronically via EDI or LEX and logged in LASR. The end time is the date and time the reject notice is available to the CLEC. A manual reject is a reject of an electronic LSR. The rejected order is any reject that errors out of SORD and is returned to the CLEC via LASR GUI.	
Levels of Disaggregation:	
• By State	
Calculation:	**Report Structure:**
(# electronic manual rejects returned within 5 hours of receipt of LSR ÷ total electronic manual rejects) * 100	Reported for CLEC and all CLECs
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
97% within 5 Hours.	

11. Measurement	
Mean Time to Return Mechanized Rejects	
Definition:	
Average time required to return a mechanized reject.	
Exclusions:	
See Measurement No. 10	
Business Rules:	
The start time is the time the LSR is received electronically via EDI or LEX. The end time is the date and time the reject notice is available to the CLEC. A mechanized reject is any reject returned electronically (without manual intervention) to the CLEC.	
Levels of Disaggregation:	
See Measurement No. 10	
Calculation:	**Report Structure:**
Σ[(Date and Time of Order Rejection) - (Date and Time of Order Acknowledgment)] ÷ (# of unique LSR's and Supps Rejected)	Reported on CLEC and all CLECs for the electronic interfaces (EDI and LEX).
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
See Measurement No. 10	

11.1 Measurement:	
Mean Time to Return Manual Rejects that are Received Electronically via LEX or EDI	
Definition:	
Average time to return manual rejects received electronically via LEX or EDI; receipt to return.	
Exclusions:	
• See Measurement 10.1	
Business Rules:	
See Measurement 10.1	
Levels of Disaggregation:	
• By State	
Calculation:	**Report Structure:**
{Σ(receipt to CLEC of electronic manual rejects – receipt of electronic manual reject) ÷ total electronic manual rejects}	Reported for CLEC and all CLECs
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Five Hours	

12. Measurement	
Mechanized Provisioning Accuracy	
Definition:	
Percent of mechanized orders completed as ordered.	
Exclusions:	
None	
Business Rules:	
This measurement compares the features ordered on a mechanized order, to that which is provisioned on the switch.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(# of orders completed as ordered ÷ total orders) * 100	Reported by individual CLEC, CLECs and SWBT.
Measurement Type:	
Tier 1 – Low Tier 2 – Low	
Benchmark:	
Parity	

13. Measurement	
Order Process Percent Flow Through	
Definition:	
Percent of orders or LSRs from entry to distribution that progress through SWBT ordering systems.	
Exclusions:	
LEX/EDI excludes orders both electronically generated and rejected if error is caused by CLEC.	
Business Rules:	
The number of orders that flow through SWBT's ordering systems and are distributed in SORD without manual intervention, divided by the total number of MOG Eligible orders and orders that would flow through EASE within the reporting period. Orders that fall out after LASR, that are worked by SWBT and not rejected back to CLEC due to CLEC caused errors, will be included as failed pass-through occurrences.	
Levels of Disaggregation:	
• For CLEC typed orders by UNE loops, Resale, UNE Combos, and other.	
Calculation:	**Report Structure:**
(# of orders that flow through ÷ total MOG-eligible orders and orders that flow through EASE) * 100	Reported by individual CLEC, CLECs and SWBT.
Measurement Type:	
Tier 1 – Low Tier 2 – High	
Benchmark:	
Parity	

Billing

14. Measurement	
Billing Accuracy	
Definition:	
SWBT performs three bill audits to ensure the accuracy of the bills rendered to its customers: CRIS, CABS and toll/usage.	
Exclusions:	
Non-recurring charges are not part of the CRIS audit process, as SWBT has developed a test order process to ensure the accuracy of CRIS non-recurring charges.	
Business Rules:	
The purpose of the CRIS Bill Audit is to review and recalculate each service billed for each of the seven bill processing centers in the five states. Wholesale accounts are included in each processing center for every billing period. In the toll/usage bill audit, a sample of customer accounts is selected using an appropriate mix of USOCs and Classes of Service. The purpose of this audit is to ensure that monthly bills sent to the CLECs, whether it is for resale or unbundled services, and retail customers are rated accurately according to tariffs and CLEC contracts. For all accounts that are audited, the number of bills that have been released prior to correction (bills are audited for complete information, accurate calculations and are properly formatted) are counted as an error against the total bills audited.	
Levels of Disaggregation:	
CLEC and non-CLEC	
Calculation:	**Report Structure:**
(# of bills not corrected prior to bill release ÷ total bills audited) * 100	Reported for aggregate of all CLECs and SWBT for the CRIS, CABS and Usage bill audits.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Parity	

15. Measurement

Percent of Accurate and Complete Formatted Mechanized Bills

Definition:

The percent of monthly bills sent to the CLECs via the mechanized EDI process that are accurate and complete.

Exclusions:

None

Business Rules:

EDI Billing accuracy is based upon three factors: totaling, formatting, and syntax. In other words, does the bill total up correctly, does the EDI Billing data conform to the format outlined in the SWB Electronic Commerce Guide for EDI Billing, and is the EDI Billing data syntactically correct? For completeness, EDI checks that the sum of all itemized calls equals the total for the itemized calls bill section, and the sum of all OC&C charges should equal the total for the OC&C section. Similar audits are performed for total current charges and the amount due.

Levels of Disaggregation:

- None

Calculation:	**Report Structure:**
(Count of accurate and complete formatted mechanized bills via EDI ÷ total # of mechanized bills via EDI.) * 100	Reported for CLEC and all CLECs.

Measurement Type:

Tier 1 – Low
Tier 2 – High

Benchmark:

99%

16. Measurement:	
Percent of Usage Records Transmitted Correctly	
Definition:	
The percent of usage records transmitted correctly on the Daily Usage extract feed.	
Exclusions:	
None	
Business Rules:	
Controls and edits within the billing system uncover certain types of errors that are likely to appear on the usage records. When these errors are uncovered, a new release of the program is written to ensure that the error does not occur again. Thus, an error that is reported in one month should not occur the next month because the billing program error would have been fixed by the next month. The usage record data and the cycle date (when the bill was sent out) are used in the calculation of this measurement.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(Count of usage records transmitted correctly ÷ total usage records transmitted) * 100	Reported for CLEC and all CLECs.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
95% within 6th workday	

17. Measurement

Billing Completeness

Definition:

Percent of service orders completed within the billing cycle that post in the CRIS or CABS billing systems prior to the customer's bill period.

Exclusions:

Access Service Orders billed through CABS.

Business Rules:

The Billing Completeness Measure includes all orders and is created from the Posted Service Order Database (PSOD). PSOD includes copies of all posted service orders for both the CRIS and CABS. PSOD includes the Bill Period, Completion Date, and Post Date for each Service Order as well as an On-Time/Late indicator created based on these dates. This On-Time/Late indicator is calculated as follows:

1. Determine the Bill Date, Completion Date, and Post Date for any order that has an OCN number regardless of order type.
2. Calculate the Bill Date minus one month by subtracting one month from the Bill Date.
3. Determine the Bill Render Date by using the Bill Date to look up the Bill Render Date on the Bill Period Calendar.
4. Compare the Completion Date, Bill Date, Bill Date Minus one month, Bill Render Date, and Post Date of the service order to determine if order is on-time or late:
   - If the Completion Date of the service order is prior to the Bill Date minus one month, then the order is late.
   - Compare the Post Date to the Bill Render Date. If the Post Date is earlier than or equal to the Bill Render Date and the Completion Date of the service order is equal to or greater than the Bill Date minus one month, then the order is on-time.
   - In all other cases, the order is late.
   - The Billing Completeness Measure for each month is based on all orders that post within that given month. The denominator of the measure is all orders within a month. The numerator is the total number of on-time orders for that same month. The Billing Completeness Measure calculation is completed for each CLEC, for all CLECs, and for all retail service orders. The CLEC orders for both CRIS and CABS are defined as all service orders that include the AECN or OCN FID. The retail orders are all CRIS orders that do not include an AECN.

Levels of Disaggregation:

CLEC and non-CLEC

Calculation:	Report Structure:
(Count of on-time service orders included in current applicable bill period ÷ total service orders in current applicable billing period) *100	Reported for CLEC, all CLECs and SWBT.
Measurement Type:	
Tier 1 – Low Tier 2 – Medium	
Benchmark:	
Parity with SWBT Retail.	

18. Measurement	
Billing Timeliness (Wholesale Bill)	
Definition:	
Billing Timeliness measures the length of time from the billing date to the time it is sent or transmitted (made available) to the CLECs.	
Exclusions:	
Excludes Weekends and Holidays.	
Business Rules:	
The transmission date is used to gather the data for the reporting period. The measure counts the number of workdays between the bill day and transmission date for each bill.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(Count of bills transmitted on time ÷ total number of bills released) * 100	Reported for CLEC and all CLECs.
Measurement Type:	
Tier 1 – Low Tier 2 – High	
Benchmark:	
95% within 6th workday	

19. Measurement	
Daily Usage Feed Timeliness	
Definition:	
Usage information is sent to the CLECs on a daily basis. This usage data must be sent to the CLEC within 6 work days in order to be considered timely.	
Exclusions:	
Excludes Weekends and Holidays.	
Business Rules:	
The measure uses the actual EMI usage records that are sent to the CLECs. Data date is the recording date of the usage and is part of the EMI usage record. Cycle date is the day the Daily Usage file is sent to the CLEC. Cycle date is found on the pack header record of the Daily Usage file.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(Number of usage feeds transmitted on time ÷ total number of usage feeds) * 100	Reported for CLEC and all CLECs.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
95% within 6th workday	

20. Measurement	
Unbillable Usage	
Definition:	
The percent usage data that is unbillable.	
Exclusions:	
None	
Business Rules:	
For CRIS billing, the total dollars for A.M.A/ECS written off is divided by the total CRIS A.M.A/ECS billing. For CABS, the total CABS uncollectible dollars is divided by total CABS billing. The end of the month cycle date is used as the start/stop time for the reporting period.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(Total unbillable usage ÷ total billed usage) * 100	Reported for the aggregate of SWBT and CLECs.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Aggregate measurement. No benchmark required.	

Miscellaneous Administrative

21. Measurement	
Local Service Center (LSC) Average Speed Of Answer	
Definition:	
The average time a customer is in queue.	
Exclusions:	
Weekends and Holidays	
Business Rules:	
The clock starts when the customer enters the queue and the clock stops when a SWBT representative answers the call. The speed of answer is determined by measuring and accumulating the elapsed time from the entry of a CLEC customer call into the SWBT call management system queue until the CLEC customer call is transferred to SWBT personnel assigned to handling CLEC calls for assistance. Data is accumulated from 12:00 a.m. on the first calendar day to 11:59 p.m. on the last calendar day of the month for the reporting period. Hours of operation are 8:00 a.m. to 5:30 p.m. Monday through Friday.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
Total queue time ÷ total calls	Reported for all calls to the LSC by operational separation and SWBT.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Parity with SWBT RSC / BSC	

22. Measurement	
Local Service Center (LSC) Grade Of Service (GOS)	
Definition:	
Percent of calls answered by the Local Service Center (LSC) within 20 seconds.	
Exclusions:	
Excludes Weekends and Holidays.	
Business Rules:	
See Measurement No. 21	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
Total number of calls answered by the LSC within a specified period of time ÷ Total number of calls answered by the LSC	Reported for all calls to the LSC by operational separation and SWBT.
Measurement Type:	
Tier 1 – None Tier 2 – High	
Benchmark:	
Parity with SWBT RSC / BSC	

23. Measurement	
Percent Busy in the Local Service Center (LSC)	
Definition:	
Percent of calls which are unable to reach the Local Service Center (LSC) due to a busy condition in the ACD.	
Exclusions:	
See Measurement No. 22	
Business Rules:	
See Measurement No. 21	
Levels of Disaggregation:	
See Measurement No. 21	
Calculation:	**Report Structure:**
(Count of blocked calls ÷ total calls offered) * 100	Reported for all CLECs and SWBT.
Measurement Type:	
Tier 1 – None Tier 2 – Low	
Benchmark:	
Parity with SWBT RSC / BSC	

24. Measurement	
Local Operations Center (LOC) Average Speed Of Answer	
Definition:	
The average time a customer is in queue.	
Exclusions:	
None	
Business Rules:	
The clock starts when the customer enters the queue and the clock stops when the SWBT representative answers the call. The speed of answer is determined by measuring and accumulating the elapsed time from the entry of a CLEC customer call into the SWBT call management system queue until the CLEC customer call is transferred to SWBT personnel assigned to handling CLEC calls for assistance. Data is accumulated from 12:00 a.m. on the first calendar day to 11:59 p.m. on the last calendar day of the month for the reporting period. The Measure includes calls to the LOC related to provisioning activities, e.g., coordinated conversions, as well as maintenance activities.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
Total queue time ÷ total calls	Reported for all calls to the LOC for all CLECs and SWBT.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Parity with SWBT CSB	

25. Measurement	
Local Operations Center (LOC) Grade Of Service (GOS)	
Definition:	
Percent of calls answered by the Local Operations Center (LOC) within a specified period of time.	
Exclusions:	
See Measurement No. 24	
Business Rules:	
See Measurement No. 24 – Calls answered within 20 seconds.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
Total number of calls answered by the LOC within a specified period of time ÷ total number of calls answered by the LOC	Reported for all calls to the LOC by operational separation and SWBT Retail (Repair Bureau).
Measurement Type:	
Tier 1 – None Tier 2 – High	
Benchmark:	
Parity with SWBT CSB	

26. Measurement	
Percent Busy in the Local Operations Center (LOC)	
Definition:	
Percent of calls which are unable to reach the Local Operations Center (LOC) due to a busy condition in the ACD.	
Exclusions:	
None	
Business Rules:	
See Measurement No. 24	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(Count of blocked calls ÷ total calls offered) * 100	Reported for all CLECs and SWBT.
Measurement Type:	
Tier 1 – None Tier 2 – Low	
Benchmark:	
Parity with SWBT (CSB)	

RESALE POTS AND UNE LOOP AND PORT COMBINATIONS COMBINED BY SWBT

Provisioning

27. Measurement

Mean Installation Interval

Definition:

Average business days from application date to completion date.

Exclusions:

- Excludes customer-caused misses.
- Field Work orders – excludes customer requested due dates greater than 5 business days.
- No Field Work orders – excluded if order applied for before 3:00 p.m.; and the due date requested is not same day; and if order applied for after 3:00 p.m.; and the due date requested is beyond the next business day.
- Excludes all orders except N, T, and C orders.
- Excludes Weekends and Holidays.

Business Rules:

The clock starts on the Application Date, which is the day that SWBT receives a correct Service Order. The clock stops on the Completion Date, which is the day that SWBT personnel complete the service order activity. Orders are included in the month they are completed. There are 2 types of orders in the measurement. Same Day Due orders (defined as distribution time EQUAL or BEFORE 3:00 p.m. and Application Date = Distribution Date = Due Date. Next Day Due orders (defined as distribution time AFTER 3:00 p.m. and Application Date = Distribution Date and Due Date is one business day after Application Date. If the order is Same Day Due, then (Completion – Application Date), if the order is Next Day Due, then [(Completion – Next Business Day) + 1]. UNE Combos, are reported at order level.

Levels of Disaggregation:

POTS

- Field Work (FW)
- No Field Work (NFW)
- Business class of service
- Residence class of service

UNE Combo

- Field Work (FW)
- No Field Work (NFW)

Calculation:	Report Structure:
[Σ(completion date – application date)]/(Total number of orders completed)	Reported for CLEC, all CLECs and SWBT.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
Resale POTS parity between Field Work compared to SWBT Field Work (N, T, C order types) and No Field Work compared to SWBT No Retail Field Work (N, T, C order types). UNE Combo Parity between Field Work compared to SWBT Field Work (N, T, C order types) and No Field Work compared to SWBT No Retail Field Work. (N, T, C order types).	

28. Measurement

Percent Installations Completed Within "X" Business Days (POTS)

Definition:

Measure of orders completed within five business days for Field Work (FW) orders and three business days for No Field Work (NFW) orders, of application date.

Exclusions:

- Excludes customer caused misses.
- Field Work orders – excludes customer requested due dates greater than five business days.
- No Field Work orders – excluded if order applied for before 3:00 p.m.; and the due date requested is not same day; and if order applied for after 3:00 p.m.; and the due date requested is beyond the next business day.
- Excludes all orders except N, T, and C orders.
- Excludes Weekends and Holidays.

Business Rules:

The clock starts on the Application Date, which is the day that SWBT receives a correct Service Order. The clock stops on the Completion Date which is the day that SWBT personnel complete the service order activity. Orders are included in the month they are completed. There are 2 types of orders in the measurement. Same Day Due orders (defined as distribution time EQUAL or BEFORE 3:00 p.m. and Application Date = Distribution Date = Due Date. Next Day Due orders (defined as distribution time AFTER 3:00 p.m. and Application Date = Distribution Date and Due Date is one business day after Application Date. If the order is Same Day Due, then (Completion – Application Date), if the order is Next Day Due, then [(Completion – Next Business Day) + 1]. UNE Combos, are reported at order level.

Levels of Disaggregation:

POTS

- Field Work (FW)
- No Field Work (NFW)
- Business class of service
- Residence class of service

UNE Combo

- Field Work (FW)
- No Field Work (NFW)

Calculation:	Report Structure:
FW: (Count of orders installed within 5 business days ÷ total number of orders) * 100 NFW: (Count of orders installed within 3 business days ÷ total number of orders) * 100	Reported for CLEC, all CLECs and SWBT.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Resale POTS parity between Field Work compared to SWBT Field Work (N, T, C order types) and No Field Work compared to SWBT Retail No Field Work (N, T, C order types). UNE Combo Parity between Field Work compared to SWBT Field Work (N, T, C order types) and No Field Work compared to SWBT Retail No Field Work. (N, T, C order types).	

29. Measurement	
Percent SWBT Caused Missed Due Dates	
Definition:	
Percent of N, T, and C orders where installation was not completed by the due date as a result of a SWBT caused missed due date.	
Exclusions:	
Excludes orders that are not N, T, or C.	
Business Rules:	
The due date is the negotiated date by the customer and the SWBT representative for service activation. For CLEC orders, the due date is the due date reflected on the FOC. The Completion Date is the day that SWBT personnel complete the UNE Combos, are reported at order level.	
Levels of Disaggregation:	
POTS • Field Work (FW) • No Field Work (NFW) • Business class of service • Residence class of service UNE Combo • Field Work (FW) • No Field Work (NFW)	
Calculation:	**Report Structure:**
(Count of N, T, C orders not completed by the due date as a result of a SWBT caused missed due date ÷ total number of orders) * 100	Reported for CLEC, all CLECs and SWBT.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
Resale POTS parity between Field Work compared to SWBT Field Work (N, T, and C order types) and No Field Work compared to SWBT Retail No Field Work (N, T, and C order types). UNE Combo Parity between Field Work compared to SWBT Field Work (N, T, and C order types) and No Field Work compared to SWBT Retail No Field Work. (N, T, and C order types).	

30. Measurement	
Percent Company Missed Due Dates Due To Lack Of Facilities	
Definition:	
Percent N, T, and C orders with missed committed due dates due to lack of facilities.	
Exclusions:	
Excludes orders that are not N, T, or C.	
Business Rules:	
The due date is the negotiated date by the customer and the SWBT representative for service activation. CLEC orders, the due date is the due date reflected on the FOC. The Completion Date is the day that SWBT personnel complete the service order activity. UNE Combos are reported at order level. The lack of facilities is selected based on the missed reason code.	
Levels of Disaggregation:	
POTS • Business class of service • Residence class of service POTS / UNE Combo • > 30 calendar days • > 90 calendar days	
Calculation:	**Report Structure:**
(Count of orders with missed due dates due to lack of facilities ÷ total orders completed) * 100 (Calculated monthly based on posted orders)	Reported for CLEC, all CLECs and SWBT Retail for POTS.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
Resale POTS parity compared to SWBT (N, T, and C order types). UNE Combo Parity compared to SWBT (N, T, C order types).	

31. Measurement	
Average Delay Days For Missed Due Dates Due To Lack Of Facilities	
Definition:	
Average calendar days from due date to completion date on company missed orders due to lack of facilities.	
Exclusions:	
• Excludes orders that are not N, T, or C. • Excludes No Field Work (NFW).	
Business Rules:	
The due date is the negotiated date by the customer and the SWBT representative for service activation. CLEC orders, the due date is the due date reflected on the FOC. The Completion Date is the day that SWBT personnel complete the service order activity. UNE Combos, are reported at order level. The lack of facilities is based on the missed reason code.	
Levels of Disaggregation:	
POTS • Business class of service • Residence class of service UNE Combo - None	
Calculation:	**Report Structure:**
Σ(Completion date – due date) ÷ (total # of completed orders with a SWBT caused missed due date due to lack of facilities)	Reported for CLEC, all CLECs and SWBT.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Resale POTS parity between compared to SWBT (N, T, and C order types). UNE Combo Parity between compared to SWBT (N, T, and C order types).	

32. Measurement

Average Delay Days For SWBT Caused Missed Due Dates.

Definition:

Average calendar days from due date to completion date on company missed orders.

Exclusions:

- Excludes orders that are not N, T, or C.
- Excludes company delayed orders as a result of lack of facilities.

Business Rules:

The Due Date is the negotiated date by the customer and the SWBT representative for service activation. CLEC orders, the due date is the due date reflected on the FOC. The Completion Date is the day that SWBT personnel complete the service order activity.
Combos are reported at the order level.

Levels of Disaggregation:

POTS
- Business class of service
- Residence class of service

UNE Combo – None

Calculation:	**Report Structure:**
Σ(Completion date – due date) ÷ (total # of completed orders with a SWBT caused missed due date)	Reported for CLEC, all CLECs and SWBT.

Measurement Type:

Tier 1 – Medium
Tier 2 – None

Benchmark:

Resale POTS parity between Field Work compared to SWBT Field Work (N, T, and C order types) and No Field Work compared to SWBT Retail No Field Work (N, T, and C order types). UNE Combo Parity between Field Work compared to SWBT Field Work (N, T, and C order types) and No Field Work compared to SWBT Retail No Field Work (N, T, and C order types).

33. Measurement

Percent SWBT Caused Missed Due Dates > 30 days

Definition:

Percent of orders where installation was completed greater than 30 days following the due date.

Exclusions:

Excludes orders that are not N, T, or C.

Business Rules:

The Due Date is the negotiated date by the customer and the SWBT representative for service activation. CLEC orders, the due date is the due date reflected on the FOC. The Completion Date is the day that SWBT personnel complete the service order activity.
UNE Combos, are reported at order level.

Levels of Disaggregation:

POTS

- Field Work (FW)
- No Field Work (NFW)
- Business class of service
- Residence class of service

UNE Combo

- Field Work (FW)
- No Field Work (NFW)

Calculation:	**Report Structure:**
(Count of orders completed greater than 30 calendar days following the due date ÷ total # of orders completed) * 100	Reported for CLEC, all CLECs and SWBT.

Measurement Type:

Tier 1 – Low
Tier 2 – None

Benchmark:

Resale POTS parity between Field Work compared to SWBT Field Work (N, T, and C order types) and No Field Work compared to SWBT Retail No Field Work (N, T, and C order types). UNE Combo Parity between Field Work compared to SWBT Business and Residence Field Work (N, T, and C order types) and No Field Work compared to SWBT Retail No Field Work (N, T, and C order types).

34. Measurement	
Count of Orders Canceled After the Due Date Which Were Caused by SWBT	
Definition:	
A count of the total number of orders that were canceled after the order became due. Only orders canceled with SWBT missed codes are included.	
Exclusions:	
Customer delayed orders.	
Business Rules:	
Orders that are cancelled by the customer after the negotiated due date and prior to completion.	
Levels of Disaggregation:	
POTS • Business class of service • Residence class of service UNE Combinations	
Calculation:	**Report Structure:**
The count of orders cancelled where Cancel Date is > Due Date	Reported for individual CLECs and the aggregate of all CLECs and SWBT. Count is divided into 1-30 delay days / 31-90 delay days / > 90 delay days.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Diagnostic. No benchmark required.	

35. Measurement

Percent Trouble Report Within 10 Days (I-10) of Installation

Definition:

Percent of N, T, C orders that receive an electronic or manual trouble report on or within 10 calendar days of service order completion.

Exclusions:

- Excludes subsequent reports. A subsequent report is a repair report that is received while an existing repair report is open on the same number.
- Excludes disposition code "13" reports (excludable reports), with the exception of code 1316, unless the trouble report is taken prior to completion of the service order.
- Excludes reports caused by customer provided equipment (CPE) or wiring.
- Excludes trouble report received on the due date before service order completion.

Business Rules:

Includes reports received the day after SWBT personnel complete the service order through 10 calendar days after completion

Levels of Disaggregation:

N, T and C Orders

POTS

- Field Work (FW)
- No Field Work (NFW)
- Business class of service
- Residence class of service

UNE Combo

- Field Work (FW)
- No Field Work (NFW)

Calculation:	Report Structure:
(Count of orders that receive a network customer trouble report within 10 calendar days of service order completion ÷ total # of orders) * 100	Reported for POTS Resale by CLEC, total CLECs and SWBT.

Measurement Type:
Tier 1 – High Tier 2 – High
Benchmark:
Resale POTS parity between Field Work compared to SWBT Field Work (N, T, and C order types) and No Field Work compared to SWBT Retail No Field Work (N, T, and C order types). UNE Combo Parity between Field Work compared to SWBT Field Work (N, T, and C order types) and No Field Work compared to SWBT Retail No Field Work (N, T, and C order types).

36. Measurement	
Percent No Access (Service Orders With No Access)	
Definition:	
Percent of Field Work (FW) orders with a status of "No Access."	
Exclusions:	
• Excludes customer caused misses. (SL – customer requests later date, SO – other customer reasons, SR - customer not ready). • Excludes all orders that are not N, T, or C. • No Field Work.	
Business Rules:	
SWBT personnel set the "No Access" flag when access cannot be obtained to the customer's premises.	
Levels of Disaggregation:	
POTS • Business class of service • Residence class of service UNE Combo - None	
Calculation:	**Report Structure:**
Count of orders that are No Access ÷ Total Field Work orders	Reported for CLEC, total CLECs and SWBT.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Resale POTS parity between Field Work compared to SWBT Field Work (N, T, and C order types). UNE Combo Parity between Field Work compared to SWBT Field Work (N, T, and C order types). .	

Maintenance

37. Measurement	
Trouble Report Rate	
Definition:	
The number of electronic or manual customer trouble reports per 100 lines.	
Exclusions:	
• Excludes reports caused by customer provided equipment (CPE) or wiring. • Excludes all disposition "13" reports (excludable reports), with the exception of code 1316, unless the report is taken prior to the completion of the service order	
Business Rules:	
CLEC and SWBT repair reports are entered into and tracked via WFA. They are downloaded nightly into LMOS. Reports are counted in the month they post to LMOS.	
Levels of Disaggregation:	
POTS • Business class of service • Residence class of service UNE Combo - None	
Calculation:	**Report Structure:**
[Total number of customer trouble reports ÷ (total lines ÷100)]	Reported for POTS Resale trouble reports by CLEC, all CLECs and SWBT.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
POTS – Parity with SWBT Retail. UNE Combo – Parity with SWBT Business and Residence combined.	

38. Measurement

Percent Missed Repair Commitments

Definition:

Percent of trouble reports not cleared by the commitment time.

Exclusions:

- Excludes all disposition code "13" reports (excludable reports), with the exception of code 1316, unless the report is taken prior to the completion of the service order.

Business Rules:

The negotiated commitment date and time is established when the repair report is received. The cleared time is the date and time that SWBT personnel clear the repair activity and complete the trouble report. If this is after the commitment time, the report is flagged as a "Missed Commitment."

Levels of Disaggregation:

POTS

- Business class of service
- Residence class of service
- Dispatch
- No Dispatch

UNE Combo

- Dispatch
- No Dispatch

Calculation:	**Report Structure:**
(Count of trouble reports not cleared by the commitment time ÷ total trouble reports) * 100	Reported for CLEC, all CLECs and SWBT.

Measurement Type:

Tier 1 – High
Tier 2 – High

Benchmark:

POTS – Parity with SWBT Retail.
UNE Combo – Parity with SWBT Business and Residence combined.

39. Measurement

Receipt To Clear Duration

Definition:

Average duration of customer trouble reports from the receipt of the customer trouble report to the time the trouble report is cleared.

Exclusions:

- Excludes subsequent reports. A subsequent report is one that is received while an existing repair report is open.
- Excludes disposition code "13" reports (excludable reports), with the exception of code 1316, unless the report is taken prior to the completion of the service order.

Business Rules:

The clock starts on the date and time SWBT receives a trouble report. The clock stops on the date and time that SWBT personnel clear the repair activity and complete the trouble report in WFA.

Levels of Disaggregation:

POTS

- Business class of service
- Residence class of service
- Dispatch
- No Dispatch
- Affecting Service
- Out of Service

UNE Combo

- Dispatch
- No Dispatch
- Affecting Service
- Out of Service

Calculation:	Report Structure:
Σ[(Date and time SWBT clears ticket with the CLEC) - (Date and time ticket received)] ÷ Total customer trouble reports	Reported for POTS Resale trouble reports by CLEC, all CLECs and SWBT.

Measurement Type:

Tier 1 – High
Tier 2 – High

Benchmark:

POTS – Parity with SWBT Retail.
UNE Combo – Parity with SWBT Business and Residence combined.

40. Measurement	
Percent Out Of Service (OOS) < 24 Hours	
Definition:	
Percent of OOS trouble reports cleared in less than 24 hours.	
Exclusions:	
• Excludes subsequent reports. A subsequent report is one that is received while an existing repair report is open. • Excludes disposition code "13" reports (excludable reports), with the exception of code 1316, unless the report is taken prior to the completion of the service order. • Excludes reports marked as "No Access" to customer premises. • Excludes Affecting Service reports.	
Business Rules:	
Customer trouble reports are cleared within 24 hours when: • The customer report is received Monday through Friday cleared within 24 hours. • The customer report is received Saturday and cleared within 48 hours. • The customer report is received Sunday and cleared before midnight Monday. • Holidays are excluded.	
Levels of Disaggregation:	
POTS • Business class of service • Residence class of service UNE Combo - None	
Calculation:	**Report Structure:**
(Count of OOS trouble reports < 24 hours ÷ total number of OOS trouble reports) * 100	Reported for CLEC, all CLECs and SWBT.
Measurement Type:	
Tier 1 – Medium Tier 2 – None	
Benchmark:	
POTS – Parity with SWBT Retail. UNE Combo – Parity with SWBT Business and Residence combined.	

41. Measurement	
Percent Repeat Reports	
Definition:	
Percent of customer trouble reports received within 10 calendar days of a previous customer report.	
Exclusions:	
• Excludes subsequent reports. A subsequent report is one that is received while an existing repair report is open. • Excludes disposition code "13" reports (excludable reports), with the exception of code 1316, unless the report is taken prior to the completion of the service order. • Excludes reports caused by customer provided equipment (CPE) or wiring.	
Business Rules:	
Includes customer trouble reports received within 10 calendar days of an original customer report. When the second report is received in 10 days, the original report is marked as an Original of a Repeat, and the second report is marked as a Repeat. If a third report is received within 10 days, the second report is marked as an Original of a Repeat as well as being a Repeat, and the third report is marked as a Repeat. In this case there would be two repeat reports.	
Levels of Disaggregation:	
POTS • Business class of service • Residence class of service UNE Combo - None	
Calculation:	**Report Structure:**
Count of customer trouble reports, not caused by CPE or wiring and excluding subsequent reports, received within 10 calendar days of a previous customer report ÷ total customer trouble reports not caused by CPE or wiring and excluding subsequent reports) * 100	Reported by CLEC, all CLECs and SWBT.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
POTS – Parity with SWBT Retail. UNE Combo – Parity with SWBT Business and Residence combined.	

42. Measurement

Percent No Access (Percent of Trouble Reports with No Access)

Definition:

Percentage of dispatched customer trouble reports with a status of "No Access."

Exclusions:

- Excludes subsequent reports. A subsequent report is one that is received while an existing repair report is open.
- Excludes disposition code "13" reports (excludable reports), with the exception of code 1316, unless the report is taken prior to the completion of the service order.
- Excludes reports that are not dispatched.

Business Rules:

SWBT personnel set the "No Access" flag when access cannot be obtained at the customer's premises.

Levels of Disaggregation:

POTS

- Business class of service
- Residence class of service

UNE Combo - None

Calculation:	**Report Structure:**
Count of trouble reports with a status of "No Access" to customer's premises ÷ Total dispatched customer trouble reports	Reported for CLEC, all CLECs and SWBT.

Measurement Type:

Tier 1 – None
Tier 2 – None

Benchmark:

POTS – Parity with SWBT Retail.
UNE Combo – Parity with SWBT Business and Residence combined.

RESALE SPECIALS AND UNE LOOP AND PORT COMBINATIONS COMBINED BY SWBT (EXCLUDES "ACCESS" ORDERS)

Provisioning

43. Measurement	
Average Installation Interval	
Definition:	
Average business days from application date to completion date for N, T, and C orders by item or circuit.	
Exclusions:	
• UNE and Interconnection Trunks. • Excludes orders that are not N, T, or C. • Excludes circuits that have a customer requested Due Date greater than 20 business days. • Excludes Weekends and Holidays.	
Business Rules:	
The Application Date is the day that the customer initiated the service request. The Completion Date is the day that SWBT personnel complete the service order activity by circuit. The base of items is out of WFA (Work Force Administration) and it is reported at an item or circuit level.	
Levels of Disaggregation:	
• Resold Specials - DDS, DS1, DS3, Voice Grade Private Line (VGPL), ISDN, and any other services available for resale. • UNE Loop and Port - ISDN and other combinations.	
Calculation:	**Report Structure:**
[Σ(completion date - application date)] ÷ (Total number of circuits completed)	Reported for CLEC, all CLECs and SWBT.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
Parity with SWBT Retail.	

44. Measurement	
Percent Installations Completed Within 20 Calendar Days.	
Definition:	
Percent installations completed within 20 calendar days.	
Exclusions:	
See Measurement No. 43	
Business Rules:	
See Measurement No. 43	
Levels of Disaggregation:	
See Measurement No. 43	
Calculation:	**Report Structure:**
(Count of circuits installed within 20 calendar days ÷ total circuits) * 100	Reported for CLEC, all CLECs and SWBT.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Parity with SWBT Retail.	

45. Measurement	
Percent SWBT Caused Missed Due Dates	
Definition:	
Percentage of N, T, and C orders by circuit where installations were not completed by the due date.	
Exclusions:	
• UNE and Interconnection Trunks. • Excludes orders that are not N, T, or C.	
Business Rules:	
The Due Date is the negotiated date that is returned on the FOC by SWBT for service activation. The Completion Date is the day that SWBT personnel complete the service order activity. The source is WFA (Work Force Administration) and is at an item or circuit level. Specials are selected based on a specific service code off of the circuit ID.	
Levels of Disaggregation:	
See Measurement No. 43	
Calculation:	**Report Structure:**
(Count of circuits with missed due dates excluding customer caused misses ÷ total number of circuits) * 100	Reported for CLEC, all CLECs and SWBT.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
Parity with SWBT Retail.	

46. Measurement	
Percent Installation Reports (Trouble Reports) Within 30 Days (I-30) of Installation	
Definition:	
Percent of N, T, and C orders by circuit that receive a network customer trouble report within 30 calendar days of service order completion.	
Exclusions:	
• UNE and Interconnection Trunks. • Excludes orders that are not N, T, or C. • Excludes trouble report received on the due date before service order completion.	
Business Rules:	
A trouble report is counted if it is flagged on WFA (Work Force Administration) as a trouble report that had a service order completion within 30 days. It cannot be a repeat report and must be a measured report. The order flagged against must be an addition in order for the trouble report to be counted. Specials are selected based on a specific service code off of the circuit ID.	
Levels of Disaggregation:	
See Measurement No. 43	
Calculation:	**Report Structure:**
[Count of circuits that receive a network customer trouble report within 30 calendar days of service order completion ÷ total circuits (excludes trouble reports received on the due date)]* 100	Reported for CLEC, all CLECs and SWBT.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
Parity with SWBT Retail.	

47. Measurement	
Percent Missed Due Dates Due To Lack Of Facilities	
Definition:	
Percentage of N, T, and C orders by circuit with missed committed due dates due to lack of facilities.	
Exclusions:	
• UNE and Interconnection Trunks. • Excludes orders that are not N, T, or C.	
Business Rules:	
The Due Date starts the clock. The Completion Date is the day that SWBT personnel complete the service order activity, which stops the clock. The source is WFA (Work Force Administration) and is at an item or circuit level. Specials are selected based on a specific service code off of the circuit ID and by selected center names that indicate resale. The lack of facilities is selected based on the missed reason code.	
Levels of Disaggregation:	
• See Measurement No. 43 • Reported for > 30 calendar days & > 90 calendar days.	
Calculation:	**Report Structure:**
(Count of circuits with missed committed due dates due to lack of facilities ÷ total circuits) * 100	Reported for Specials Resale by CLEC, all CLECs and SWBT Retail.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
Parity with SWBT Retail.	

48. Measurement	
Delay Days for Missed Due Dates Due to Lack Of Facilities	
Definition:	
Average calendar days from due date to completion date on company missed circuit orders due to lack of facilities.	
Exclusions:	
• UNE and Interconnection Trunks. • Excludes orders that are not N, T, or C.	
Business Rules:	
The calculation is the difference in calendar days between the completion date and the due date. The source is WFA (Work Force Administration) and is at an item or circuit level. Specials are selected based on a specific service code off of the circuit ID and by selected center names that indicate resale. The lack of facilities is based on the missed reason code.	
Levels of Disaggregation:	
See Measurement No. 43	
Calculation:	**Report Structure:**
Σ(Completion date - Committed circuit due date) ÷ (# of completed circuits with SWBT caused missed due dates due to lack of facilities)	Reported for CLEC, all CLECs and SWBT Retail Specials.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Parity with SWBT Retail.	

49. Measurement	
Delay Days For SWBT Caused Missed Due Dates	
Definition:	
Average calendar days from due date to completion date on company missed circuit orders.	
Exclusions:	
• UNE and Interconnection Trunks. • Excludes orders that are not N, T, or C.	
Business Rules:	
The calculation is the difference in calendar days between the completion date and the due date. The source is WFA (Work Force Administration) and is at an item or circuit level. Specials are selected based on a specific service code off of the circuit ID.	
Levels of Disaggregation:	
See Measurement No. 43	
Calculation:	**Report Structure:**
Σ(Completion date – committed circuit due date) ÷ (# of posted – circuits with a SWBT caused missed due date)	Reported for CLEC, all CLECs and SWBT Retail Specials.
Measurement Type:	
Tier 1 – Medium Tier 2 – None	
Benchmark:	
Parity with SWBT Retail.	

50. Measurement	
Percent SWBT Caused Missed Due Dates > 30 days	
Definition:	
Percentage of circuits where installation was completed greater than 30 days following the due date, excluding customer caused misses.	
Exclusions:	
• UNE and Interconnection Trunks. • Excludes orders that are not N, T, or C.	
Business Rules:	
See Measurement No. 49	
Levels of Disaggregation:	
See Measurement No. 43	
Calculation:	**Report Structure:**
Count of circuits completed greater than 30 days following the due date, excluding customer caused misses ÷ total number of circuits) * 100	Reported for CLEC, all CLECs and SWBT for Retail Specials.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
Parity with SWBT Retail.	

51. Measurement	
Count of Orders Canceled After the Due Date That Were Caused by SWBT – SPECIALS – Provisioning	
Definition:	
A count of the total number of orders that were canceled by the CLEC after the order became due. Only orders cancelled with SWBT missed codes are included.	
Exclusions:	
• UNE, and Interconnection Trunk • Excludes orders that are not N, T, or C	
Business Rules:	
Orders that are cancelled by the customer after the negotiated due date and prior to completion.	
Levels of Disaggregation:	
• See Measurement No. 43. • The count will be divided into 1-30, 31-90 and > 90.	
Calculation:	**Report Structure:**
The count of orders cancelled where Cancel Date > Due Date	Reported for individual CLECs, the aggregate of all CLECs and SWBT.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Diagnostic. No benchmark required.	

Maintenance

Specials are all treated as Out of Service repair reports. There is no classification or disaggregation of Affecting Service.

52. Measurement	
Mean Time To Restore	
Definition:	
Average duration of network customer trouble reports from the receipt of the customer trouble report to the time the trouble report is cleared.	
Exclusions:	
• UNE and Interconnection Trunk. • No Access Time. • Delayed Maintenance Time.	
Business Rules:	
The start time is when the customer report is received and the stop time is when the report is closed in WFA. Specials are selected based on a specific service code off of the circuit ID.	
Levels of Disaggregation:	
See Measurement No. 43 • Dispatch In • Dispatch Out	
Calculation:	**Report Structure:**
Σ[(Date and time trouble report is cleared with the customer) - (date and time trouble report is received)] ÷ total network customer trouble reports	Reported for CLEC, all CLECs and SWBT.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
Parity with SWBT Retail.	

53. Measurement	
Percent Repeat Reports	
Definition:	
Percentage of network customer trouble reports received within 30 calendar days of a previous customer report.	
Exclusions:	
UNE and Interconnection Trunk	
Business Rules:	
Includes customer trouble reports received within 30 calendar days of an original customer report. When the second report is received in 30 days, the original report is marked as an Original of a Repeat, and the second report is marked as a Repeat. If a third report is received within 30 days, the second report is marked as an Original of a Repeat as well as being a Repeat, and the third report is marked as a Repeat. In this case there would be two repeat reports.	
Levels of Disaggregation:	
See Measurement No. 43	
Calculation:	**Report Structure:**
Count of network customer trouble reports received within 30 calendar days of a previous customer report ÷ total network customer trouble reports) * 100	Reported for CLEC, all CLECs and SWBT.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
Parity with SWBT Retail.	

54. Measurement	
Failure Frequency	
Definition:	
The number of network customer trouble reports within a calendar month per 100 circuits.	
Exclusions:	
UNE and Interconnection Trunks	
Business Rules:	
CLEC and SWBT repair reports are entered into and tracked via WFA. Reports are counted in the month they post.	
Levels of Disaggregation:	
See Measurement No. 43	
Calculation:	**Report Structure:**
[Count of network trouble reports ÷ (Total Resold circuits ÷100)]	Reported for CLEC, all CLECs and SWBT.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
Parity with SWBT Retail.	

UNBUNDLED NETWORK ELEMENTS (UNES)

Provisioning

55. Measurement	
Average Installation Interval	
Definition:	
Average business days from application date to completion date for N, T, and C orders excluding customer caused misses and customer requested due date greater than "X" business days. The "X" business days is determined based on quantity of UNE loops ordered and the associated standard interval.	
Exclusions:	
• Specials and Interconnection Trunks. • Excludes UNE Combos captured in the POTS or Specials measurements. • Exclude orders that are not N, T, or C. • Excludes customer requested due dates greater than "X" business days as set out in Measurement No. 56. • Excludes customer caused misses. • Excludes Weekends and Holidays.	
Business Rules:	
The Application Date is the day that the customer initiated the service request. The Completion Date is the day that SWBT personnel complete the service order activity. The base of items is out of WFA (Work Force Administration) and it is reported at an order level to account for different measurement standards based on the number of circuits per order.	
Levels of Disaggregation:	
UNEs contained in the UNE price schedule, and/or agreed to by parties.	
Calculation:	**Report Structure:**
[Σ(completion date - application date)] ÷ (Total number of orders completed)	Reported for CLEC and all CLECs.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
See Measurement No. 56	

55.1 Measurement	
Average Installation Interval - DSL	
Definition:	
Average calendar days from application date to completion date for N, T, and C orders excluding customer caused misses and customer requested due date greater than the offered interval.	
Exclusions:	
• Exclude orders that are not N, T, or C. • Excludes customer requested due dates greater than the offered interval. • Excludes customer caused misses. • Excludes Weekends and Holidays.	
Business Rules:	
The Application Date is the day that the customer authorizes SWBT to provision the DSL based on the loop qualification. If the loop qualification determines that no conditioning is required, SWBT will initiate the service order when the loop qualification is returned from SWBT engineering and this date will be the application date. If conditioning is required, SWBT will reject the LSR back to the CLEC and wait for a supplement from the CLEC notifying SWBT of the appropriate action to take. If the CLEC supplements the LSR to order the DSL, SWBT will issue the order and the application date will be the date that SWBT receives the supplement. The Completion Date is the day that SWBT personnel complete the service order activity. The base of items is out of WFA (Work Force Administration) and it is reported at a circuit level.	
Levels of Disaggregation:	
Loops requiring conditioning and loops requiring no conditioning.	
Calculation:	**Report Structure:**
[Σ(completion date - application date)] ÷ (Total number of orders completed)	Reported for CLEC and all CLECs.
Measurement Type:	
Tier 1 – Yes Tier 2 – Yes	
Benchmark:	
Parity with SWBT	

55.2 Measurement
Average Installation Interval for Loop With LNP
Definition:
Average business days from FOC return date to completion date for N, T, and C orders excluding customer caused misses and customer requested due date greater than "X" business days. The "X" business days is determined based on quantity of UNE loops ordered and the associated standard interval.
Exclusions:
• Specials and Interconnection Trunks. • Excludes UNE Combos captured in the POTS or Specials measurements. • Excludes orders that are not N, T, or C. • Excludes customer requested due dates greater than "X" business days as set out in Measurement No. 56.1. • Excludes customer caused misses. • Excludes Weekends and Holidays.
Business Rules:
The FOC return date is the day that SWBT returns the FOC to the CLEC. The Completion Date is the day that SWBT personnel complete the service order activity. If the CLEC submits the LSR prior to 3:00 p.m. the CLEC may request a 3 day interval. If the LSR is submitted after 3:00 p.m. the CLEC can request a 4 day interval. The base of items is out of WFA (Work Force Administration) and it is reported at an order level to account for different measurement standards based on the number of circuits per order. Industry guidelines for due dates for LNP are as follows: • For Offices in which NXXs are previously opened – 3 Business Days. • New NXX – 5 Business days on LNP capable NXX. The above-noted due dates are from the date of the FOC receipt. For partial LNP conversions that require restructuring of customer account: • 1-30 TNs: Add one additional day to the FOC interval. The LNP due date intervals will continue to be three business days and five business days from the receipt of the FOC depending on whether the NXX has been previously opened or is new. • >30 TNs, including entire NXX: The due dates are negotiated.
Levels of Disaggregation:
UNEs contained in the UNE price schedule, and/or agreed to by parties. See Benchmark below.

Calculation:	Report Structure:
[Σ(completion date - application date)] ÷ (Total number of orders completed)	Reported for CLEC and all CLECs.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
See Measurement No. 56.1	

56. Measurement	
Percent Installations Completed Within "X" Days	
Definition:	
Percent installations completed within "X" business days excluding customer caused misses and customer requested due date greater than "X" business days.	
Exclusions:	
• Specials and Interconnection Trunks. • Excludes UNE Combos captured in the POTS or Specials measurements. • Exclude orders that are not N, T, or C. • Excludes customer requested due dates greater than "X" business days as set out below. • Excludes customer caused misses.	
Business Rules:	
See Measurement No. 55	
Levels of Disaggregation:	
UNEs contained in the UNE price schedule, and/or agreed to by parties.	
Calculation:	**Report Structure:**
Count of N, T, C orders installed within business "x" business days ÷ total N, T, C orders) * 100	Reported for CLEC and all CLECs.
Measurement Type:	
Tier 1 – High Tier 2 – High	

Benchmark:

95% within "X" days

- 2 Wire Analog and Digital and INP (1-10) – 3 Days
- 2 Wire Analog and Digital and INP (11-20) – 7 Days
- 2 Wire Analog and Digital and INP (20+) – 10 Days
- DS1 loop(includes PRI) (1-10) – 3 Days
- DS1 loop(includes PRI) (11-20) – 7 Days
- DS1 loop(includes PRI) (20+) – 10 Days
- XDSL loop (1-10) – 3 Days
- XDSL loop (11-20) – 7 Days
- XDSL loop (20+) – 10 Days
- Switch Ports – Analog Port – 2 Days
- Switch Ports – BRI Port (1-50) – 3 Days
- Switch Ports – BRI Port (50+) – 5 Days
- Switch Ports – PRI Port (1-20) – 5 Days
- Switch Ports – PRI Port (20+) – 10 Days
- DS1 Trunk Port (1 to 10) – 3 Days
- DS1 Trunk Port (11 to 20) – 5 Days
- DS1 Trunk Port (20+) – ICB
- Dedicated Transport (DS0, DS1, and DS3) (1 to 10) – 3 Days
- Dedicated Transport (DS0, DS1, and DS3) (11 to 20) – 5 Days
- Dedicated Transport (DS0, DS1, and DS3) (20+) and all other types – ICB

56. 1 Measurement	
Percent Installations Completed Within Industry Guidelines for LNP With Loop	
Definition:	
Percent installations completed within "X" business days excluding customer caused misses and customer requested due date greater than "X" business days.	
Exclusions:	
• Specials and Interconnection Trunks. • Excludes UNE Combos captured in the POTS or Specials measurements. • Exclude orders that are not N, T, or C. • Excludes customer requested due dates greater than "X" business days as set out below. • Excludes customer caused misses. • CLEC or Customer caused or requested delays. • NPAC caused delays unless caused by SWBT.	
Business Rules:	
See Measurement No. 55.2	
Levels of Disaggregation:	
UNEs contained in the UNE price schedule, and/or agreed to by parties.	
Calculation:	**Report Structure:**
Count of N, T, C orders installed within business "x" business days ÷ total N, T, C orders) * 100	Reported for CLEC and all CLECs.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
95% within "X" days • 2 Wire Analog and Digital and INP (1-10) – 3 Days from receipt of FOC • DS1 loop(includes PRI) – 3 Days from receipt of FOC	

57. Measurement	
Average Response Time for Loop Make-Up Information	
Definition:	
The average time required to provide loop qualification for ADSL.	
Exclusions:	
None	
Business Rules:	
The time starts when a request is received by the CLEC and ends when the information on the loop qualification has been made available to the CLEC.	
Levels of Disaggregation:	
ADSL or other DSL as determined by the Public Utility Commission of Texas.	
Calculation:	**Report Structure:**
Σ(Date and Time the Loop Qualification is made available to CLEC – Date and Time the CLEC request is received)/Total number of loop qualifications	CCLEC, All CLECs and SWBT.
Measurement Type:	
Tier 1 – Low Tier 2 – Medium	
Benchmark:	
Parity	

58. Measurement	
Percent SWBT Caused Missed Due Dates	
Definition:	
Percentage of UNEs (8db loops are measured at an order level) where installations are not completed by the negotiated due date.	
Exclusions:	
• Specials and Interconnection Trunks. • Excludes UNE Combos captured in the POTS or Specials measurements. • Exclude orders that are not N, T, or C. • Excludes customer caused misses.	
Business Rules:	
The Due Date starts the clock. The Completion Date is the day that SWBT personnel complete the service order activity, which stops the clock. If the completion date is after the Due Date, the order is flagged as a miss. This measurement is reported at a circuit level for all UNEs with the exception of 8db loops, which are reported at an order level to facilitate comparison with POTS retail.	
Levels of Disaggregation:	
UNEs contained in the UNE price schedule, and/or agreed to by parties (Field Work and No Field Work) .	
Calculation:	**Report Structure:**
Count of UNEs (8dB loops are measured at an order level)with missed due dates excluding customer caused misses ÷ total number of UNEs (total orders for 8db loops) *100	Reported for CLEC and all CLECs.

Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
Parity:	Retail Comparison
1. 8.0 dB Loop with Test Access and 8.0 dB Loop without Test Access (FW)	POTS (Res/Bus FW)
1a. 8.0 dB Loop with Test Access and 8.0 dB Loop without Test Access (NFW)	POTS (Res/Bus NFW)
2. 5.0 dB Loop with Test Access and 5.0 dB Loop without Test Access	VGPL
3. BRI Loop with Test Access	ISDN
4. ISDN BRI Port	ISDN
5. DS1 Loop with Test Access	DS1
6. DS1 Dedicated Transport	DS1
7. Subtending Channel (23B)	DDS
8. Subtending Channel (1D)	DDS
9. Analog Trunk Port	VGPL
10. Subtending Digital Direct Combination Trunks	VGPL
11. DS3 Dedicated Transport	DS3
12. Dark Fiber	DS3
13. DSL Loops	DS1

59. Measurement	
Percent Installation Reports (Trouble Reports) Within 30 Days (I-30) of Installation	
Definition:	
Percentage of UNEs (8db loops are measured at an order level) that receive a network customer trouble report within 30 calendar days of service order completion.	
Exclusions:	
• Specials and Interconnection Trunks. • Excludes Non-measured reports (CPE, Interexchange, and Information reports). • Excludes UNE Combos captured in the POTS or Specials measurements. • Excludes trouble report received on the due date before service order completion. • Excludes orders that are not N, T, or C.	
Business Rules:	
A trouble report is counted if it is received within 30 days of a service order completion. The service order which generated the report must be an add in order for the trouble report to be counted. UNEs are selected based on a specific service code off of the circuit ID. This measurement is reported at a circuit level for all UNEs with the exception of 8db loops, which are reported at an order level to facilitate comparison with POTS retail.	
Levels of Disaggregation:	
UNEs contained in the UNE price schedule, and/or agreed to by parties.	
Calculation:	**Report Structure:**
(Count of UNEs (8db loops are measured at an order level) that receive a network customer trouble report within 30 calendar days of service order completion ÷ total UNEs (total orders for 8db loops)) * 100	Reported for CLEC and all CLECs.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
See Measurement 58	

60. Measurement	
Percent Missed Due Dates Due To Lack Of Facilities	
Definition:	
Percentage of UNEs (8db loops are measured at an order level) with missed committed due dates due to lack of facilities.	
Exclusions:	
• Specials and Interconnection Trunks. • Excludes UNE Combos captured in the POTS or Specials measurements. • Excludes orders that are not N, T, or C.	
Business Rules:	
Any completion date that is greater than the due date with a SWBT lack of facilities missed reason code. This measurement is reported at a circuit level for all UNEs with the exception of 8db loops, which are reported at an order level to facilitate comparison with POTS retail.	
Levels of Disaggregation:	
UNEs contained in the UNE price schedule, and/or agreed to by parties.	
Calculation:	**Report Structure:**
Count of UNEs (8db loops are measured at an order level) with missed committed due dates due to lack of facilities ÷ total UNEs (total orders for 8db loops) * 100	Reported by CLEC, all CLECs Reported for > 30 calendar days & > 90 calendar days.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
See Measurement No. 58	

61. Measurement	
Average Delay Days for Missed Due Dates Due To Lack Of Facilities	
Definition:	
Average calendar days from due date to completion date on company missed UNEs (8db loops are measured at an order level) orders due to lack of facilities.	
Exclusions:	
• Specials and Interconnection Trunks. • Excludes UNE Combos captured in the POTS or Specials measurements. • Excludes orders that are not N, T, or C.	
Business Rules:	
The calculation is the difference in calendar days between the completion date and the due date. The source is WFA (Work Force Administration) and is at an item or circuit level. UNEs are selected based on a specific service code off of the circuit ID. The lack of facilities is selected based on the missed reason code. This measurement is reported at a circuit level for all UNEs with the exception of 8db loops, which are reported at an order level to facilitate comparison with POTS retail.	
Levels of Disaggregation:	
• UNEs contained in the UNE price schedule, and/or agreed to by parties.	
Calculation:	**Report Structure:**
Σ(Completion date - committed UNE (8db loops are measured at the order level) due date) ÷ (# of completed UNEs (total completed orders for 8db loops) with SWBT caused missed due dates due to lack of facilities)	Reported for CLEC and all CLECs for UNEs contained in the UNE price schedule.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
See Measurement No. 58	

62. Measurement	
Average Delay Days For SWBT Caused Missed Due Dates	
Definition:	
Average calendar days from due date to completion date on company missed UNEs (8db loops are measured at an order level).	
Exclusions:	
• Specials and Interconnection Trunks. • Excludes UNE Combos captured in the POTS or Specials measurements. • Excludes orders that are not N, T, or C.	
Business Rules:	
The calculation is the difference in calendar days between the completion date and the due date. The source is WFA (Work Force Administration) and is at an item or circuit level. UNEs are selected based on a specific service code off of the circuit ID. This measurement is reported at a circuit level for all UNEs with the exception of 8db loops, which are reported at an order level to facilitate comparison with POTS retail.	
Levels of Disaggregation:	
See Measurement 58	
Calculation:	**Report Structure:**
Σ(Completion date – committed UNE (8db loops are measured at the order level) due date) ÷ (# of posted UNEs (total completed orders for 8db loops) with SWBT caused missed due dates)	Reported for CLEC and all CLECs.
Measurement Type:	
Tier 1 – Medium Tier 2 – None	
Benchmark:	
See Measurement No. 58	

63. Measurement	
Percent SWBT Caused Missed Due Dates > 30 days	
Definition:	
Percentage of UNEs (8db loops are measured at an order level)where installation was completed greater than 30 days following the due date, excluding customer caused misses.	
Exclusions:	
Specials and Interconnection Trunks	
Business Rules:	
See Measurement No. 58	
Levels of Disaggregation:	
UNEs contained in the UNE price schedule, and/or agreed to by parties.	
Calculation:	**Report Structure:**
(Count of UNEs (8db loops are measured at an order level) completed greater than 30 days following the due date, excluding customer caused misses ÷ total number of total UNEs (total orders for 8db loops)) * 100	Reported for CLEC and all CLECs.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
See Measurement No. 58	

64. Measurement	
Count of Orders Canceled After the Due Date Which Were Caused by SWBT – UNE – Provisioning	
Definition:	
A count of the total number of orders that were canceled after the order became due. Only orders canceled with SWBT missed codes are included.	
Exclusions:	
None	
Business Rules:	
Orders that are cancelled by the customer after the negotiated due date and prior to completion.	
Levels of Disaggregation:	
UNEs contained in the UNE price schedule, and/or agreed to by parties.	
Calculation:	**Report Structure:**
The count of orders cancelled where Cancel Date is > Due Date	The count will be divided into 1-30, 31-90 and > 90. Reported for individual CLECs and the aggregate of all CLECs.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Diagnostic. No benchmark required.	

Maintenance

65. Measurement	
Trouble Report Rate	
Definition:	
The number of network customer trouble reports within a calendar month per 100 UNEs.	
Exclusions:	
• Specials and Interconnection Trunks. • Excludes Non-measured reports (CPE, Interexchange, and Information reports). • Excludes UNE Combos captured in the POTS or Specials measurements.	
Business Rules:	
Repair reports are entered into and tracked via WFA. Reports are counted in the month they post.	
Levels of Disaggregation:	
UNEs contained in the UNE price schedule, and/or agreed to by parties.	
Calculation:	**Report Structure:**
[Count of network trouble reports ÷ (Total UNEs ÷ 100)]	Reported for CLEC, all CLECs and SWBT.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
See Measurement No. 58	

66. Measurement	
Percent Missed Repair Commitments	
Definition:	
Percentage of trouble reports not cleared by the commitment time for SWBT reasons.	
Exclusions:	
• Specials and Interconnection Trunks. • Excludes all UNE Combos other than 8db loops with test access.	
Business Rules:	
The commitment time is defined as 24 hours. If the cleared date and time minus the receive date and time > 24 hours, it counts as a trouble report that missed the repair commitment. UNEs are selected based on a specific service code off of the circuit ID.	
Levels of Disaggregation:	
"POTS type" loops (2-Wire Analog 8dB Loop) with test access.	
Calculation:	**Report Structure:**
(Count of trouble reports not cleared by the commitment time for company reasons ÷ total trouble reports) * 100	Reported for each CLEC, all CLECs and SWBT.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
Parity with SWBT POTS Business and Residence combined.	

67. Measurement	
Mean Time To Restore	
Definition:	
Average duration of network customer trouble reports from the receipt of the customer trouble report to the time the trouble report is cleared excluding no access and delayed maintenance.	
Exclusions:	
See Measurement No. 65	
Business Rules:	
The start time is when the report is received. The stop time is the stop time is when the report is cleared in WFA.	
Levels of Disaggregation:	
UNEs contained in the UNE price schedule, and/or agreed to by parties. Also disaggregated by Dispatch/No Dispatch.	
Calculation:	**Report Structure:**
Σ[(Date and time trouble report is cleared with the customer) - (date and time trouble report is received)] ÷ total network customer trouble reports	Reported for CLEC, all CLECs and SWBT.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
See Measurement No. 58	

68. Measurement	
Percent Out Of Service (OOS) < "X" Hours	
Definition:	
Percentage of OOS trouble reports cleared in less than 24 hours.	
Exclusions:	
See Measurement No. 65	
Business Rules:	
The close date and time minus the receive date and time must be greater than 0 and less than 24 hours for it to count as a trouble report that was cleared in less than 24 hours. All WFA specials trouble tickets are considered to be OSS.	
Levels of Disaggregation:	
By "POTS like" loop (2-Wire Analog 8dB Loop) with test access.	
Calculation:	**Report Structure:**
(Count of UNE OOS trouble reports < 24 hours ÷ total number of UNE OOS trouble reports) * 100	Reported for CLEC, CLECs and SWBT.
Measurement Type:	
Tier 1 – Medium Tier 2 – None	
Benchmark:	
Parity with SWBT POTS Business and Residence combined.	

69. Measurement	
Percent Repeat Reports	
Definition:	
Percentage of network customer trouble reports received within 30 calendar days of a previous customer report.	
Exclusions:	
See Measurement No. 65	
Business Rules:	
Includes customer trouble reports received within 30 calendar days of an original customer report. When the second report is received in 30 days, the original report is marked as an Original of a Repeat, and the second report is marked as a Repeat. If a third report is received within 10 days, the second report is marked as an Original of a Repeat as well as being a Repeat, and the third report is marked as a Repeat. In this case there would be two repeat reports. If either the original or the second report within 30 days is a measured report, then the second report counts as a Repeat report.	
Levels of Disaggregation:	
UNEs contained in the UNE price schedule, and/or agreed to by parties.	
Calculation:	**Report Structure:**
Count of network customer trouble reports received within 30 calendar days of a previous customer report ÷ total network customer trouble reports) * 100	Reported for CLEC, all CLECs and SWBT.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
See Measurement No. 58	

INTERCONNECTION TRUNKS

70. Measurement:

Percentage of Trunk Blockage

Definition:

Percentage of calls blocked on outgoing traffic from SWBT end office to CLEC end office and from SWBT tandem to CLEC end office.

Exclusions:

No penalties or liquidated damages apply:

- If CLECs have trunks busied-out for maintenance at their end, or if they have other network problems which are under their control.
- SWBT is ready for turn-up on Due Date and CLEC is not ready or not available for turn-up of trunks.
- If CLEC does not take action upon receipt of Trunk Group Service Request (TGSR) or ASR within 3 days when a Call Blocking situation is identified by SWBT or in the timeframe specified in the ICA.
- If CLEC fails to provide a forecast.
- If CLEC's actual trunk usage, as shown by SWBT from traffic usage studies, is more than 25% above CLEC's most recent forecast, which must have been provided within the last six-months unless a different timeframe is specified in an interconnection agreement.

The exclusions do not apply if SWBT fails to timely provide CLEC with traffic utilization data reasonably required for CLEC to develop its forecast or if SWBT refuses to accept CLEC trunk orders (ASRs or TGSRs) that are within the CLEC's reasonable forecast regardless of what the current usage data is.

Business Rules:

Blocked calls and total calls are gathered during the official study week each month. This week is chosen from a pre-determined schedule.

Levels of Disaggregation:

- The SWBT end office to CLEC end office and SWBT tandem to CLEC end office trunk blockage will be reported separately.
- By Market Region.

Calculation:	Report Structure:
(Count of blocked calls ÷ total calls offered) * 100	Reported for CLEC, all CLECs and SWBT.

Measurement Type:

Tier-1 High
Tier-2 High

Benchmark:

Dedicated Trunk Groups not to exceed blocking standard of B.01.

70. 1 Measurement:	
Count of Blocked calls Excluded from Measurement No. 70	
Definition:	
Count of Blocked calls excluded from the numerator of measurement No. 70	
Exclusions:	
None	
Business Rules:	
Blocked calls and total calls are gathered during the official study week each month. This week is chosen from a pre-determined schedule.	
Levels of Disaggregation:	
• The SWBT end office to CLEC end office and SWBT tandem to CLEC end office trunk blockage will be reported separately. • By Market Region. • Count of Blocked calls excluded because of the following reasons reported on a disaggregated basis and the total count of excluded calls; • CLECs had trunks busied-out for maintenance at their end, or if they had other network problems which are under their control. • SWBT was ready for turn-up on Due Date and CLEC was not ready or not available for turn-up of trunks. • CLEC did not take action upon receipt of Trunk Group Service Request (TGSR) or ASR within 3 days when a Call Blocking situation was identified by SWBT or in the timeframe specified in the ICA. • CLEC failed to provide a forecast. • CLEC's actual trunk usage, as shown by SWBT from traffic usage studies, was more than 25% above CLEC's most recent forecast, which must have been provided within the last six-months unless a different timeframe is specified in an interconnection agreement.	
Calculation:	**Report Structure:**
Count of Blocked Calls	Reported for CLEC, all CLECs
Measurement Type:	
Tier-1 None Tier-2 None	
Benchmark:	
Diagnostic Measurement	

71. Measurement:	
Common Transport Trunk Blockage	
Definition:	
Percentage of local common transport trunk groups exceeding 2%, 1% blockage.	
Exclusions:	
No data is collected on weekends	
Business Rules:	
Blocked calls and total calls are gathered during the official study week each month. This week is chosen from a pre-determined schedule. The busy hour of the study week is used for comparison.	
Levels of Disaggregation:	
• Common trunk groups where CLECs share ILEC trunks, and Common trunk groups for CLECs not shared by ILEC. • By Market Region.	
Calculation:	**Report Structure:**
(Number of common transport trunk groups exceeding 2%, 1% blocking ÷ total common transport trunk groups) * 100.	Reported on local common transport trunk groups.
Measurement Type:	
Tier-1 None Tier-2 High	
Benchmark:	
PUC Subst. R. 23.61(e)(5)(A) or parity, whichever allows less blocking in a given month. SWBT shall compare common trunk groups exceeding 1% blockage, reported for switch based CLECs, be compared to SWBT's dedicated trunk groups designed for B.01 standard for parity compliance.	

72. Measurement	
Distribution Of Common Transport Trunk Groups > 2%/1%.	
Definition:	
A distribution of trunk groups exceeding 2% reflecting the various levels of blocking.	
Exclusions:	
None	
Business Rules:	
See Measurement No. 71	
Levels of Disaggregation:	
By Market Region.	
Calculation:	**Report Structure:**
The number of trunk groups exceeding 2%/1% will be shown in histogram form based on the levels of blocking	Reported on local common transport trunk groups.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Aggregate measurement. No benchmark required.	

73. Measurement	
Percentage Missed Due Dates – Interconnection Trunks	
Definition:	
Percentage of trunk order due dates missed on interconnection trunks.	
Exclusions:	
Customer Caused Misses	
Business Rules:	
The Due Date starts the clock. The Completion Date is the day that SWBT personnel complete the service order activity and it is accepted by the CLEC, which stops the clock. The source is WFA (Work Force Administration) and is at an item or circuit level. Interconnection trunks are selected based on a specific service code off of the circuit ID.	
Levels of Disaggregation:	
By Market Region.	
Calculation:	**Report Structure:**
(Count trunk circuits missed ÷ total trunk circuits) * 100	Reported for CLEC, all CLECs and SWBT.
Measurement Type:	
Tier 1 – Medium Tier 2 – None	
Benchmark:	
Parity with SWBT interconnection trunks.	

74. Measurement	
Average Delay Days For Missed Due Dates – Interconnection Trunks	
Definition:	
Average calendar days from due date to completion date on company missed interconnection trunk orders.	
Exclusions:	
Customer Caused Misses	
Business Rules:	
The calculation is the difference in calendar days between the completion date (the date the CLEC accepts the circuit) and the due date. The source is WFA (Work Force Administration) and is at an item or circuit level. Interconnection Trunks are selected based on a specific service code off of the circuit ID.	
Levels of Disaggregation:	
By Market Region.	
Calculation:	**Report Structure:**
Σ (Completion date – committed circuit due date) ÷ (# of completed trunk circuits with missed Due Dates)	Reported for CLEC, all CLECs and SWBT for interconnection trunks.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
Parity	

75. Measurement:	
Percentage SWBT Caused Missed Due Dates > 30 Days – Interconnection Trunks	
Definition:	
Percentage of Interconnection Trunk Circuits where installation was completed greater than 30 days following the due date.	
Exclusions:	
Excludes Customer Caused Misses.	
Business Rules:	
See Measurement No. 74	
Levels of Disaggregation:	
By Market Region.	
Calculation:	**Report Structure:**
(Count of SWBT caused interconnection trunk circuits completed greater than 30 days following the due date, ÷ total number of interconnection trunk circuits) * 100.	Reported for CLEC, all CLECs and SWBT for interconnection trunks.
Measurement Type:	
Tier-1 Low Tier-2 None	
Benchmark:	
No more than 2% interconnection trunk orders completed > 30 days.	

76. Measurement	
Average Trunk Restoration Interval – Interconnection Trunks	
Definition:	
Average time to repair interconnection trunks. This measure is based on calendar days.	
Exclusions:	
• Excludes non-measured tickets (CPE, Interexchange, or Information). • No access delayed maintenance.	
Business Rules:	
The source is WFA (Work Force Administration) and is at an item or circuit level. Interconnection Trunks are selected based on the circuit being identified as a message type circuit.	
Levels of Disaggregation:	
By Market Region.	
Calculation:	**Report Structure:**
Total trunk outage duration ÷ total trunk trouble reports	Reported for CLEC, all CLECs and SWBT.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
Parity	

77. Measurement	
Average Trunk Restoration Interval for Service Affecting Trunk Groups	
Definition:	
The average time to restore service affecting trunk groups.	
Exclusions:	
Customer Caused Outages	
Business Rules:	
Service affecting is defined as 20% of a trunk group out-of-service that causes trunk group blockage. The clock starts on receipt of a trouble ticket from the CLEC that identifies a service affecting condition. The clock stops after completion of work by SWBT.	
Levels of Disaggregation:	
• Tandem trunk groups. • Non-Tandem trunk groups. • By Market Region.	
Calculation:	**Report Structure:**
Total trunk group outage time / total trunk group trouble reports	Reported for CLEC, all CLECs and SWBT.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
Tandem trunk groups – 1 hour / Non-Tandem – 2 hours.	

78. Measurement:	
Average Interconnection Trunk Installation Interval	
Definition:	
The average time from receipt of a complete and accurate ASR until the completion of the trunk order.	
Exclusions:	
• Excludes customer requested due dates greater than 20 business days as set out below.	
Business Rules:	
The clock starts on the receipt of a complete and accurate ASR and the clock stops on the date the work is completed and accepted by the CLEC. The measurement is taken for all ASRs that complete in the reporting period.	
Levels of Disaggregation:	
Interconnection Trunks, SS7 links, OS/DA and 911 trunks.	
Calculation:	**Report Structure:**
Σ(completion date of the trunk order - receipt of complete and accurate ASR) ÷ total trunk orders	Reported by CLEC and all CLECs. (SWBT does not currently have comparable data to report. SWBT will continue to work on methods to collect comparable data).
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
20 Business days.	

DIRECTORY ASSISTANCE (DA) AND OPERATOR SERVICES (OS)

79. Measurement	
Directory Assistance Grade Of Service	
Definition:	
Percentage of directory assistance calls answered < 1.5, < 2.5, > 7.5, > 10.0, > 15.0, > 20.0, and > 25.0 seconds.	
Exclusions:	
None	
Business Rules:	
The clock starts when the customer enters the queue and the clock stops when a SWBT representative answers the call or the customer abandons the call. The length of each call is determined by measuring and accumulating the elapsed time from the entry of a CLEC customer call into the SWBT call management system queue until the CLEC customer call is transferred to SWBT personnel assigned to handling CLEC calls for assistance during hours of operation. Calls are categorized into the above bands to determine the percentage of calls that were answered within "x" seconds.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
Calls answered within "x" seconds ÷ total calls answered	Reported for the aggregate of SWBT and CLECs.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Aggregate measurement. No benchmark required.	

80. Measurement	
Directory Assistance Average Speed Of Answer	
Definition:	
The average time a customer is in queue.	
Exclusions:	
None	
Business Rules:	
The clock starts when the customer enters the queue and the clock stops when a SWBT representative answers the call or the customer abandons the call. The length of each call is determined by measuring and accumulating the elapsed time from the entry of a CLEC customer call into the SWBT call management system queue until the CLEC customer call is transferred to SWBT personnel assigned to handling CLEC calls for assistance during hours of operation.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
Total queue time ÷ total calls answered	Reported for the aggregate of SWBT and CLECs.
Measurement Type:	
Tier 1 – None Tier 2 – Low	
Benchmark:	
PUC Subst. Rule 23.61.e (3)(A)(iii)	

81. Measurement	
Operator Services Grade Of Service	
Definition:	
Percentage of operator services calls answered < 1.5, < 2.5, > 7.5, > 10.0, > 15.0, > 20.0, and > 25.0 seconds.	
Exclusions:	
None	
Business Rules:	
The clock starts when the customer enters the queue and the clock stops when a SWBT representative answers the call or the customer abandons the call. The length of each call is determined by measuring and accumulating the elapsed time from the entry of a CLEC customer call into the SWBT call management system queue until the CLEC customer call is transferred to SWBT personnel assigned to handling CLEC calls for assistance during hours of operation. Calls are categorized into the above bands to determine the percentage of calls that were answered within "x" seconds.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
Calls answered within "x" seconds ÷ total calls answered	Reported for the aggregate of SWBT and CLECs.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Aggregate measurement. No benchmark required.	

82. Measurement	
Operator Services Speed Of Answer	
Definition:	
The average time a customer is in queue.	
Exclusions:	
None	
Business Rules:	
The clock starts when the customer enters the queue and the clock stops when a SWBT representative answers the call or the customer abandons the call. The length of each call is determined by measuring and accumulating the elapsed time from the entry of a CLEC customer call into the SWBT call management system queue until the CLEC customer call is transferred to SWBT personnel assigned to handling CLEC calls for assistance during hours of operation.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
Total queue time ÷ total calls answered.	Reported for the aggregate of SWBT and CLECs.
Measurement Type:	
Tier 1 – None Tier 2 – Low	
Benchmark:	
PUC Subst. Rule 23.61.e (3)(A)(1)	

83. Measurement	
Percentage of Calls Abandoned	
Definition:	
The percentage of calls where the customer hangs up while the call is in queue.	
Exclusions:	
SWBT generated test calls.	
Business Rules:	
The clock runs on a 24 hour cycle starting at 6:00 a.m. and ending at 6:00 a.m. This measurement determines the amount of calls that were abandoned against the number of operator positions available during the reporting period in quarter hour intervals.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(Number of calls abandoned ÷ number of operator positions available) * 100	Reported for CLEC and SWBT in the aggregate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Aggregate measurement. No benchmark required.	

84. Measurement	
Percentage of Calls Deflected	
Definition:	
The percentage of calls that are received and are unable to be placed in queue	
Exclusions:	
SWBT generated test calls.	
Business Rules:	
The clock runs on a 24 hour cycle starting at 6:00a.m. and ending at 6:00a.m. This measurement determines the amount of calls that are received and deflected to a recording rather than being placed in queue against the number of operator positions available during the reporting period in quarter hour intervals.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(Number of calls deflected ÷ number of operator positions available) * 100	Reported for CLEC and SWBT in the aggregate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Aggregate measurement. No benchmark required.	

85. Measurement	
Average Work Time	
Definition:	
The average number of seconds an operator spends handling a customer's request for assistance in obtaining a telephone number, placing a call at the customer's request or in a position busy state.	
Exclusions:	
SWBT generated test calls.	
Business Rules:	
The clock starts when a customer connects to an operator position and stops when the operator position releases the customer after serving his/her request.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
Σ (Time operator position releases customer – time customer connects to an operator position) ÷ calls	Reported for CLEC and SWBT in the aggregate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Aggregate measurement. No benchmark required.	

86. Measurement	
Non-Call Busy Work Volumes	
Definition:	
The amount of time in CCS (Centum Call Second) that an operator has placed their position in make busy or in a position busy state.	
Exclusions:	
• SWBT generated test calls. • When an operator is talking to a customer and places the position in a busy state to gather information is excluded from this measurement.	
Business Rules:	
The clock starts when the operator's last customer hangs up (position is placed in busy state) and the clock stops when a call is answered (position is removed from busy state).	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
Σ(Time operator placed position in busy state - time operator removed position from busy state)	Reported for CLEC and SWBT in the aggregate.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
Aggregate measurement. No benchmark required.	

INTERIM NUMBER PORTABILITY (INP)

87. Measurement	
Percentage Installation Completed Within "X" (3, 7, 10) Days	
Definition:	
Percentage of installations completed within "x" (3, 7, 10) business days.	
Exclusions:	
• Excludes customer caused misses. • Excludes customer requested due dates greater than "x" (3, 7, 10) business days. • Excludes Weekends and Holidays.	
Business Rules:	
The Application Date is the day that the customer initiated the service request. The Completion Date is the day that SWBT personnel complete the service order activity. The orders are flagged as INP by USOC codes on the order.	
Levels of Disaggregation:	
• 1-10 numbers • 11-20 numbers • > 20	
Calculation:	**Report Structure:**
Total INP orders installed within "x" (3, 7, 10) business days ÷ total INP orders within "x" (3, 7, 10) business days.	Reported for CLEC and all CLECs.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
90% within "X" business days • 1-10 numbers (3 days) • 11-20 numbers (7 days) • > 20 (10 days)	

88. Measurement	
Average INP Installation Interval	
Definition:	
Average business days from application date to completion date for INP orders.	
Exclusions:	
Excludes customer requested due dates greater than the SWBT standard interval.	
Business Rules:	
See Measurement No. 87	
Levels of Disaggregation:	
See Measurement No. 87	
Calculation:	**Report Structure:**
(Total business days from application to completion date for INP orders ÷ total INP orders) * 100	Reported for CLEC and all CLECs.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
For calculation of Tier 1 damages, see Measurement No. 87. The benchmark will be established during the 6 month review.	

89. Measurement	
Percentage INP Only I-Reports Within 30 Days	
Definition:	
Percentage of INP N, T, C orders that receive a network customer trouble report.	
Exclusions:	
• Excludes customer provided equipment (CPE) or wiring within 30 calendar days of service order completion. • Excludes subsequent reports and all disposition "13" reports (excludable reports), with the exception of 1316, unless the trouble report is taken prior to completion of the service order.	
Business Rules:	
A trouble report is counted if it is mechanically flagged in LMOS as a trouble report that had a service completion within 30 days. The tickets are flagged as INP by matching the telephone number and order number against an order that is marked as INP based on the USOC codes on the order.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(Count of INP N, T, C orders that receive a network customer trouble report within 30 calendar days of service order completion ÷ total INP N, T, C orders (excludes trouble reports received on the due date)) * 100	Reported for CLEC and all CLECs.
Measurement Type:	
Tier 1 – Medium Tier 2 – None	
Benchmark:	
Parity with SWBT POTS NFW I reports within 30 days.	

90. Measurement	
Percentage Missed Due Dates (INP Only)	
Definition:	
Percentage of INP N, T, and C orders where installations are not completed by the negotiated due date.	
Exclusions:	
Excludes customer caused misses.	
Business Rules:	
The Due Date starts the clock. The Completion Date is the day that SWBT personnel complete the service order activity, which stops the clock.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(Count of INP N, T, C orders with missed due dates excluding customer caused misses ÷ total number of INP N, T, C orders) *100	Reported for CLEC and all CLECs.
Measurement Type:	
Tier 1 – Medium Tier 2 – None	
Benchmark:	
Parity with SWBT POTS – NFW percent missed due dates.	

LOCAL NUMBER PORTABILITY (LNP)

91. Measurement:

Percentage of LNP Only Due Dates within Industry Guidelines

Definition:

Percentage of LNP Due date interval that meets the industry standard established by the North American Numbering Council (NANC).

Exclusions:

- CLEC or Customer caused or requested delays.
- NPAC caused delays unless caused by SWBT.

Business Rules:

Industry guidelines for due dates for LNP are as follows:

- For Offices in which NXXs are previously opened – 3 Business Days.
- New NXX – 5 Business days on LNP capable NXX.

The above-noted due dates are from the date of the FOC receipt.

For partial LNP conversions that require restructuring of customer account:

- 1-30 TNs: Add one additional day to the FOC interval. The LNP due date intervals will continue to be three business days and five business days from the receipt of the FOC depending on whether the NXX has been previously opened or is new.
- >30 TNs, including entire NXX: The due dates are negotiated.

Levels of Disaggregation:

NXXs previously opened and NXX new (1-30 TNs and greater than 30 TNs)

Calculation:	**Report Structure:**
(Count of LNP TNs implemented within Industry guidelines ÷ total number of LNP TNs) *100	Reported for CLEC and all CLECs.

Measurement Type:

Tier 1 – None
Tier 2 – None

Benchmark:

96.5%. The benchmark will be revised either up or down if industry guidelines are established that are different than the objective stated here.

92. Measurement:	
Percentage of Time the Old Service Provider Releases the Subscription Prior to the Expiration of the Second 9 Hour (T2) Timer	
Definition:	
Percentage of time the old service provider releases subscription(s) to NPAC within the first (T1) or the second (T2) 9-hour timers.	
Exclusions:	
• Customer caused or requested delays. • NPAC caused delays unless caused by SWBT. • Cases where SWBT did the release but the New Service Provider did not respond prior to the expiration of the T2 timer. This sequence of events causes the NPAC to send a cancel of SWBT's release request. In these cases, SWBT may have to re-work to release the TN so it can be ported to meet the due date.	
Business Rules:	
Number of LNP TNs for which subscription to NPAC was released prior to the expiration of the second 9-hour (T2) timer.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(Number of LNP TNs for which subscription to NPAC was released prior to the expiration of the second 9-hour (T2) timer ÷ total number of LNP TNs for which the subscription was released) *100	Reported for CLEC and all CLECs.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
96.5%. The benchmark will be revised either up or down if industry guidelines are established that are different than the objective stated here.	

93. Measurement:	
Percentage of Customer Account Restructured Prior to LNP Due Date	
Definition:	
Percentage of accounts restructured within the LNP order due date established in Measurement No. 91, and/or negotiated due date for orders that contain more than 30 TNs.	
Exclusions:	
None	
Business Rules:	
See Measurement No. 91	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(Number of LNP orders for which customer accounts were restructured prior to LNP due date) ÷ (total number of LNP orders that require customer accounts to be restructured) *100	Reported for CLEC and all CLECs.
Measurement Type	
Tier 1 – Low Tier 2 – None	
Benchmark:	
96.5%	

94. Measurement:

Percentage FOCs Received Within "X" Hours

Definition:

Percentage of FOCs returned within a specified time frame from receipt of complete and accurate LNP or LNP with Loop service request to return of confirmation to CLEC.

Exclusions:

- Rejected orders.
- SWBT only Disconnect orders.
- Orders involving major projects.

Business Rules:

See Business Rule for FOCs

Levels of Disaggregation:

Manually submitted:

- Simple Residence and Business LNP Only (1-19 Lines)< 24 Clock Hours
- LNP with Loop (1-19 Loops) < 24 Clock Hours
- Simple Residence and Business LNP Only (20+ Loops) < 48 Clock Hours
- LNP with Loop (20+ Loops) < 48 Clock Hours
- LNP Complex Business (1-19 Lines) < 24 Clock Hours
- LNP Complex Business (20-50 Lines) < 48 Clock Hours
- LNP Complex Business (50+ Lines) < Negotiated with Notification of Timeframe within 24 Clock Hours

Electronically submitted via LEX or EDI:

- Simple Residence and Business LNP Only (1-19 Lines) < 5 Business Hours
- LNP with Loop (1-19 Loops) < 5 Business Hours
- Simple Residence and Business LNP Only (20+ Loops) < 48 Clock Hours
- LNP with Loop (20+ Loops) < 48 Clock Hours
- LNP Complex Business (1-19 Lines) < 24 Clock Hours
- LNP Complex Business (20-50 Lines) < 48 Clock Hours
- LNP Complex Business (50+ Lines) < Negotiated with Notification of Timeframe within 24 Clock Hours

Calculation:	Report Structure:
(# FOCs returned within "x" hours ÷ total FOCs sent) * 100	Reported for CLEC and all CLECs This includes mechanized from EDI and LEX and manual (FAX or phone orders).

Measurement Type:

Tier 1 – Low
Tier 2 – Medium

Benchmark:

95%

95. Measurement:	
Average Response Time for Non-Mechanized Rejects Returned With Complete and Accurate Codes.	
Definition:	
Average Response time for returning rejected non-mechanized LNP orders with complete and accurate identification of CLEC caused errors in the order.	
Exclusions:	
None	
Business Rules:	
For each non-mechanized order track, the Start time is the Receipt date/time of non-mechanized order; and the End time is the transmittal time of rejection notification of the order due to CLEC-caused errors. The difference between the two is the duration in hours. Obtain cumulative total for all non-mechanized LNP/LNP with Loop orders for the month. SWBT will track the performance for this measurement until its EDI interfaces are tested and approved as satisfactory by the Commission. Subsequent to the above finding, a CLEC that continues to use manual process should track the performance delivered by SWBT and report to SWBT any sub-standard performance. The CLEC has the burden to prove any dispute regarding sub-standard performance.	
Levels of Disaggregation:	
LNP only and LNP with Loop	
Calculation:	**Report Structure:**
Σ(Date & Time of LNP Order – Date and Time LNP Order Acknowledgement) ÷ Total Number of non-mechanized LNP Orders Rejected	Reported for CLEC and all CLECs.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
5 Business Hours.	

96. Measurement:	
Percentage Pre-mature Disconnects for LNP Orders	
Definition:	
Percentage of LNP cutovers where SWBT prematurely removes the translations, including the 10 digit trigger, prior to the scheduled conversion time.	
Exclusions:	
Coordinated Conversions	
Business Rules:	
The count of incidents, on a TN basis, where the translations are removed prior to the scheduled conversion. Count the number of cutovers that are prematurely disconnected (10 minutes before scheduled conversion time).	
Levels of Disaggregation:	
LNP only and LNP with Loop.	
Calculation:	**Report Structure:**
Count of premature disconnects ÷ total LNP conversions * 100	Reported by CLEC and all CLECs disaggregated by LNP and LNP with UNE loop.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
2% or Less premature disconnects starting 10 minutes before scheduled due time.	

97. Measurement:	
Percentage of Time SWBT Applies the 10-digit Trigger Prior to the LNP Order Due Date	
Definition:	
Percentage of time SWBT applies 10-digit trigger, where technically feasible, for LNP or LNP with loop TNs on the day prior to the due date.	
Exclusions:	
Excludes Remote Call Forwarding in DMS 100s, DID in all offices and ISDN Data TNs."	
Business Rules:	
Obtain number of LNP or LNP with loop TNs where the 10-digit trigger was applied on the day prior to due date, and the total number of LNP or LNP with Loop TNs where the 10-digit trigger was applied, where technically feasible.	
Levels of Disaggregation:	
LNP only, and LNP with Loop.	
Calculation:	**Report Structure:**
(Count of LNP TNs for which 10-digit trigger was applied 24 hours prior to due date ÷ total LNP TNs for which 10-digit triggers were applied) * 100.	Reported for CLEC and all CLECs.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
96.5%	

98. Measurement:	
Percentage LNP I-Reports in 10 Days	
Definition:	
Percentage of LNP and LNP with Loop Orders that receive a LNP related network customer trouble report within 10 calendar days of service order completion.	
Exclusions:	
• Excluding subsequent reports and all disposition code "13" reports (excludable reports) with the exception of 1316 unless the trouble report is taken prior to completion of the service order. • Trouble reports caused by CPE or inside wiring.	
Business Rules:	
The Start time is the date/time of completion; and the End time is the date/time of receipt of trouble report. Count the number of LNP and LNP with loop Orders which receive an LNP related trouble report within 10 calendar days of completion.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(Count of LNP and LNP with loop Orders that receive a network customer trouble report within 10 calendar days of service order completion ÷ total LNP and LNP with loop Orders) * 100.	Reported for CLEC and all CLECs, and SWBT.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
Parity with SWBT Retail POTS – No Field Work.	

99. Measurement:	
Average Delay Days for SWBT Missed Due Dates	
Definition:	
Average calendar days from due date to completion date on company missed orders.	
Exclusions:	
On time or early completions	
Business Rules:	
The clock starts on the due date and the clock ends on the completion date based on posted LNP orders.	
Levels of Disaggregation:	
LNP Only	
Calculation:	**Report Structure:**
Σ(LNP Port Out Completion Date– LNP Order due date) ÷ # total port out orders where there was a SWBT caused missed due date* 100	Reported for CLEC and all CLECs and SWBT.
Measurement Type:	
Tier 1 – Medium Tier 2 – Medium	
Benchmark:	
Parity with SWBT Retail POTS – No Field Work.	

100. Measurement:	
Average Time of Out of Service for LNP Conversions	
Definition:	
Average time to facilitate the activation request in SWBT's network.	
Exclusions:	
• CLEC-caused errors. • NPAC-caused errors unless caused by SWBT. • Large ports greater than 500 ports.	
Business Rules:	
The Start time is the Receipt of NPAC broadcast activation message in SWBT's LSMS; and the End time is when the Provisioning event is done in SWBT's LSMS. Calculate the total difference between the start time and end time in minutes for LNP activations during the reporting period.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
Σ(LNP start time – LNP stop time) ÷ # total LNP activated messages	Reported for CLEC and all CLECs
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
60 Minutes unless a different industry guideline is established that will override the benchmark referenced here.	

101. Measurement:	
Percent Out of Service < 60 minutes	
Definition:	
The Number of LNP related conversions where the time required to facilitate the activation of the port in SWBT's network is less than 60, expressed as a percentage of total number of activations that took place.	
Exclusions:	
• CLEC-caused errors. • NPAC-caused errors unless caused by SWBT. • Large ports greater than 500 ports.	
Business Rules:	
The Start time is the Time that an "activate NPAC" broadcast is received in SWBT's LSMS. The End time is the Time the provisioning event is complete in SWBT's LSMS. Count the number of conversions that took place in less than 60 minutes.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(Number of activation events provisioned in less than 60minutes) ÷ (total LNP provisioning events) * 100.	Reported for CLEC and all CLECs.
Measurement Type:	
Tier 1 – Medium Tier 2 – Medium	
Benchmark:	
96.5%	

911

102. Measurement	
Average Time To Clear Errors	
Definition:	
The average time it takes to clear an error after it is detected during the processing of the 911 database file. This is only on resale or UNE loop and port combination orders that SWBT installs.	
Exclusions:	
None	
Business Rules:	
The clock starts upon the receipt of the error file and the clock stops when the error is corrected.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
Σ(Date and time error detected – date and time error cleared) ÷ total number of errors	Reported for CLEC, all CLECs and SWBT.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
Parity	

103. Measurement	
Percent Accuracy for 911 Database Updates	
Definition:	
The percentage of 911 records that were updated by SWBT in error.	
Exclusions:	
CLEC caused errors.	
Business Rules:	
The data required to calculate this measurement will be provided by the CLEC based on the compare file. The CLEC will provide the number of records transmitted and the errors found. SWBT will verify the records determined to be in error to validate that the records were input by SWBT incorrectly. An update is completed without error if the database completely and accurately reflects the activity specified on the order submitted by the CLEC.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(Number of SWBT caused update errors ÷ Total number of updates) * 100	CLEC, All CLECs and SWBT.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
Parity	

104. Measurement	
Average Time Required to Update 911 Database (Facility Based Providers)	
Definition:	
The average time it takes to update the 911 database file.	
Exclusions:	
None	
Business Rules:	
The clock starts on the date/time when the data processing starts and the clock stops on the date/time when the data processing is complete.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
Σ(Date and time data processing begins - date and time data processing ends) ÷ total number of files	Reported for individual CLEC, all CLECs and SWBT.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
Parity	

POLES, CONDUIT AND RIGHTS OF WAY

105. Measurement	
Percentage of requests processed within 35 Days	
Definition:	
The percentage of requests for access to poles, conduits, and right-of-ways processed within 35 days.	
Exclusions:	
None	
Business Rules:	
The clock starts upon the receipt date of the application for access to poles, conduits and right-of-ways and the clock stops upon response date of the application granting or denying access to poles, conduits and right-of-ways.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(count of number of requests processed within 35 days ÷ total number of requests) * 100	Reported for individual CLEC and all CLECs.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
90% within 35 days.	

106. Measurement	
Average Days Required to Process a Request	
Definition:	
The average time it takes to process a request for access to poles, conduits, and right-of-ways.	
Exclusions:	
None	
Business Rules:	
See Measurement No. 105	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
Σ(Date request returned to CLEC – date request received from CLEC) ÷ total number of requests	Reported for individual CLEC and all CLECs.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
See Measurement No. 105. Benchmark will be established during the 6 month review.	

COLLOCATION

107. Measurement
Percentage Missed Collocation Due Dates
Definition:
The percentage of SWBT caused missed due dates for collocation projects.
Exclusions:
None
Business Rules:
The clock starts when SWBT receives, in compliance with the approved tariff, payment and return of proposed layout for space as specified in the application form from the CLEC and the clock stops when the collocation arrangement is complete and ready for CLEC occupancy. Due Date Extensions will be extended when mutually agreed to by SWBT and the CLEC, or when a CLEC fails to complete work items for which they are responsible in the allotted time frame. The extended due date will be calculated by adding to the original due date the number of calendar days that the CLEC was late in performing said work items. Work items include but are not limited to: • CLEC return to SWBT corrected and complete floor plan drawings. • CLEC placement of required component(s). If the business rules and tariff are inconsistent, the terms of the tariff will apply.
Levels of Disaggregation:
Physical • Caged • Shared Caged • Caged Common • Cageless • Adjacent On-site • Adjacent Off-site • Augments to Physical Collocation Virtual • Virtual • Augments to Virtual.

Calculation:	Report Structure:
(count of number of SWBT caused missed due dates for physical collocation facilities ÷ total number of physical collocation projects) * 100	Reported for individual CLEC and all CLECs.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
95% within the due date. Damages and Assessments will be calculated based on the number of days late.	

108. Measurement	
Average Delay Days for SWBT Missed Due Dates	
Definition:	
The average delay days caused by SWBT to complete collocation facilities.	
Exclusions:	
None	
Business Rules:	
See Measurement No. 107	
Levels of Disaggregation:	
Physical, • Caged • Shared Caged • Caged Common • Cageless • Adjacent On-site • Adjacent Off-site • Augments to Physical Collocation Virtual • Augments to Virtual.	
Calculation:	**Report Structure:**
Σ(Date collocation work completed - collocation due date) ÷ total number of SWBT caused missed collocation projects	Reported for individual CLEC and all CLECs by active and non-active as defined in the tariff
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
10% of the tariffed intervals.	

109. Measurement	
Percent of Requests Processed Within the Tariffed Timelines	
Definition:	
The percent of requests for collocation facilities processed within the Tariffed timelines.	
Exclusions:	
Excludes Weekends & Holidays.	
Business Rules:	
The clock starts when SWBT (ICSC) receives the application. The clock stops when SWBT responds back to the application request with a quote.	
Levels of Disaggregation:	
Physical, • Caged • Shared Caged • Caged Common • Cageless • Adjacent On-site • Adjacent Off-site • Augments to Physical Collocation Virtual • Augments to Virtual. .	
Calculation:	**Report Structure:**
(count of number of requests processed within the tariff timeline ÷ total number of requests) * 100	Reported for individual CLEC and all CLECs.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
90% within the tariff timeline	

DIRECTORY ASSISTANCE DATABASE

110. Measurement	
Percentage of Updates Completed into the DA Database within 72 Hours for Facility Based CLECs	
Definition:	
The percentage of DA database updates completed within 72 hours of receipt of the update from the CLEC for directory change only and within 72 hours of the completion date on the provisioning service order where a provisioning order is required.	
Exclusions:	
Excludes Weekends and Holidays.	
Business Rules:	
The date and time stamp on fax updates starts the clock and the date and time when the listing is updated stops the clock. For directory changes that also have a provisioning order, the clock starts when the provisioning order completes and ends when the listing is updated. The update clerks work hours are 6:30 a.m. to 3:00 p.m. Monday through Friday. On requests received after 3:00 p.m. the clock will start at 6:30 a.m. the following day.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(Count of updates completed within 72 hours ÷ total updates) * 100	Reported by CLEC and all CLECs for facility based providers.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
95% updated within 72 hours.	

111. Measurement	
Average Update Interval for DA Database for Facility Based CLECs	
Definition:	
The average update interval for DA database changes for facility based CLECs.	
Exclusions:	
None	
Business Rules:	
See Measurement No. 110	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
Σ (8:00 a.m. of the day following the input into the LSS database – Time update received from CLEC) ÷ total updates	Reported by CLEC and all CLECs for facility based providers.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
48 Hours. This benchmark will be re-evaluated in 6 months.	

112. Measurement	
Percentage DA Database Accuracy For Manual Updates	
Definition:	
The percentage of DA records that were updated by SWBT in error. The data required to calculate this measurement will be provided by the CLEC. The CLEC will provide the number of records transmitted and the errors found. SWBT will verify the records determined to be in error to validate that the records were input by SWBT incorrectly.	
Exclusions:	
None	
Business Rules:	
See Measurement No. 110	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(Number of SWBT caused update errors ÷ Total number of updates) *100	Reported by CLEC and all CLECs for facility based providers.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
97%	

113. Measurement	
Percentage of Electronic Updates that Flow Through the DSR process Without Manual Intervention	
Definition:	
Percentage of DSRs from entry to distribution that progress through SWBT ordering systems to ALPS/LIRA.	
Exclusions:	
Rejected DSRs due to CLEC error.	
Business Rules:	
The number of DSRs, that flow through SWBT's ordering systems and are passed to ALPS/LIRA without manual intervention, divided by the total number of DSRs issued within the reporting period.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(Number of DSRs that flow through to ALPS/LIRA ÷ Total DSRs) * 100	CLEC and All CLECs.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
97%	

COORDINATED CONVERSIONS

114. Measurement	
Percentage of Premature Disconnects (Coordinated Cutovers)	
Definition:	
Percentage of coordinated cutovers where SWBT prematurely disconnects the customer prior to the scheduled conversion.	
Exclusions:	
None	
Business Rules:	
A premature disconnect occurs any time SWBT disconnects the CLEC customer prior to the CLEC authorization.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(Count of prematurely disconnected customers ÷ total coordinated conversion customers) * 100	Reported by CLEC and all CLECs disaggregated by INP and INP with loop, LNP and LNP with loop.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
2% or less premature disconnects starting 10 minutes before scheduled time.	

115. Measurement	
Percentage of SWBT caused delayed Coordinated Cutovers	
Definition:	
Percentage of SWBT caused late coordinated cutovers in excess of "x" (30, 60 and 120) minutes.	
Exclusions:	
None	
Business Rules:	
A coordinated cutover is delayed if SWBT is not ready within "x" (30, 60, and 120) minutes after the frame due time.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(Count of SWBT caused late coordinated cutovers in excess of "x" (30, 60 and 120) minutes ÷ total coordinated cutovers) * 100	Reported by CLEC and all CLECs disaggregated by INP and INP with loop, LNP and LNP with loop.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
8% or less of SWB coordinated conversions beyond 30 minutes, 2% beyond 1 hour from scheduled time or 1% beyond 2 hours.	

116. Measurement	
Percentage of Missed Mechanized INP Conversions	
Definition:	
Percentage of mechanized INP conversions not loaded in the switch within 10 minutes prior to or 30 minutes after the scheduled due time.	
Exclusions:	
None	
Business Rules:	
The clock starts on the Due Date and Frame Due Time and the clock stops on the Switch Date and Time.	
Levels of Disaggregation:	
None	
Calculation:	**Report Structure:**
(Count of mechanized INP conversions not loaded in the switch within 10 minutes prior to or 30 minutes after scheduled due time (Frame Due Time)) ÷ total mechanized INP conversions) * 100	Reported by CLEC and all CLECs.
Measurement Type:	
Tier 1 – Medium Tier 2 – None	
Benchmark:	
See Measurements No. 114 and No. 115	

NXX

117. Measurement	
Percent NXXs loaded and tested prior to the LERG effective date	
Definition:	
The percent of NXXs loaded and tested prior to the LERG effective date.	
Exclusions:	
None	
Business Rules:	
Data for the initial NXX(s) in a local calling area will be based on the LERG effective date or completion of the initial interconnection trunk group(s), whichever is longer. Data for additional NXXs in the local calling area will be based on the LERG effective date.	
Levels of Disaggregation:	
By Market Region	
Calculation:	**Report Structure:**
(Count of NXXs loaded and tested by LERG date ÷ total NXXs loaded and tested) * 100	Reported by CLEC, all CLECs and SWBT.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
Parity	

118. Measurement	
Average Delay Days for NXX Loading and Testing	
Definition:	
Average calendar days from due date to completion date on company missed NXX orders.	
Exclusions:	
None	
Business Rules:	
See Measurement No. 117	
Levels of Disaggregation:	
By Market Region	
Calculation:	**Report Structure:**
Σ(Completion Date - LERG date) ÷ (number of SWBT caused late orders)	Reported for CLEC, all CLECs and SWBT.
Measurement Type:	
Tier 1 – Low Tier 2 – None	
Benchmark:	
Parity	

119. Measurement	
Mean Time to Repair	
Definition:	
Average duration of NXX trouble reports from the receipt of the customer trouble report to the time that the trouble report is cleared.	
Exclusions:	
None	
Business Rules:	
The start time is when the report is received. The stop time is when the report is cleared.	
Levels of Disaggregation:	
By Market Region.	
Calculation:	**Report Structure:**
Σ(Date and time trouble report is cleared with the customer – Date and time trouble report is received) ÷ (number of NXX trouble reports)	Reported for CLEC, all CLECs and SWBT.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
Parity	

BONA FIDE/SPECIAL REQUEST PROCESS (BFRs)

120. Measurement	
Percentage of Requests Processed Within 30 Business Days	
Definition:	
Percentage of Bona fide/Special requests processed within 30 business days.	
Exclusions:	
Excludes weekends and holidays.	
Business Rules:	
The clock starts when SWBT receives a complete and accurate application. The clock stops when SWBT completes application processing for Network Elements that are not operational at the time of the request.	
Levels of Disaggregation:	
• None	
Calculation:	**Report Structure:**
(Count of number of requests processed within 30 days ÷ total number of requests) * 100	Reported by CLEC and all CLECs.
Measurement Type:	
Tier 1 – None Tier 2 – None	
Benchmark:	
90% within 30 business days.	

121. Measurement	
Percentage of Quotes Provided for Authorized BFRs/Special Requests Within X (10,30,90) Days	
Definition:	
Percentage of quotes provided in response to bona fide/Special requests for within X (10,30,90) days.	
Exclusions:	
Requests that are subject to pending arbitration.	
Business Rules:	
The clock starts when SWBT receives a complete and accurate application. The clock stops when SWBT responds back to the application request with a quote.	
Levels of Disaggregation:	
• New Network Elements that are operational at the time of the request. • New Network Elements that are ordered by the FCC. • New Network Elements that are not operational at the time of the Request.	
Calculation:	**Report Structure:**
(Count of number of requests processed within X (10, 30, 90) days ÷ total number (10, 30, 90 Days) of requests) * 100	Reported by CLEC and all CLECs.
Measurement Type:	
Tier 1 – High Tier 2 – High	
Benchmark:	
90% within 10, 30, 90 business days. • Network Elements that are operational at the time of the request – 10 days • Network Elements that are Ordered by the FCC– 30 days • New Network Elements 90 days	

PERFORMANCE MEASUREMENTS

Appendix One

Subsequent Due Date Indicator	
Added to the service order whenever the due date is changed. Order can carry multiple codes. Company delay code overrides subscriber delay code.	
Subscriber(customer) Reasons:	
SA	No Access
SL	Subscriber requests later date
SO	Subscriber – Other
SP	Subscriber requests earlier date
SR	Subscriber not ready
Company (SWBT) Reasons:	
CA	Assignment office
CB	Residence/Business office
CE	Back order / unavailability of equipment or supplies from vendors
CF	Lack of Facilities (outside plant or buried service wires)
CL	Work Load
CO	Other company reasons
CS	Lack of Central Office facilities
CU	Uncontrollable circumstances

PERFORMANCE MEASUREMENTS

Appendix Two

Disposition Codes
The following is a list of Excluded (13) disposition codes.
1301 Request for directories 1302 Reports received as a result of dual service 1303 Request for information revertive dialing codes – muliparty line (no longer applicable) 1304 CVAS Disconnect or hang up 1305 Request for information provided by another department – Business office, claims, etc. 1306 Request for SWBT to locate buried facilities 1307 Request to lower or raise wire 1308 Report on phone number which is properly disconnected, unassigned or suspended with disconnect recording on line. 1309 Report on feature customer is not being billed for 1310 Request to verify busy condition of line 1311 Report of non-SWBT plant or facilities 1313 Reports due to incorrect network administration records 1314 Request that SWBT ground be connected to electric company ground 1316 Report on service order activity prior to midnight of completion date 1317 Report on incorrect number; Regenerate report on correct number 1320 Request from Business Office 1321 Customer unable to reach business office 1322 Request from vendor for testing 1323 Changes in network structure (i.e. 10 digit dialing) 1324 Miscellaneous (Commendations, callback request for information only) 1335 Customer request service guarantee (tech gave credit) 1336 Customer request service guarantee (tech did not give credit) 1380 CNA Report Cancel by customer

PERFORMANCE MEASUREMENTS

Appendix Three

Percentage of Missed Collocation Due Dates Damages and Assessments Methodology

The following methodology will apply in calculating Tier 1 liquidated damages and Tier 2 assessments for the percentage of missed collocation due dates measurement.

Tier 1:

1. The benchmark will be 95% of Collocations completed within the due date. For example, if a CLEC has 30 collocations complete in the study month, SWBT can miss two due dates and still be in compliance. In this case no damages would apply. If, three due dates out of 30, SWBT would be out of compliance. In this case, damages would be payable on the number of collocations required to be back within the 95% benchmark.
2. Damages are calculated based on the number of days that SWBT misses the due date using the per occurrence values in the MOU, multiplied by the number of days from completion to due date.
3. In order to determine which collocations to use in the damage calculation, the missed collocation due dates will be ranked based on the number of days missed from highest to lowest. SWBT will pay damages on the highest number of days missed until the number of collocations missed is within the benchmark. For example, in the example above, if the three misses had missed days of 20, 10 and three, SWBT would pay damages on 20 missed days.
4. The collocation measurement will be used in the determination of the "K" number of allowances. In addition, it may also be excluded as defined in the MOU in the order of progression also contained there. The number of underlying data points used for the purposes of determining the order of exclusion will be the total days late for collocation projects.
5. All collocation completions in a month will be considered for the calculation of liquidated damages.
6. The critical Z-value will not be subtracted from the benchmark to determine compliance.

Tier 2:

1. Assessments will be applicable, as described in the MOU, when the measurement has been out of compliance for three consecutive months for the aggregate of all CLEC collocations.
2. Compliance will be defined as described in the Tier 1 damages above.
3. If assessments are applicable, the rolling three month average for days missed will be used to calculate the total assessments payable to the Texas State Treasury.

LASR (Local Area Service ?)
EPI - Electronic Data Interchange
LEX (Local Exchange ?) NO
OC&C (Optical Carrier NO
AECN (added enhancement? NO
OCN FID
CRIS (Database) Customer Record Information System
CABS (Carrier Access Billing System)
A.MA /ECS (Automated Message Acctg) (Energy
ACD (Automatic Call Distributors)
POTS (Plain Old Telephone Service)
ADSL (Asymmetrical Digital Subscriber Line)
NPAC (Numbering Plan Area Code)
SORD (Service Order Retrieval & Distribution)

Telecommunications Attorney

ATTACHMENT 2

ACRONYMS

ACRONYMS

ACRONYM	DEFINITION
AAA	American Arbitration Association
AIN	Advanced Intelligent Network
ALI	Automatic Location Identification/
AMA	Automated Message Accounting
AMI	Alternate Mark Inversion
ANSI	American National Standards Institute
ARPM	Average Revenue Per Message
APTOS	Automated Pricing, Terminals, Options and Services
ATIS	Alliance for Telecommunications Industry Solutions
ATM	Asynchronous Transfer Mode
B8ZS	Bipolar 8 Zero Substitution
BICI	Broadband Inter-Carrier Interface
BITS	Building Integrated Timing Supply
BLV/BLVI	Busy Line Verification/Interrupt
BOSS	Billing & Ordering Support System
BRCS	Business and Residential Customer Service
C	Network Element Combination
C-DTTA	Combination of Dedicated Transport & Tandem
C-LPLS	Combination of Loop & Local Switching
C-LSCTSSDBTS	Combination Local Service, Common Transport Signaling, Databases and/or Tandem Switching
CABS	Carrier Access Billing System
CAMA ANI	Centralized Automatic Message Accounting - Automatic Number Identification
CAP	Competitive Access Provider
CCITT	Consultative Committee on International Telegraph & Telephone
CCS	Common Channel Signaling
CCSNIS	Common Channel Signaling Network Interface Specification
CESAR	Customers' Enhanced System for Access Requests
CIC	Carrier Identification Code
CLASS	Custom Local Area Signaling Service
CLC/CLEC	Competitive Local Exchange Carrier
CLEO	Cleopatra (subsystem of CESAR)
CLFI	Common Language Facility Interface
CLLI	Common Language Location Identifier
CMDS	Centralized Message Distribution Systems
CMIP	Coded Mark Inversion Protocol
CO	Central Office
CPE	Customer Premises Equipment

CPN	Calling PartY Number
CRDD	Customer Requested Due Dates
CT	Common Transport
CY	Current Year
D4	Digital Channel Bank Type 4
DA	Directory Assistance
DACS	Digital Access Crossconnect Systems
DB	Database
DB	Service Central Points/Databases
DCC	Data Communications Channel
DCS	Digital Cross-Connect System
DF	Distribution Frame
DID	Direct Inward Dialing
DLC	Digital Loop Carrier
DLCI	Data Link Connection Identifier
DMOQs	Direct Measures of Quality
DN	Directory Numbers
DN-RI	Directory Number - Route Index
DS-1	Digital Signal Level One
DS-3	Digital Signal Level Three
DS0	Digital Signal Level Zero
DSN	Data Set Name
DSX	Digital Cross Connect
DT	Dedicated Transport
DTMF	Dual-Tone Multi Frequency
E	Network Element
E&M	Ear & Mouth Signaling
E-LP	Element Loop
EAMF	Equal Access Multi-Frequency
EBCDIC	Extended Binary-Coded Decimal Interexchange Code
EBI	Electronic Bonding Interface
EFT	Electronic Fund Transfer
EI	Electronic Interface
EICC	Expanded Interconnection Cross Connect
EMR	Exchange Message Record
EO	End Office
ESF	Extended Super Frame
ESL	Essential Service Line
ESN	Emergency Service Number
ETTR	Estimated Time to Repair
FCC	Federal Communications Commission
FDI	Feeder Distribution Interface
FN	Fiber Node
FOC	Firm Order Confirmation

FRF	Frame Relay Forum
FUNI	Framebased User to Network Interface
GTT	Global Title Translation
HDT	Host Digital Terminal
HFC	Hybrid Fiber Coax
HFC-HDT	Hybrid Fiber Coax - Host Digital Terminal
ID	Remote Identifiers
IEC	Interexchange Carrier
IECs	Interexchange Carriers
IEEE	Institute of Electrical and Electronic Engineers
IISP	Interim Interswitch Signaling Protocol
ILEC	Incumbent Local Exchange Carrier
IN	Intelligent Network
INA	Integrated Network Access
INP	Interim Number Portability
ISC	Interconnection Services Center
ISDN	Integrated Services Digital Network
ISDNUP	Integrated Services Digital Network User Part
ISNI	Intermediate Signal Network Identifier
ISO	International Standardization Organization
ISUP	Integrated Services User Part
ITU	International Telecommunications Union
IVMS	Interswitch Voice Messaging Service
LARG	LIDB Access Routing Guide
LASS	Local Area Signaling Services
LATA	Local Access Transport Area
LC	Loop Concentrator/Multiplexor
LCC	Line Class Code
LD	Loop Distribution
LEC	Local Exchange Carrier
LEC DA	LEC Directory Assistance
LEC SCE	LEC Service Creation Environment
LEC SCP	LEC Service Control Point
LEC SMS	LEC Service Management System
LEC SSP	LEC Service Switching Point
LERG	Local Exchange Carrier Routing Guide
LF	Loop Feeder
LFACS	Loop Facilities Assignment and Control System
LGX	Lightguide Cross-Connect
LIDB	Line Information Data Base
LIDB/AS	Line Information Data Base Administrative System
LI-OFFICE	Local Interconnection Office
LMI	Local Management Interface
LNP	Local Number Portability

LP	Loop
LRECL	Logical Record Length
LRN	Local Routing Number
LS	Local Switching
LSNE	Local Switching Network Element
LSO	Local Serving Office
LSSGR	LATA Switching Systems Generic Requirements
MDF	Main Distribution Frame
MDU	Multiple Dwelling Unit
MDU/BCL	Multiple Dwelling Unit/Business Customer Location
MECAB	Multiple Exchange Carrier Billing
MECOD	Multiple Exchange Carriers Ordering and Design
MF	Multi-Frequency
MIB	Management Information Base
MLT	Mechanized Loop Tests
MOP	Methods of Procedure
MOS	Modified Operator Services
MOU	Minutes of Use
MR	Modification Request
MRVT	MTP Routing Verification Test
MSAG	Master Street & Address Guide
MTP	Message Transfer Port
NANP	North American Numbering Plan
NDM	Network Data Mover
NEBS	Network Equipment Building System
NI	Network Interface Device
NID	Network Interface Device
NIU	Network Interface Unit
NMS	Network Management System
NNI	Network to Network Interface
NPA	Numbering Plan Area
NVT	Network Validation Test
OA	Operator Assistance
OAM	Operation and Maintenance
OAM&P	Operations Administration Maintenance & Provisioning
OBF	Ordering & Billing Forum
OC	Optical Carrier
OC 3	Optical Carrier Level 3
ODS	Optical Distribution
OLI	Originating Line Indicator
OMAP	Operations, Maintenance & Administration Part
ORT	Operational Readiness Test
OS	Operator Services
OSS	Operations Support Systems

OSSGR	Operator Services Systems Generic Requirements
PBSM	Pacific Bell Service Manager
PBX	Private Branch Exchange
PDH	Plesiochronous Digital Hierarchy
PEC	Primary Exchange Carrier
PIC	Primary Interexchange Carrier
PLU	Percent Local Usage
PNP	Permanent Number Portability
POI	Point of Interface
POI	Points of Interconnection
POT	Point of Termination
POTS	Plain Old Telephone Service
PREMIS	Premise Information System
PRI	Primary Rate Interface
PSAP	Public Safety Answering Point
PUC	Public Utilities Commission
RAO	Regional Accounting Office
RCF	Remote Call Forwarding
RECFM	Record Format
RI	Route Index
RI-PH	Route Index - Portability Hub
ROW	Right of Way
RPC	Regional Processing Center
RSM	Remote Switch Module
RT	Remote Terminal
SAC	Service Area Code
SAG	Street Address Guide
SCCP	Signaling Connection Control Point
SCE	Service Creation Environment
SCP	Service Control Points
SDH	Synchronous Digital Hierarchy
SECAB	Small Exchange Carrier Access Billing
SL	Signaling Link Transport
SMDI-E	Standard Message Desk Interface - Enhanced
SMS	Service Management System
SNI	Simple Network Interface
SNMP	Simple Network Management Protocol
SONET	Synchronous Optical Network
SORD	Service Order Retrieval and Distribution
SPOC	Single Point of Contact
SPOI	Signaling Point of Interconnection
SRVT	SCCP Routing Verification Test
SS	SS7 Message Transfer & Connection Control
SS7	Signaling System 7

SSP	Switching Services Port
STP	Signaling Transfer Point
STS	Synchronous Transport Signal
STS-1	Synchronous Transport Signal Level 1
STSn	Synchronous Transport Signal Level N
SWF-DSI	Switched Functional DS1 Service Capability
T1.5	T Carrier Transport @ 1.544 mb
T3	T Carrier Transport @ 45 mb
T&M	Time & Material
TCAP	Transaction Capabilities Application Port
TDEV	Time Deviation
TDI	Tie Down Information
TIA/EIA	Telecommunications Industries Association/Electronic Industries Association
TR	Technical Requirements
TS	Tandem Switching
TSG	Trunk Sub-Group
TSGR	Transport System Generic Requirements
TSLRIC	Total Service Long Run Incremental Cost
TSP	Telecommunications Services Priority
UNI	User to Network Interface
USCC	Unbundled Service Cross Connect
VB	Variable Block
VCI	Virtual Channel Identifier
VF	Voice Frequency
V&H	Vertical & Horizontal
WDM	Wavelength Division Multiplexing
WSP	Wireless Service Provider
WTN	Working Telephone Number