BELLSOUTH

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June 25, 2001

VIA HAND DELIVERY

Mr. David Waddell, Executive Secretary
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, Tennesse 37243

Re: *Docket to Establish Generic Performance Measurements, Benchmarks and Enforcement Mechanisms for BellSouth Telecommunications, Inc.*
Docket No. 01-00193

Gentlemen:

Enclosed please find BellSouth's non-proprietary responses to AT&T's First Set of Interrogatories and Request for Production of Documents. BellSouth will provide its proprietary responses upon the entry of an appropriate Protective Order. Copies of the enclosed have been served upon counsel of record.

Very truly yours,

Guy M. Hicks

GMH/jej

Enclosure

395907

CERTIFICATE OF SERVICE

I hereby certify that on June 25, 2001, a copy of the foregoing document was served on the following parties, via the method indicated:

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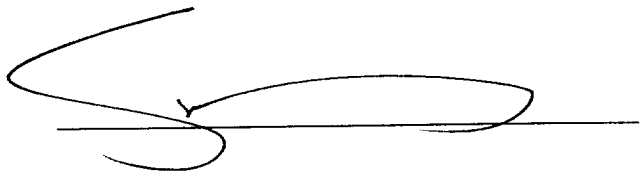

REQUEST: Please state the date that BellSouth will begin to provide CLECs with raw data for each of the following reports:

Ordering

- LNP_PCT_Reject_Interval_Service_Requests_Total_Mech.txt
- LNP_PCT_Reject_Interval_Service_Requests_Partial_Mech.txt
- LNP_PCT_Reject_Interval_Service_Requests_Fully_Mech.txt
- LNP_Reject_Interval_Service_Requests_Total_Mech.txt
- LNP_Reject_Interval_Service_Requests_Partial_Mech.txt
- LNP_Reject_Interval_Service_Requests_Fully_Mech.txt
- LNP_Firm_Order_Confirmation_Total_Mech.txt
- LNP_Firm_Order_Confirmation_Partial_Mech.txt
- LNP_Firm_Order_Confirmation_Fully_Mech.txt
- Note that no LNP Non-Mechanized data is reported in the Ordering
- reports or raw data files

Provisioning

- LNP_Total_Order_Cycle_Time_Mechanized.txt
- LNP_Total_Order_Cycle_Time_Mechanized_with_Appointment_codes.txt
- LNP_Percent_Missed_Installation_Appointments.txt
- LNP_Disconnects.txt
- Note again that no LNP Non-Mechanized data is reported in the Provisioning reports or raw data files

Billing

- Invoice Accuracy CLEC (Region)
- Mean Time to Deliver Invoices CLEC (Region)
- Usage Data Delivery Accuracy CLEC
- Usage Timeliness & Completeness CLEC

RESPONSE: Only reports generated through the PMAP processor have "raw" data files associated with them. BellSouth plans to migrate the LNP reports into PMAP in June and the Billing reports into the PMAP-NG at the end of the year. When this process is complete, both reports will have the "raw" data files available on the Web Site.

REQUEST: Identify, on an individual measure basis, any and all studies or other documents, that BellSouth has caused to be prepared or possesses that justify and/or explain the differences between its SQM measures and its SEEM measures, including, but not limited to, differences in disaggregation.

RESPONSE: BellSouth is not aware of any studies or other documents that BellSouth has caused to be prepared or possesses on an individual measure basis that justify and/or explains the differences between BellSouth's SQM measures and its SEEM measures, other than the publicly available testimony that BellSouth has filed in various proceedings in the region, which is already available to AT&T and, in most instances, would have already been served on AT&T in those proceedings, such as the North Carolina performance measures dockets and the Louisiana performance measures workshops and proceedings.

By way of further answer, however, BellSouth would note that the concept of having SEEM measures that are different than the SQM measures has been around since these plans were first proposed three years ago. BellSouth would state that it has adopted the idea of having different measurement sets in the two types of plans based on other plans adopted by other companies around the country, such as Verizon, which has had its plans approved by the FCC. Indeed, the FCC itself has recognized, in approving interLATA applications for other companies that performance plans and remedy plans need not include the same measures.

The logic of having plans with different measurements is fully supported by the facts. BellSouth believes, for instance, and based on its testimony filed in other jurisdictions, AT&T agrees, that measurements in the SQM that are interdependent should not result in multiple penalties being paid for a single incident that causes a failure to provide parity. BellSouth also believes that measures that are diagnostic or that result in parity by design do not belong in a penalty plan. Most of these conclusions are intuitive, however, and BellSouth has not performed studies to verify what seems obvious.

REQUEST: Describe the method(s) and/or procedure(s) BellSouth uses to ensure the accuracy of the error assignment for the flow-through report.

RESPONSE: The mechanized systems used by the LCSC representatives provide information to identify the reason the LSR has fallen out for manual review. BellSouth service representatives use the BellSouth Business Rules to determine the requirements for correct issuance of an LSR which is the same document which should be utilized by the CLEC to correctly issue a Local Service Request.

As part of BellSouth efforts to improve flow-through, BellSouth assigns a Customer Support Manager to each CLEC. The role of the CSM is to assist the CLEC in identifying the cause of and reducing rejects and clarifications, thereby improving flow-through. The CSM reviews rejects and clarifications causing the most problem for a CLEC. As part of that review, any rejects or clarifications sent to the CLEC in error are identified on a case-by-case basis and forwarded to the appropriate BellSouth center manager for additional coaching and/or training of the particular BellSouth representative.

Additionally, BellSouth has a quality group which reviews a statistically-valid sample of work performed by the LCSC representative to ensure the accuracy of the issued order, based on the information submitted by the CLEC via the LSR.

REQUEST: For each of the following SEEM sub-measures, list any and all CLEC products and/or services offered by BellSouth that will be aggregated together for comparison with BellSouth's retail data:

a. Percent Missed Installation Appointments – UNE Loops
b. Average Completion Interval (OCI) – UNE Loops
c. % Provisioning Troubles Within 30 Days – UNE Loops
d. Missed Repair Appointments – UNE Loops
e. Customer Trouble Report Rate – UNE Loops
f. Maintenance Average Duration – UNE Loops
g. Percent Repeat Troubles Within 30 Days – UNE Loops

RESPONSE: The product categories used by SEEM are as follows:

a. Percent Missed Installation Appointments – UNE Loops
UNE 2-Wire Loop Non-Design, UNE 2-Wire Loop Design, UNE Loop Other

b. Average Completion Interval (OCI) – UNE Loops
UNE 2-Wire Loop Non-Design, UNE 2-Wire Loop Design, UNE Loop Other

c. % Provisioning Troubles Within 30 Days – UNE Loops
UNE 2-Wire Loop Non-Design, UNE 2-Wire Loop Design, UNE Loop Other

d. Missed Repair Appointments – UNE Loops
UNE 2-Wire Loop Non-Design, UNE 2-Wire Loop Design, UNE Loop Other

e. Customer Trouble Report Rate – UNE Loops
UNE 2-Wire Loop Design, UNE 2-Wire Loop Non-Design, UNE Loop Other

RESPONSE: (Cont'd)

f. Maintenance Average Duration – UNE Loops
UNE 2-Wire Loop Non-Design, UNE 2-Wire Design, UNE Loop Other

g. Percent Repeat Troubles Within 30 Days – UNE Loops
UNE 2-Wire Loop Non-Design, UNE 2-Wire Loop Design, UNE Loop Other

REQUEST: Please provide the standard order interval offered by BellSouth for each of the products/services listed in response to Interrogatory No. 4, sub-measures (a) through (g).

RESPONSE: The information requested is publicly available in the Products and Services Interval Guide located on the Internet at http://www.interconnection.bellsouth.com/guides/html/usoc.html

REQUEST: List each and every BellSouth product and/or service that is included in each of the following SEEM retail analogs:

a. Retail Residence and Business
b. Retail Residence and Business Dispatch
c. Retail Design

RESPONSE: The product categories used by SEEM are as follows:

a. Retail Residence and Business –
Residence POTS
Residence Switched Based Orders
Business Switched Based Orders
Business
PBX Non-Design
Centrex/ESSX Non-Design
ISDN Residence
ISDN Business

b. Retail Residence and Business Dispatch –
Residence POTS
Business
PBX Non-Design
Centrex/ESSX Non-Design
ISDN Residence
ISDN Business

c. Retail Design – Design
PBX Design
Centrex/ESSX Design
ISDN Design
Design (HICAPS, MegaLink, Tie Lines, etc.)

REQUEST: Please specify the standard offered order interval for each of the BellSouth products and/or services identified in response to Interrogatory No. 6.

RESPONSE: The information requested is publicly available in the Products and Services Interval Guide located on the Internet at http://www.interconnection.bellsouth.com/guides/html/usoc.html

REQUEST: For the months of December 2000, January and February 2001, please state, expressed in percentages and by BellSouth retail analog category, the number of each BellSouth product and/or service sold.

RESPONSE: The table below provides the percentages, by BellSouth retail analog category of each BellSouth product and/or service sold for the months of December 2000, January and February 2001.

Tennessee Interrogatories
Item Number 8 (Ordering Volume)

	December	January	February
Residence	91.184%	91.056%	89.164%
Business	7.304%	7.549%	9.048%
PBX	0.123%	0.084%	0.130%
Centrex	0.233%	0.236%	0.361%
ISDN	0.316%	0.330%	0.343%
Design	0.841%	0.745%	0.954%
Total	100.000%	100.000%	100.000%

REQUEST: Please describe in detail BellSouth's procedure(s) for ensuring that its raw data includes all BellSouth and CLEC transactions, and is otherwise accurate.

RESPONSE: BellSouth has developed and implemented a comprehensive Performance Measurements Quality Assurance Plan (PMQAP) that ensures the completeness and accuracy of raw data. Further, a Third Party Test, being conducted in Georgia by KCI, includes a "Metrics Data Integrity Verification and Validation Review" (PMR4). This test evaluates the completeness and accuracy of raw data produced by BellSouth and includes CLP and BellSouth transactions. As of the latest report issued by KPMG on March 12, 2001, BellSouth had satisfied 76 of the 86 test criteria in PMR4. As of June 8, 2001, KPMG had informally acknowledged that issues associated with six additional test criteria had been resolved. BellSouth and KPMG are continuing work on the remaining four test criteria.

REQUEST: Explain with specificity how the product disaggregation for provisioning and maintenance sub-measures specified in BellSouth's SEEM proposal, supports BellSouth's claim that SEEM incorporates "like-to-like" comparisons with BellSouth's retail results.

RESPONSE: The statistical calculation (Truncated Z) that supports the SEEM proposal compares provisioning and maintenance work at the lowest level available. The data is compared at appropriate levels, e.g. geography, timing, handling, product, order type, etc. The statistical testing process treats the data as follows:

1. Identifies variables that may affect the performance measure
2. Records these important confounding covariates
3. Adjusts for the observed covariates in order to remove potential biases and to make the CLEC and the ILEC units as comparable as possible

The "cell" is the point (below the wire center level) at which like-to-like comparisons are made. For example, all BellSouth retail POTS services, for residential customers, requiring a dispatch in a particular wire center, at a particular point in time will be compared directly to CLEC resold services for residential customers, requiring a dispatch, in the same wire center, at a particular point in time. When determining compliance, these cells can have a positive or negative value.

REQUEST: Describe BellSouth's process, including raw data collection, systems accessed for data, and report creation, used for assembling the performance measure billing reports. In your description, state what aspects of the process are manual or electronic, and to the extent to which it is manual, whether it is a totally or partially manual process.

RESPONSE:

BellSouth Billing Metrics/Usage: ***Timeliness, Completeness and Mean Time to Deliver***

- The Usage Data Delivery Accuracy/Timeliness and Completeness have their base information in the **mechanized processes** of CRIS (Customer Record Information System), BIBS (BellSouth Industrial Billing System) and CMDS (Centralized Message Distribution System).

- The CRIS and BIBS system provide bases for CLEC (Competitive Local Provider) OCN (Operating Company Number) usage data and are totally **mechanized processes.**

- The CMDS system provides the base for BellSouth Usage Aggregate data and the CMDS system is a totally mechanized system sponsored by Telcordia Technologies of which BellSouth is a client.

- Billing usage data for a reporting month requires data processed through the last workday of the reporting month. This is a little different from Invoice Metrics in that the Invoice Metrics requires completion of the 20 Billing periods for a reporting month and may be extended into the following calendar month before data is available.

- CLEC usage data is extracted and combined from the ODUF (Optional Daily Usage File) and the ADUF (Access Daily Usage File) processes to determine CLEC OCN metrics. The ODUF and ADUF data are mechanized cumulative mechanized reports on the CRIS system and the cumulative data is reset after the last working day of the reporting month. This extraction is a **manual process** but the resetting of the cumulative data is a function of the mechanized processes.

- BellSouth usage data is extracted from the Intra-Company data of the CMDS system reporting month data. This is also a **manual process**.

BellSouth Billing Metrics/Usage:
Timeliness, Completeness and Mean Time to Deliver (Cont'd)

- Billing usage data for a reporting month is extracted from the mechanized files through **manual processes** of individual BBI Specialists. This is a totally **manual process** requiring downloads to PCs by the Specialists utilizing Microsoft Excel. The Specialists perform **manual processes** in order to present data in a format to the BBI Metrics group. The BBI metrics group performs additional **manual processes** on the data to present data in a format usable by the PMAP process. Microsoft Excel is the tool utilized. Transfer to the PMAP process is also a **manual process**. The finalized format is a Microsoft Excel document. The process flow contains proprietary information and will be provided upon the execution of an appropriate non-disclosure agreement.

BellSouth Billing Metrics/Invoices: ***Invoice Accuracy***

- The process flow contains proprietary information and will be provided upon the execution of an appropriate non-disclosure agreement.

- The Invoice Accuracy measurements for UNE, Resale and Interconnection are based on billing and adjustments processed in CRIS (Customer Record Information System) and CABS (Carrier Access Billing System) mechanized systems.

- The CABS system provides the absolute value of adjustments and the absolute value of billing dollars for the CLEC Interconnection-Invoice Accuracy measurement for the data month. This report is downloaded via the Service Quality Measurement Intranet application.

- The CABS system also provides the absolute value of the total BST CABS adjustments for the data month. This report is also downloaded via the Service Quality Measurement Intranet application.

- The CRIS system feeds billing and adjustment information to the Financial Data Base System (FDB) which provides download reports of the absolute value of adjustments and absolute value of billing for the CLEC Resale and UNE Invoice Accuracy measurements for the data month.

BellSouth Billing Metrics/Usage:
Timeliness, Completeness and Mean Time to Deliver (Cont'd)

- The FDB system also provides download reports of the absolute value of BST CRIS adjustments and the absolute value of BST CRIS billing and the absolute value of CABS billing.

- Adjustments are reviewed and non-billing adjustments are manually excluded. Test accounts are also manually excluded from billing and adjustment totals.

- Manual format changes are made to the files to present the data in a format usable by the PMAP process. Transfer to the PMAP process is a manual process. The finalized format is a Microsoft Excel document.

- The process flow contains proprietary information and will be provided upon the execution of an appropriate non-disclosure agreement.

BellSouth Billing Metrics/Invoices: *Meantime to Deliver Invoices*:

- The Mean Time To Deliver Invoices statistics are extracted, from the Customer Record Information System (CRIS) and the Carrier Access Billing System (CABS). These are both **mechanized billing systems**.

- Some CRIS data is **manually** obtained by querying against a WEB-based database. Additional data is obtained by viewing jobs and running queries against the CRIS Data Base through Sysout Archival and Retrieval (SAR), a subsystem of both CRIS & CABS. Various reports that are generated by the Bill Mailing Process, through day-to-day operations, are reviewed and used to capture any other data needed to complete the data gathering process.

- CABS data is **manually** obtained from several billing reports that are **mechanically** produced in SAR, during the course of the month. These reports provide data for all bill media delivered in CABS format.

BellSouth Billing Metrics/Invoices: ***Meantime to Deliver Invoices***: (Cont'd)

- The data is gathered throughout the month, as each bill period closes. All bill periods must have closed and bills posted before reports can be completed. Since the last bill period, in CRIS, is the 29th, the reporting is carried over into the first few days of the following month.

- The total process of gathering this data is a **manual** one and involves **manual** reporting from several Bill Distribution Supervisors, **manual** extractions and compilations by individual Bill Distribution Specialists, for a reporting month. This **manual process** requires downloads to PCs by the Specialists and utilization of Microsoft Excel. The Specialists perform **manual processes** in order to present data in a format to the BBI Metrics group.

- The process flow contains proprietary information and will be provided upon the execution of an appropriate non-disclosure agreement.

REQUEST: For each and every measure for which BellSouth provides raw data, please state what data, if any, is excluded from the PMAP raw data files.

RESPONSE: See response to AT&T's 1st Request for Production Item No. 1. This attachment is proprietary and will be provided subject to a nondisclosure Agreement. See the following chart for exclusions in the PMAP.

PMAP RAW DATA FILES
WITH EXCLUSIONS

PMAP RAW DATA FILE	EXCLUSIONS
Ordering: % Rejected Service Requests	• Service Requests canceled by the CLEC prior to being rejected/clarified.
Ordering: FOC Timeliness (Trunk)	• Rejected LSRs • Designated Holidays are excluded from the interval calculation. • LSRs which are identified and classified as "Projects" • The following hours for Partially mechanized and Non-mechanized LSRs are excluded from the interval calculation: Residence Resale Group – Monday through Saturday 7:00PM until 7:00AM From 7:00 PM Saturday until 7:00 AM Monday Business Resale, Complex, UNE Groups – Monday through Friday 6:00PM until 8:00AM From 6:00 PM Friday until 8:00 AM Monday. The hours excluded will be altered to reflect changes in the Center operating hours. The LCSC will accept faxed LSRs only during posted hours of operation. The interval will be the amount of time accrued

PMAP RAW DATA FILE	EXCLUSIONS
	from receipt of the LSR until normal closing of the center if an LSR is worked using overtime hours. In the case of a Partially Mechanized LSR received and worked after normal business hours, the interval will be set at one (1) minute
Ordering: FOC Timeliness (Non-Trunk)	• Rejected LSRs • Designated Holidays are excluded from the interval calculation. • LSRs which are identified and classified as "Projects" • The following hours for Partially mechanized and Non-mechanized LSRs are excluded from the interval calculation: Residence Resale Group – Monday through Saturday 7:00PM until 7:00AM From 7:00 PM Saturday until 7:00 AM Monday Business Resale, Complex, UNE Groups – Monday through Friday 6:00PM until 8:00AM From 6:00 PM Friday until 8:00 AM Monday. The hours excluded will be altered to reflect changes in the Center operating hours. The LCSC will accept faxed LSRs only during posted hours of operation. The interval will be the amount of time accrued from receipt of the LSR until normal closing of the center if an LSR is worked using overtime hours. In the case of a Partially Mechanized LSR received and worked after normal business hours, the interval will be set at one (1) minute.
Ordering: Reject Interval	• Service Requests canceled by CLEC prior to being rejected/clarified. • Designated Holidays are excluded from the interval calculation. • LSRs which are identified and classified as "Projects" • The following hours for Partially mechanized and Non-mechanized LSRs are excluded from the interval calculation:

PMAP RAW DATA FILE	EXCLUSIONS
	Residence Resale Group – Monday through Saturday 7:00PM until 7:00AM From 7:00 PM Saturday until 7:00 AM Monday Business Resale, Complex, UNE Groups – Monday through Friday 6:00PM until 8:00AM From 6:00 PM Friday until 8:00 AM Monday. The hours excluded will be altered to reflect changes in the Center operating hours. The LCSC will accept faxed LSRs only during posted hours of operation. The interval will be the amount of time accrued from receipt of the LSR until normal closing of the center if an LSR is worked using overtime hours. In the case of a Partially Mechanized LSR received and worked after normal business hours, the interval will be set at one (1) minute.
Provisioning: Percent Missed Installation Appointments	• Canceled Service Orders • Order Activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Listing Orders Test Orders, etc.) • Disconnect (D) & From (F) orders • End User Misses on Local Interconnection Trunks
Provisioning: Percent Missed Installation Appointments (Trunks)	• Canceled Service Orders • Order Activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Listing Orders Test Orders, etc.) • Disconnect (D) & From (F) orders • End User Misses on Local Interconnection Trunks
Provisioning: % Troubles within 30 Days of Provisioning	• Canceled Service Orders • Order Activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Listing Orders, Test Orders, etc.) • D & F orders • Trouble reports caused and closed out to Customer Provided Equipment (CPE)
Provisioning: % Troubles within 30 Days of Provisioning (Trunk)	• Canceled Service Orders • Order Activities of BellSouth or the CLEC associated with internal or administrative use of

PMAP RAW DATA FILE	EXCLUSIONS
	local services (Record Orders, Listing Orders, Test Orders, etc.) • D & F orders • Trouble reports caused and closed out to Customer Provided Equipment (CPE)
Provisioning: Held Order Interval & Mean	• Order Activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Listing Orders, Test Orders, etc.) • Disconnect (D) & From (F) orders • Orders with appointment code of 'A' for Rural orders.
Provisioning: Held Order Interval & Mean (Trunks)	• Order Activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Listing Orders, Test Orders, etc.) • Disconnect (D) & From (F) orders • Orders with appointment code of 'A' for Rural orders.
Provisioning: Order Completion Interval (OCI)	• Canceled Service Orders • Order Activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Listing Orders, Test Orders, etc.) • Disconnect (D&F) orders (Except "D" orders associated with LNP Standalone) • "L" Appointment coded orders (where the customer has requested a later than offered interval) • End user-caused misses
Provisioning: Order Completion Interval (OCI) (Trunks)	• Canceled Service Orders • Order Activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Listing Orders, Test Orders, etc.) • Disconnect (D&F) orders (Except "D" orders associated with LNP Standalone) • "L" Appointment coded orders (where the customer has requested a later than offered interval) • End user-caused misses
Provisioning: Jeopardy Interval and Percent Jeopardy	• Orders held for CLEC end user reasons • Disconnect (D) & From (F) orders • Non-Dispatch Orders
Provisioning: Average Completion Notice Interval	• Cancelled Service Orders • Order Activities of BellSouth or the CLEC

PMAP RAW DATA FILE	EXCLUSIONS
Notice Interval	associated with internal or administrative use of local services (Record Orders, Listing Orders, Test Orders, etc.) • D&F orders (Exception: "D" orders associated with LNP Standalone)
Provisioning: Total Service Order Cycle Time	• Canceled Service Orders • Order Activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Listing Orders, Test Orders, etc.) • D (Disconnect - Except "D" orders associated with LNP Standalone.) 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.
Provisioning: CCC – Hot Cuts Timelines	• Any order canceled by the CLEC will be excluded from this measurement. • Delays caused by the CLEC • Unbundled Loops where there is no existing subscriber loop and loops where coordination is not requested. • All unbundled loops on multiple loop orders after the first loop.
Provisioning: CCC – Coordinated Customer Conversions	• Any order canceled by the CLEC will be excluded from this measurement. • Delays due to CLEC following disconnection of the unbundled loop • Unbundled Loops where there is no existing subscriber loop and loops where coordination is not requested.
Maintenance: Percent Repeat Troubles Within 30 Days	• Trouble tickets canceled at the CLEC request. • BellSouth trouble reports associated with internal or administrative service. • Customer Provided Equipment (CPE) troubles or CLEC Equipment Trouble.
Maintenance: Customer Trouble Report Rate	• Trouble tickets canceled at the CLEC request. • BellSouth trouble reports associated with internal or administrative service. • Customer Provided Equipment (CPE) troubles or CLEC Equipment Trouble. • LMOS - Code 7 (Test OK), Code 8 (Found OK -

PMAP RAW DATA FILE	EXCLUSIONS
	In), Code 9 (Found OK - Out) • WFA - No Trouble Found (NTF)
Maintenance: Maintenance Average Duration	• Trouble tickets canceled at the CLEC request. • BellSouth trouble reports associated with internal or administrative service. • Customer Provided Equipment (CPE) troubles or CLEC Equipment Trouble.

REQUEST: For all sub-measures for which BellSouth is currently providing performance -- results, please state the following: BellSouth and CLEC means, BellSouth and CLEC standard deviations, and BellSouth and CLEC sample sizes.

RESPONSE: BellSouth is currently providing performance results via the Performance Measurement Analysis Platform (PMAP) on the Internet. Where these measurements specify a mean, the mean for BellSouth and the CLEC is available on this web site. Standard deviations are not reported in PMAP.

BellSouth has not filed performance results in Tennessee to date. In this proceeding BellSouth has proposed a set of Performance Measurements that, if adopted by the Tennessee Regulatory Authority, will include standard deviations and number of observations where appropriate.

REQUEST: Please provide the following values missing from the first 2 tables in Attachment 3 of the BellSouth's Comments filed April 9, 2001 in Docket No. 01-00193:

- o In both tables: the ILEC samples sizes for each of the ten cells.
- o In the first table (MIA): the count of missed ILEC appointments for each of the ten cells.
- o In the second table (OCI): the ILEC standard deviation for each of the ten cells.

RESPONSE: The purpose of these tables was simply to illustrate the calculation of the amount of the penalty, based upon a set of hypothetical conditions. No actual values have been assigned to these tables.

The tables referenced in this interrogatory clearly state that they are illustrative. There are no ILEC sample sizes or count of missed ILEC appointments. With regard to the standard deviations on the 2nd chart, the Modified Z statistic was made up for illustrative purposes.

REQUEST: For the months of December 2000, January and February 2001, what are the average CLEC and BellSouth sample sizes for each SQM sub-measure.

RESPONSE: See response to Item No. 13

REQUEST: In BellSouth's SEEM, within which disaggregation category are LNP standalone performance results reported for the following measures?

a. Average Completion Interval
b. Percent Troubles Within 30 Days
c. Missed Repair Appointment
d. Customer Trouble Report Rate
e. Maintenance Average Duration
f. Repeat Troubles Within 30 Days
g. FOC Interval
h. Rejection Interval

RESPONSE: For a, g, and h above, LNP Standalone data does not currently appear in the SEEM reports. The LNP Gateway data will be migrated into the PMAP database in June 2001. For Ordering Measures (g-all and h-fully mechanized LSRs) LNP Standalone data will appear in those SEEM reports at that time. For Provisioning Measures (a) LNP Standalone data will not appear, however, the two most important aspects of LNP Standalone order experience is measured in the SEEM reports LNP-Percent Missed Installation Appointments and LNP-Disconnect Timeliness.

For Maintenance Measures (b – f) LNP Standalone historical data is not maintained in the BellSouth maintenance systems (LMOS and WFA) because the number has been ported to a new carrier. If an CLEC enters a trouble in TAFI on the ported number, TAFI will check for the proper translations and repair the translation if they are incorrect.

REQUEST: In BellSouth's SEEM, within which disaggregation category are LNP with UNE loop performance results reported for the following measures?

a. Average Completion Interval
b. Percent Troubles Within 30 Days
c. Missed Repair Appointment
d. Customer Trouble Report Rate
e. Maintenance Average Duration
f. Repeat Troubles Within 30 Days
g. FOC Interval
h. Rejection Interval

RESPONSE: For a, g, and h above, UNE Loop with LNP data does not currently appear in the SEEM reports. The LNP Gateway data will be migrated into the PMAP database in June 2001. For Ordering Measures (g-all and h-fully mechanized LSRs) UNE Loop with LNP data will appear in those SEEM reports at that time. For Provisioning Measures (a) UNE Loop with LNP data appears today in UNE Loops or UNE Loop + Port Combinations.

For Maintenance Measures (b – f) UNE Loop with LNP data appears today in UNE Loops or UNE Loop + Port Combinations.

REQUEST: In BellSouth's SEEM, within which disaggregation category are Switch Ports performance results reported for the following measures?

a. Average Completion Interval
b. Percent Troubles Within 30 Days
c. Missed Repair Appointment
d. Customer Trouble Report Rate
e. Maintenance Average Duration
f. Repeat Troubles Within 30 Days
g. Percent Missed Appointments
h. FOC Interval
i. Rejection Interval

RESPONSE: The data for Switch Ports does not appear in SEEM results. In SEEM, BellSouth does not have a separate disaggregation category for Switch Ports due to the low volume of Switch Ports data.

REQUEST: In BellSouth's SEEM, within which disaggregation category are Transport performance results reported for the following measures?

a. Average Completion Interval
b. Percent Troubles Within 30 Days
c. Missed Repair Appointment
d. Customer Trouble Report Rate
e. Maintenance Average Duration
f. Repeat Troubles Within 30 Days
g. Percent Missed Appointments

RESPONSE: Transport data does not appear in the SEEM results. In SEEM, BellSouth does not have a separate disaggregation category for Transport due to the low volume of Transport data.

REQUEST: In BellSouth's SEEM, within which disaggregation category are EEL performance results reported for the following measures?

a. Average Completion Interval
b. Percent Troubles Within 30 Days
c. Missed Repair Appointment
d. Customer Trouble Report Rate
e. Maintenance Average Duration
f. Repeat Troubles Within 30 Days
g. Percent Missed Appointments
h. FOC Interval
i. Rejection Interval

RESPONSE: EEL data is captured in the UNE Combo Other SEEM disaggregation category.

REQUEST: Please provide all information on test responsiveness results used by BellSouth in the development of its benchmark for the Loop Make Inquiry –Electronic measure.

RESPONSE: The benchmark for the Loop Make-up Inquiry – Electronic is that ordered by the Georgia Public Service Commission (GAPSC) in Docket No. 7892-U.

Since this is a new system and a new measure, BellSouth has no historical data to support the development of this benchmark.

REQUEST: Describe each and every step of the process by which data flows from the CLEC to receipt of a response by the CLEC for the OSS Response Interval Measure and identify what portion of the data flow process is included in the time captured for this measure by BellSouth.

RESPONSE: As a part of the pre-ordering process, CLECs use the Local Exchange Navigation System (LENS) and the Telecommunications Access Gateway (TAG) to query BellSouth legacy systems. Information such as valid addresses, telephone number reservation, verification of feature/service availability, and calculation of customer due dates is provided.

The response interval for each of these queries begins when the client application (LENS or TAG) submits a request to the desired legacy system and ends when the response is returned to the client application. Depending on the number of concurrent request(s) response time for each request could be instantaneous. Please refer to Section 1 of BellSouth's SQM for specifics on the definitions, business rules, calculations and the systems involved in this process.

REQUEST: Describe each and every step of the process by which data flows from the CLEC to receipt of a response by the CLEC for the FOC Timeliness Measure and identify what portion of the data flow process is included in the time captured for this measure by BellSouth.

RESPONSE: A CLEC submits electronic LSRs via TAG, LENS or EDI. The start time for the FOC interval begins at the first occurrence of the LSR on the BellSouth side of the interface. If the LSR is automatically processed and flows through LEO to LESOG, appropriate service orders are generated and sent to SOCS. If the LSR falls out for manual handling (partially mechanized), service orders are issued by LCSC service representatives via DOE, SONGS or EXACT. Once the service orders which are associated with a particular LSR pass up front edits and are accepted by SOCS, the Firm Order Confirmation notice is returned to the CLEC via TAG, LENS or EDI. The stop time for the FOC interval is the last occurrence of the LSR on the BellSouth side of the Gateway before it is returned to the CLEC.

Manually submitted LSRs, which are faxed to the LCSC, are input into an internal tracking system called LON. The start time for these LSRs is the receive timestamp from the fax server. Service representatives in the LCSC issue service orders via DOE, SONGS or EXACT using data provided on the LSR. The service orders are then processed to SOCS. The stop time for a manually submitted LSR is when the service representative sends the Firm Order Confirmation notice to the CLEC via the fax server.

Please refer to BellSouth's SQM for details on this measure.

REQUEST: Describe each and every step of the process by which data flows from the CLEC to receipt of a response by the CLEC for the Reject Interval Measure and identify what portion of that flow is included in the time captured for this measure by BellSouth.

RESPONSE: A CLEC submits electronic LSRs via TAG, LENS or EDI. The start time for the Reject interval begins at the first occurrence of the LSR on the BellSouth side of the interface. If an error or omission is made to required fields on the LSR when it's submitted to BellSouth, the request will be returned to the CLEC via a reject/clarification notification. An LSR is considered fully mechanized when the system identifies the error or omission and "auto clarifies" it back to the CLEC. An electronically submitted LSR is considered partially mechanized when it falls out to the LCSC for manual processing. In either case, the stop time for the reject interval is the last occurrence of the LSR on the BellSouth side of the interface before it's rejected/clarified to the CLEC.

Manually submitted LSRs, which are faxed to the LCSC are input into an internal tracking system. The interval is calculated using the elapsed time from receipt of a valid LSR. The start time for the interval is the date and time stamp of the FAX or the date and time a mailed LSR is received in the LCSC until notice of the reject (clarification) is returned to the CLEC via LON.

REQUEST: Describe each and every step of the process by which data flows from the CLEC to the receipt of a response by the CLEC for the Completion Notice Interval Measure and identify what portion of that flow is included in the time captured for this measure by BellSouth.

RESPONSE: The data flow for the Average Completion Notice Interval report begins at the completion of the service order. The completion notice then travels from SOCS to LEO and subsequently to the CLEC interface for mechanized orders and the release of the notice to C-SOTS for non-mechanized orders.

The start time for all orders is the completion time stamp either by the field technician or the 5PM due date stamp. The end time for orders sent to BellSouth through a mechanized system (EDI, LENS, TAG) is the time the notice was transmitted to the CLEC interface (LENS, EDI, or TAG). The end time for orders sent to BellSouth through a non-mechanized system is time the order information is updated to the C-SOTS database. Non-mechanized orders will be included in the measure with the June 2001 Report for May data.

REQUEST: Describe in detail how BellSouth gathers data regarding CLEC interface users that is needed to implement the following business rules used to determine if a full outage is incurred for the Interface availability Measure:

"...When only one work center accesses an application or system and 40% or more of the clients in that work center cannot access the application."

RESPONSE: The measurements for Interface Availability (OSS-2 for Pre-Ordering/ Ordering and OSS-3 for Maintenance/Repair) are based upon the BellSouth problem management process, a tool developed by BellSouth to track and measure OSS performance. Originally created for internal BellSouth use, the process was designed to report outages of specific applications and the hardware on which they reside, enabling the internal measurement of OSS availability. Although the process is now applied to interfaces utilized by external customers, the original intent and interpretation of the OSS measurement process as developed by BellSouth have not changed.

BellSouth has rewritten the definitions and business rules for Interface Availability (OSS 2 and OSS-3) to more clearly state the intent of the measures. The business rule, "When only one work center accesses an application or system and 40% or more of the clients in that work center cannot access the application," is no longer applicable.

REQUEST: With respect to the Pre-Order Order Interface Availability measure, please state whether BellSouth considers it an outage if the CLEC interface, i.e. LENS, EDI, TAG is down, but the legacy systems are functionally available?

RESPONSE: BellSouth reports full outages of the CLEC interfaces, i. e., LENS, EDI, TAG, even if the legacy systems are functionally available.

REQUEST: Describe the actions taken by BellSouth to disconnect telephone numbers in the central office switch following the receipt of an activate message indicating the porting of a number by a CLEC.

RESPONSE: The answer to this question depends on whether the porting is stand-alone or if with loop.

For stand alone, the CLEC sends the activate message, the Number Portability Administration Center (NPAC) sends a broadcast message to all BellSouth signifying the porting of the number via a mechanized interface, referred to as "The LNP – Gateway". BellSouth's mechanized interface either issues the disconnect order, or in some instances places the order on a work list for the LCSC. The LCSC constantly monitors activity on the work list and issues the disconnect once the activate message notifier has been received by The Gateway. Once the disconnect is issued, either mechanically or manually, a request is mechanically made to the switch to disconnect the number.

For porting of a number with a loop conversion that is coordinated between BellSouth and the CLEC, the disconnect order is issued upfront but is held for release to the switch. Once BellSouth performs the loop conversion, BellSouth notifies the CLEC that conversion activity is complete so that the CLEC can perform acceptance testing of the loop. Once the CLEC notifies BellSouth that the loop is accepted, and the number is ported, the BellSouth center performing the coordination of the loop, releases the previously issued disconnect order to allow for the switch translation which disconnects the number from the BellSouth switch.

For a detailed process flow description of tasks to be performed by BellSouth and CLECs to port numbers, please refer to the "LNP Reference Guide" located on the Internet at
http://www.interconnection.bellsouth.com/guides/html/other_guides.html

REQUEST: For the database update interval measure, indicate whether the "date and time stamp when a service order is completed" noted in the business rules is for a "CP" completion or a "CPX" completion.

RESPONSE: It is not CP or CPX. The batch start time starts the clock for this measure and the batch complete time stops the clock. Directory Listings, Directory Assistance, and LIDB databases are updated using a batch process. All completed orders, regardless of type (CLEC or BST), are collected into a single batch file during the day after the order is completed (CP). This file is used to update the databases. This measurement is parity by design because the data required to update a particular database is stripped off the SOCS order and added to the file on a first-in-first-out basis. The batch is uploaded to the appropriate database after the completion of the business day.

REQUEST: Describe in detail BellSouth's process for obtaining a statistically valid sample of CLEC orders for the Percent (%) Database Update Accuracy measure.

RESPONSE: The order universe is the total quantity of CLEC orders completed in the report month. The statistically valid sample is derived by applying an algorithm (provided by BellSouth's Internal Auditing Department) to the order universe. A Stratified Random Sampling for Proportions algorithm is then used to select the orders to be pulled for the sample.

REQUEST: Identify and describe the methods by which BellSouth captures, tracks, and reports problems with NPA/NXX activation and their resolution.

RESPONSE: The Exchange (NXX) Single Point of Contact (SPOC) will mechanically track via Work Force Administration/Dispatch In (WFA/DI) the provisioning and testing of all new NXXs received in the center. Open Query System (OQS) reports will be created to track the provisioning and testing process for each new NXX assigned using WFA/DI standard tracking keys and/or standard work types for each Network Infrastructure Support Center (NISC).

The WFA/DI standard tracking key for each new NXX that the SPOC will use in its OQS reports is: **NXX/####**. (#### Equals the NPA and NXX to be provisioned, i.e. NXX/205827). In order for the NXX SPOC to track the provisioning and testing process for new NXXs the standard tracking key above should be used on all work request generated in WFA/DI for all the appropriate work groups in the NISC.

The NISC Complex Translations Group (CTG) will provision and make operational test calls for all new NXX requests received in the center via WFA/DI. At the completion of the provisioning process, the NISC ET (Electronic Technician) will initiate a manual test call to the new NXX, provided a milliwatt test number has been assigned by the Customer requesting the NXX, to ensure that the call switches. The new NXX cannot be tested if the Customer does not provide a milliwatt test number. Also, until the trunk group to the Customer has been turned up for operation, testing cannot be performed on the new NXX. In addition, if the number of trunks provided to access the Customer's test number is limited, testing is significantly delayed. After the CTG has completed the provisioning and manual test call for the new NXX, the NISC BVA (Billing Verification Assistant) will be notified to start MATV (Mechanized AMA Testing and Validation) via a work request in WFA/DI.

RESPONSE: (Cont.)

The BVA will update the MATV system's offices database for the new NXXs being provisioned and will also update the terminating test number table for the new NXX milliwatt test number. The BVA will use pre-defined MATV test scripts to schedule a test call to the new NXX milliwatt test number from all affected central offices/rate centers. MATV will automatically validate the test calls for routing and billing requirements.

The BVA will refer and track via WFA/DI all translations troubles detected by MATV to the CTG for verification and correction. This step will be repeated until the problems have been eliminated and the test is clean. Once the translations are tested correct, the BVA will complete the work request in WFA/DI, which is the completion step for the provisioning and testing of the new NXX.

REQUEST: Identify the BellSouth SQM measure(s) that include the time interval for completion of xDSL loop conditioning and describe in detail the start and stop times of the interval, and any information or request types excluded from the interval.

RESPONSE: The measure that reports XDSL loop conditioning is Average Order Completion Interval (OCI). The interval starts at the issuance of a valid service order into SOCS: the order is then completed when the BellSouth installation technician connects the loop to the network interface and tests to insure that the loop meets the electrical parameters for an ADSL loop.

Exclusions are the same for all disaggregations of OCI: Orders with 'L' appointment code, Orders with missed appointments or supplemented due dates by the CLEC/end user, Cancelled orders, Disconnect orders, and BellSouth or CLEC orders associated with internal or administrative use of local services (Record, Listing, and Test orders).

REQUEST: Please identify each of BellSouth's LCSC locations that are included in the Speed of Answer in Ordering Center Measure.

RESPONSE: The following LCSC locations are included in the Speed of Answer in Ordering Center measure:

Atlanta, GA
Birmingham, AL
Jacksonville, FL

REQUEST: Please describe any differences in the data included in the LSRs in the denominator of the Percent LSRs total mechanized measure, and the LSRs included in the "LSRs submitted" in the flow-through report.

RESPONSE: BellSouth does not have a measurement called "Percent LSRs total mechanized." However in an effort to be responsive, it is assumed this request refers to Percent Rejected Service Requests. Both the Percent Rejected Service Requests and the LSRs submitted portion of the flow through report are intended to assess performance on a separate process and compare those results to the standard for that particular metric, if a standard is appropriate. The metrics are independent because the Business Rules for these measures are different. The Percent Rejected Service Requests report does not include Directory Listings orders. Directory Listings was not included as a disaggregation category in the Georgia Order in Docket No. 7892-U and BellSouth did not disaggregate this data into a separate report.

REQUEST: Please describe any differences in the data included in the LSRs in the fully mechanized rejections measure and the LSRs in the auto-clarifications of the flow-through report.

RESPONSE: These measurements are intended to assess performance on a separate process and compare those results to the standard for that particular metric, if a standard is appropriate. The metrics are independent.

The Fully Mechanized Rejections Measurement and the Flow Through reports use the same data but separate business rules to process some of the results. Specifically, electronically rejected LSRs can be categorized as Partially Mechanized rejects instead of Fully Mechanized rejects because the LSR gets electronically rejected and then later claimed by a service representative. The Flow Through report uses slightly different business rules, making these LSRs appear as Fully Mechanized Rejects.

REQUEST: Please describe any differences in the data included in the LSRs in the partially mechanized rejections measure and the LSRs included in the "CLEC caused fallout" of the flow-through report.

RESPONSE: See response to Item No. 35.

REQUEST: Please describe any differences in the data included in the LSRs in the fully mechanized FOCs measure and the LSRs included in the "Issued Service Orders" of the flow-through report.

RESPONSE: These measurements are intended to assess performance on a separate process and compare those results to the standard for that particular metric, if a standard is appropriate. The metrics are independent.

REQUEST: Please describe any differences in the completed orders used in the calculation of the missed appointment metric and the completed orders used in the calculation of the completion notice measure.

RESPONSE: The Missed Appointment metric measures all completed orders with the exception of exclusions for: Disconnects, BellSouth or CLEC record/administrative orders, and end user missed appointments on Interconnection Trunk Orders.

The Completion Notice Measure has the same exclusions and will measure the same completed orders with the June reporting of May data. Until that time, the metric only reported Mechanized Orders and excluded Non-Mechanized orders.

REQUEST: Please describe any differences in the completed orders used in the calculation of the Missed appointments – LNP measure and the completed orders in the calculation of the LNP Disconnect Timeliness measure.

RESPONSE: The completed orders in LNP Percent Missed Installation Appointments report (PMI) and the LNP Disconnect Timeliness measure are the total number of orders associated with LNP standalone. The "C" order which notifies the down-stream systems the number is being ported (trigger) and the associated disconnect order, which removes the number from the BST records are captured in this report.

The LNP Disconnect Timeliness report is not using completed orders in its calculation. The measure is using a total of disconnected telephone numbers completed in the central office switch in a reporting period.

REQUEST: Please describe any differences in the completed orders used in the calculation of the Missed Appointments UNE with LNP metric and the completed orders used in the calculation of the Hot Cut Timeliness measure.

RESPONSE: In the Missed Appointment metric, all UNE with LNP orders are measured that do not fall into the exclusions of disconnects, record orders, or cancels.

In the Hot Cut Timeliness report, only the UNE with LNP orders that involve coordinated Hot Cuts are included.

REQUEST: Describe in detail the process BellSouth uses to track and report performance results for coordinated customer conversions (loops with and without number portability).

RESPONSE:

1. UNE (Unbundled Network Element) service orders are updated in the WFA (Work Force Administration) database from SOCS to facilitate the conversion from the BellSouth switch to the CLEC switch.

2. WFA updates CCSS (Coordinated Cut Scheduling System). CCSS is updated in 3-hour increments from WFA with pending and completed service order information.

3. CWINS technicians use the CCSS presentation to document 'cut start' and 'cut complete' time for orders with LNP. If INP is involved, the technician documents the time required for BellSouth to port the number.

4. Twice daily all information contained in CCSS is uploaded to the ICAIS database for storage and use for report preparation.

5. PMAP takes a snapshot of the previous month's data on the third day following the end of the month.

6. PMAP uses the data to prepare the report.

REQUEST: Identify all supporting documentation that references or discusses the process. BellSouth uses to track and report performance results for coordinated customer conversions (loops with and without number portability).

RESPONSE: Please refer to BellSouth's SQM which will be filed in this docket as an exhibit to Dave Coon's Direct Testimony.

Also see Response to AT&T's 1st Request for Production of Documents Item No. 2., Attachment No. 1. The attachment is Proprietary and will be provided subject to the Nondisclosure Agreement.

REQUEST: With respect to the Coordinated Hot Cut Timeliness % Within Interval Measure, please provide all performance data, studies, or other information that support the benchmark of 95% within four-hour window for IDLC loops.

RESPONSE: BellSouth has no studies or other supporting data. This proposed benchmark was based on Subject Matter Expert (SME) estimates of the time required to provision a loop when it must be moved from IDLC to a copper pair or UDLC.

REQUEST: For the months of October 2000 through February 2001, please state, by month, the percentage of coordinated cutovers in Tennessee that involved IDLC.

RESPONSE: On June 15, 2001, the TRA ordered that BellSouth shall provide data for the months December 2000 through February 2001, rather than the period specified above.

However, the systems in which the requested information is retained, only retains this type of information for 60 days. Consequently, the data for December 2000 through February 2001 is not currently in BellSouth's possession, custody or control. The only responsive information that remains in BellSouth's possession is for the months of April and May 2001. BellSouth manually reviewed every order involving Coordinated Cutovers for these months to identify whether IDLC was involved.

In April 2001, 12.4 % of the Coordinated Time-Specific Cutovers involved IDLC. In May 2001, 20.4% of the Coordinated Time-Specific Cutovers involved IDLC.

REQUEST: For the months of October 2000 through February 2001, please state the number and percentage of coordinated customer conversion service orders in Tennessee involving IDLC for which BellSouth failed to meet the Coordinated Hot Cut Timeliness % Within Interval Measure.

RESPONSE: On June 15, 2001, the TRA ordered that BellSouth shall provide data for the months December 2000 through February 2001, rather than the period specified above.

However, the systems in which the requested information is retained, only retains this type of information for 60 days. Consequently, the data for December 2000 through February 2001 is not currently in BellSouth's possession, custody or control. The only responsive information that remains in BellSouth's possession is for the months of April and May 2001. BellSouth manually reviewed every order involving Coordinated Cutovers for these months to identify whether IDLC was involved and, where IDLC was involved, the time where BellSouth failed to meet the Coordinated Hot Cut Timeliness % Within Interval Measurement.

In April 2001, none of the Time Specific Coordinated Cutovers involving IDLC failed to meet the Coordinated Hot Cut Timeliness % Within Interval Measurement. In May 2001, 5% of the Time Specific Coordinated Cutovers involving IDLC failed to meet the Coordinated Hot Cut Timeliness % Within Interval Measurement.

REQUEST: Describe in detail the carrier notifications that are included in BellSouth's change control measures and the carrier notifications that are excluded from BellSouth's change control measures.

RESPONSE: AT&T is a participant in BellSouth's change control process and is, or should be, fully aware and familiar with the carrier notifications that are used in the change control process. Of those notifications, the following will be excluded from the measurements that BellSouth will propose in its SQM when filed with the TRA:

> Type "6" – defects. A type 6 defect request is change that corrects problems discovered in production versions of an application interface. These problems are where the interface is not working in accordance to the BellSouth baseline user requirements or the business rules that BellSouth has published or otherwise provided to the CLECs. In addition, if functional requirements agreed upon by BellSouth and the CLECs result in inoperable functionality, even though software-user requirements and business rules match, this will be addressed as a defect.

All other notifications under the change control process will be included.

For additional details and definitions, please refer to BellSouth's Change Control documentation located at:

http://www.interconnection.bellsouth.com/markets/lec/ccp_live/ccp_doc_bccp.html

REQUEST: Describe in detail the documentation releases that are included in BellSouth's change control measures and the documentation releases that are excluded from BellSouth's change control measures.

RESPONSE: BellSouth's current process, Section 4.0 Change Control Process Flow, Part 2 –Types 2-5 Process Flow, states the following:

"Documentation changes for business rules will be provided 30 days or more in advance of implementation date."

"CLEC ("CLEC") notification of documentation updates (non-system changes) will be posted 5 (five) business days in advance of documentation posting date."

The complete Change Control Process Document Version 2.3 is available at the following web site:
www.interconnection.bellsouth.com/markets/lec/ccp_live/index.html

REQUEST: Please state the average interval by which BellSouth initiates local service for a new retail customer through the "win-back" process via loop cut-overs performed in the central office.

RESPONSE: This response assumes that by loop cutovers the CLEC Coalition is referring to a situation where BellSouth is providing the loop and the CLEC is providing the switching. With this scenario, a loop conversion with LNP would apply. The average interval is 7-10 days from the date the end user notifies the BellSouth retail office until the loop conversion and port occurs.

REQUEST: Beginning with October 1, 2000 provide the service order accuracy rate for CLEC orders and the service order accuracy rate for BellSouth's retail operation for Tennessee. For purposes of this interrogatory, "service order accuracy rate" with respect to CLEC orders is defined as the percentage of service orders for CLECs that were processed by BellSouth exactly as they were ordered or prepared by the CLECs.

RESPONSE: BellSouth objects to this interrogatory on the ground that it is unduly burdensome and oppressive. BellSouth does not mechanically record, on a historical basis, whether the service order requests submitted by the CLECs were processed exactly as submitted or whether some change was necessitated. The only way to ascertain the answer to this question would be to go back and find the service order request submitted by the CLEC and then compare it to the service order that was issued, which would have to be done manually, if it could be done at all for the period requested.

REQUEST: Please describe in detail BellSouth's rationale for the 85% met benchmarks for the Percent Flow through Service Requests measure.

RESPONSE: BellSouth was ordered by the Georgia Public Service Commission (GAPSC) in Docket No. 7892-U to adopt this benchmark. The Flow Through Measures are regional reports, therefore, BellSouth has proposed this benchmark in all states.

REQUEST: Explain why "D" orders associated with LNP Standalone Orders are not excluded from the Average Order Completion Interval measure.

RESPONSE: There are a minimum of two orders necessary for the LNP Standalone product, a "C" order is issued to notify the downstream systems that the number is being ported and a disconnect order, "C" or "D" order, which disconnects the number from the BST records, completing the provisioning process and unlocking the E911 records. The clock starts when a valid "D" or "C" order is assigned in SOCS and stops when the system completes the "D" or "C" order in SOCS, therefore, the "D" and/or "C" order must be counted.

REQUEST: For each SQM measure, describe the source of the data used to calculate the performance measurement results, e.g. LESOG, SOCs, etc.

RESPONSE: Responsive information is contained in the attached matrix entitled Data Source Cross Reference.

BellSouth Telecommunications, Inc.
TRA Docket No. 01-00193
AT&T's 1st Set of Interrogatories
May 7, 2001
Item No. 52
Attachment No. 1

ATTACHMENT

Data Source Cross Reference

SQM Measures	Source	Storage Location "Barney"	Storage Location PMAP	Storage Location Manual Archived on CD Rom
OSS-1	RSAG, ATLAS, DSAP, CRIS, OASIS, HAL, COFFI, P/SIMS,	YES	YES	NO
OSS-2	EDI, HAL, LENS, LEO, LESOG, P/SIMS, TAG, ATLAS, COFFI, BOCRIS, DSAP, RSAG, SOCS, SONGS, RNS, ROS	YES	YES	NO
OSS-3	BST TAFI, CLEC TAFI, CLEC ECTA, CRIS, LMOS, LNP, MARCH, OSPCM, PREDICTOR, SOCS	YES	YES	NO
OSS-4	CRIS, DELTH, DLR, LMOS, LMOSupd, LNP, MARCH, OSPCM, PREDICTOR, SOCS, NIW	YES	YES	NO
PO-1	Excel File extracted from BRITE Database	YES	YES	NO
PO-2	TELCORDIA SOLUTIONS	YES	YES	NO
O-1	TAG, EDI	YES	YES	NO
O-2	TAG, EDI	YES	YES	NO
O-3	LENS, TAG, EDI, LESOG, LEO	YES	YES	NO
O-3A	LENS, TAG, EDI, LESOG, LEO	YES	YES	NO
O-4	LENS, TAG, EDI, LESOG, LEO	YES	YES	NO
O-4A	LENS, TAG, EDI, LESOG, LEO	YES	YES	NO

Data Source Cross Reference

SQM Measures	Source	Storage Location "Barney"	Storage Location PMAP	Storage Location Manual Archived on CD Rom
O-5	LENS, TAG, EDI, LESOG, LEO	YES	YES	NO
O-6	LENS, TAG, EDI, LESOG, LEO	YES	YES	NO
O-7	LEO, LON, EXACT	YES	YES	NO
O-8	LEO, LON, EXACT	YES	YES	NO
O-9	LEO, LON, EXACT	YES	YES	NO
O-10	LON - Excel File extracted from BRITE Database	YES	NO	NO
O-11	LON, LEO	YES	YES	NO
O-12	MERDIAN	YES	YES	NO
O-13	LNP Gateway, LON	YES	NO	NO
O-14	LNP Gateway, LON	YES	NO	NO
O-15	LNP Gateway, LON	YES	NO	NO
P-1	SOCS	YES	YES	NO

Data Source Cross Reference

SQM Measures	Source	Storage Location "Barney"	Storage Location PMAP	Storage Location Manual Archived on CD Rom
P-2	SOCS	YES	YES	NO
P-3	SOCS	YES	YES	NO
P-4	SOCS	YES	YES	NO
P-5	SOCS	YES	YES	NO
P-6	SOCS	YES	YES	NO
P-7	SOCS, WFA, OCS	YES	YES	NO
P-7A	SOCS, WFA, OCS	YES	YES	NO
P-7B	SOCS, WFA, OCS	YES	YES	NO
P-7C	SOCS, WFA, OCS	YES	YES	NO
P-8	SOCS	YES	YES	NO
P-9	SOCS	YES	YES	NO
P-9	SOCS	YES	YES	NO

Data Source Cross Reference

		Storage Location		
SQM Measures	Source	"Barney"	PMAP	Manual Archived on CD Rom
P-10	LEO, LON, SOCS	YES	YES	NO
P-11	SOCS	YES	YES	NO
P-12	SOCS	YES	NO	NO
P-13	SOCS	YES	NO	NO
P-14	SOCS	YES	NO	NO
MR-1	LMOS, WFA	YES	YES	NO
MR-2	CTTR, CRIS, MARVES, LMOS	YES	YES	NO
MR-3	LMOS, WFA	YES	YES	NO
MR-4	LMOS, WFA	YES	YES	NO
MR-5	LMOS, WFA	YES	YES	NO
MR-6	MERDIAN	YES	YES	NO
MR-7	MANUAL	NO	NO	YES

Data Source Cross Reference

SQM Measures	Source	Storage Location "Barney"	Storage Location PMAP	Storage Location Manual Archived on CD Rom
B-1	CABS-CLEC, CABS-BST, CRIS-CLEC, CRIS-BST, MAREV	YES	YES	NO
B-2	CRIS-CLEC, CRIS-EDI, CRIS-BST, CABS-BST, CABS-CLEC	YES	YES	NO
B-3	CMDS SB, CMDS SBC, CLEC MSG Delay-ODUF, CLEC MSG Delay-ADUF,BST Total # of Packs & Pack Fails-CMDS, CLEC Pack Fails - Manual	YES	YES	NO
B-4	CMDS SB, CMDS SBC, CLEC MSG Delay-ODUF, CLEC MSG Delay-ADUF	YES	YES	NO
B-5	CMDS SB, CMDS SBC, CLEC MSG Delay-ODUF, CLEC MSG Delay-ADUF	YES	YES	NO
B-6	CMDS SB, CMDS SBC, CLEC MSG Delay-ODUF, CLEC MSG Delay-ADUF	YES	YES	NO
B-7	CRIS, CABS	YES	YES	NO
B-8	CRIS, CABS	YES	YES	NO
OS-1	Excel File supplied by Operator Svcs.	NO	NO	YES
OS-2	Excel File supplied by Operator Svcs.	NO	NO	YES
DA-1	Excel File supplied by Operator Svcs.	NO	NO	YES
DA-2	Excel File supplied by Operator Svcs.	NO	NO	YES

Data Source Cross Reference

SQM Measures	Source	Storage Location "Barney"	Storage Location PMAP	Storage Location Manual Archived on CD Rom
D-1	Excel File supplied by Network Planning & Sup.	NO	NO	YES
D-2	Excel File supplied by Network Planning & Sup.	NO	NO	YES
D-3	Excel File supplied by Network Planning & Sup.	NO	NO	YES
D-4	Excel File supplied by Network Planning & Sup.	NO	NO	YES
D-5	Excel File supplied by Network Planning & Sup.	NO	NO	YES
E-1	Excel File supplied by E911 Vendor to PMAP Production for PMAP entry	YES	YES	N/A
E-2	Excel File supplied by E911 Vendor to PMAP Production for PMAP entry	YES	YES	N/A
E-3	Excel File supplied by E911 Vendor to PMAP Production for PMAP entry	YES	YES	N/A
TGP-1	Manually extracted doc file from NIW	NO	NO	YES
TGP-2	Manually extracted doc file from NIW	NO	NO	YES
TGP-3	Manually extracted doc file from NIW	NO	NO	YES
TGP-4	Manually extracted doc file from NIW	NO	NO	YES

Data Source Cross Reference

		Storage Location		
SQM Measures	Source	"Barney"	PMAP	Manual Archived on CD Rom
C-1	Excel File supplied by Collocation Group	NO	NO	YES
C-2	Excel File supplied by Collocation Group	NO	NO	YES
C-3	Excel File supplied by Collocation Group	NO	NO	YES
BFR-1	Excel File supplied by Collocation Group	NO	NO	YES
BFR-2	Excel File supplied by Collocation Group	NO	NO	YES
CM-1	Excel File supplied by the Change Control Group	NO	NO	YES
CM-2	Excel File supplied by the Change Control Group	NO	NO	YES
CM-3	Excel File supplied by the Change Control Group	NO	NO	YES
CM-4	Excel File supplied by the Change Control Group	NO	NO	YES
CM-5	Excel File supplied by the Change Control Group	NO	NO	YES

REQUEST: Please describe BellSouth's rationale for excluding from its Held Order Interval Measure those orders that were held during the month, but were completed by the end of the month.

RESPONSE: The Held Order Interval Measure reports orders held open (not completed) at the end of the report period. BellSouth and CLEC orders are measured the same way. Three other measures capture BellSouth's delivery of service when appointments are missed during the month. If an order's appointment is missed for BellSouth reasons but subsequently completed by the end of the report period, the order is reported as a BellSouth missed appointment in the Percent Missed Installation (PMI) report for that report period. In addition, the extended interval due to the BellSouth caused missed appointment is also captured in the Average Completion Interval (OCI) and TSOCT.

REQUEST: For each measure, describe the data that is stored or otherwise placed in BARNEY. If data for a measure is not stored or otherwise placed in BARNEY, please identify the database or system where such information is stored or otherwise placed.

RESPONSE: Please refer to BellSouth's response to Item No. 52.

REQUEST: Please identify all systems that feed information and/or data into PARIS.

RESPONSE: PARIS uses as its source the data that was compiled to prepare the monthly Service Quality Measurement Reports. These sources are the ICAIS database, Performance Measurement and Analysis Platform (PMAP), and various manual entries. Of course, the ICAIS database feeds the PMAP database, which with the addition of the manual reports, provides the data used to produce the monthly SQM reports. ICAIS and PMAP pull the basic transactional data from numerous legacy systems feeds.

The PARIS system is designed to provide a mechanized method for implementing BellSouth's Self-Effectuating Enforcement Mechanisms (SEEM). PARIS establishes a systematic means of assessing service parity and performance against a benchmark or an analog, provides the data necessary to understand key contributors in potentially disparate situations and swiftly executes enforcement mechanisms. This system will be used as a tool for receiving key measurement data for CLEC and BellSouth transactions and delivering a measurement of equality between the two master sets of transactions in the form of metrics. In addition, when determining measurement result equality, PARIS also calculates monetary compensation that is paid monthly to individual CLECs and the TRA.

REQUEST: Please describe the type information that is feed into and/or retained in PARIS.

RESPONSE: Please refer to BellSouth's response to Item No. 52.

REQUEST: Please describe in detail how data used to support BellSouth's SQM and SEEM plan is collected and stored.

RESPONSE: The processes for collection of data used to support BellSouth's SQM are documented in the Performance Measurements Quality Assurance Plan (PMQAP). The storage of SQM data is addressed in BellSouth's proposed data retention policy:
"It is the policy of BellSouth Performance Measurements to retain the early-stage data for a period of eighteen months to facilitate detailed audits of PMAP reports. 'Early-stage data' is defined as that which is extracted from source systems (CABS, CRIS, EXACT, WFA, SOCS, LMOS, LON, LEO, LNP Gateway, etc.) and maintained as ASCII flat files for the purpose of generating SQM reports. 'Early-stage' data is further defined as source system data that is transmitted manually for said purpose. The mechanical flat files and the manual files of early-stage data will be retained for a period of eighteen months.

"BellSouth will retain PMAP raw data for a minimum of three years. 'PMAP raw data' is defined as that which is available for download for the current month from the BellSouth website. Further, BellSouth will retain for three years the monthly aggregate database, i.e., that which has been processed and normalized from raw data, and the resources necessary to re-create the SQM reports from that database.

"BellSouth will archive the production software elements used to create the PMAP reports. This archive will include: 4GL and SQL code, UNIX scripts, DataStage jobs, data table descriptions, and other information necessary to allow viewing of the production software elements. This archive will be created each month and stored on CD-ROM; it will be viewable on a standalone personal computer. The software elements will be retained for a period of eighteen months."

SEEM is supported by PMAP data. Therefore, this plan is also relevant to SEEM.

Full implementation of the above-stated data retention policy is tentatively scheduled for 3Q01.

REQUEST: For each measure in BellSouth's SQM, describe whether the data specified as excluded in BellSouth's SQM is also excluded from the raw data provided to CLECs.

RESPONSE: The CLEC records/items listed as exclusions in the BellSouth SQM are normally included in the raw data files and must be excluded to replicate the reports. The exceptions are cancelled orders in Average Order Completion Interval (OCI) and Average Completion Notice Interval (ACNI).

REQUEST: Describe in detail BellSouth's procedure(s) for ensuring that its raw data includes all BellSouth and CLEC transactions, and is otherwise accurate.

RESPONSE: BellSouth has developed and implemented a comprehensive Performance Measurements Quality Assurance Plan (PMQAP) that ensures the completeness and accuracy of raw data residing in the PMAP platform. Further, a Third Party Test, conducted in Georgia by KPMG Consulting, Inc., (KCI), included a "Metrics Data Integrity Verification and Validation Review" (PMR4). This test evaluated the completeness and accuracy of raw data produced by BellSouth; it included CLEC and BellSouth transactions.

REQUEST: Provide a SEEM report for AT&T data for February 2001 results, including payment amounts that would be due, if any, including all back-up detail. If results are not available for all measures, please provide a report on those measures for which data is available.

RESPONSE: BellSouth does not currently produce SEEM reports for AT&T data for February 2001 results, including payment amounts that would be due, if any. The SEEM mechanism continues to be under development.

REQUEST: Provide BellSouth's basis for excluding appointments missed subsequent to the original committed due date from its Percent Missed Appointments measure.

RESPONSE: Both BellSouth and CLEC misses are treated the same in this measure. The original appointment was scheduled with the CLEC/BST customer. If the first appointment is missed due to BellSouth reasons, it is captured in this measure. If the first appointment is missed due to CLEC/BST end user reasons, it is assigned to the CLEC/BST end user. In this instance, BellSouth was ready on the originally scheduled due date and the costs for unnecessary dispatches and subsequent visits are borne by BellSouth. BellSouth does not feel it should be additionally penalized for subsequent visits following the original met appointment.

REQUEST: For the months of October 2000 through February 2001, please provide the following information for each SEEM measure described below:

Measure	For CLEC Service Orders	For CLEC Service Orders	For BST Retail Analog Service Orders	For BST Retail Analog Service Orders
	% Field Dispatch	% Central Office Dispatch	% Field Dispatch	% Central Office Dispatch
Average Completion Interval/UNE Loops				
% Missed Installation Appointments/UNE loops				
Maintenance Avg. Duration/UNE Loops				
% Provisioning Troubles within 30 Days/UNE Loops				

RESPONSE: BellSouth Response:

On June 15, 2001 the TRA ordered BellSouth to provide the requested information for January and February, 2001, rather than the period specified above. For these SEEM measurements, the BST Retail Analog is Residence and Business Dispatch, or stated another way, "Field Dispatch." Central Office Dispatch is included in the BellSouth category of Non Dispatch. Since Non Dispatch is not the retail analog for these measurements in SEEM, its percentage will be shown as zero. The following tables list the % Field Dispatch and % Central Office Dispatch for CLEC Service Orders for January and February 2001.

RESPONSE: (Cont'd)

January Results

Measure	For CLEC Service Orders	For CLEC Service Orders	For BST Retail Analog Service Orders	For BST Retail Analog Service Orders
	% Field Dispatch	% Central Office Dispatch	% Field Dispatch	% Central Office Dispatch
Average Completion Interval/UNE Loops	99.2	0.8	100	0
% Missed Installation Appointments/UNE loops	98.9	1.1	100	0
Maintenance Avg. Duration/UNE Loops	76.1	23.9	100	0
% Provisioning Troubles within 30 Days/UNE Loops	98.9	1.1	100	0

RESPONSE: (Cont'd)

February Results

Measure	For CLEC Service Orders	For CLEC Service Orders	For BST Retail Analog Service Orders	For BST Retail Analog Service Orders
	% Field Dispatch	% Central Office Dispatch	% Field Dispatch	% Central Office Dispatch
Average Completion Interval/UNE Loops	100	0	100	0
% Missed Installation Appointments/UNE loops	98.7	1.1	100	0
Maintenance Avg. Duration/UNE Loops	70.1	29.9	100	0
% Provisioning Troubles within 30 Days/UNE Loops	98.7	1.3	100	0

REQUEST: Please provide the October 2000 through February 2001 monthly performance results for the "ADSL provided to retail" analog included in BST's proposed SQM.

a. Average Completion Notice Interval
b. Average Jeopardy Notice Interval
c. % Missed Installation Appointments
d. Missed Repair Appointments
e. Maintenance Average Duration
f. % Troubles within 30 Days

RESPONSE: The October 2000 through February 2001 monthly performance results for the "ADSL provided to retail" analog data is attached in the file item 63.xls (attached).

BellSouth Telecommunications, Inc.
TRA Docket No. 01-00193
AT&T's 1st Set Interrogatories
May 7, 2001
Item No. 63
Attachment No. 1

ATTACHMENT

63.xls

BellSouth Telecommunications, Inc.
TRA Docket No. 01-00193
AT&T's 1st Interrogatories
7-May-01
Attachment to Item No. 63

ADSL Provided to Retail

October	Result
Average Completion Notice Interval	N/A
Average Jeopardy Notice Interval	N/A
% Missed Installation Appointments	12.22%
Missed Repair Appointments	34.29%
Maintenance Average Duration	46.92 hours
% Repeat Troubles within 30 days	1.90%

November	Result
Average Completion Notice Interval	N/A
Average Jeopardy Notice Interval	N/A
% Missed Installation Appointments	21.74%
Missed Repair Appointments	28.10%
Maintenance Average Duration	37.92 hours
% Repeat Troubles within 30 days	2.07%

December	Result
Average Completion Notice Interval	N/A
Average Jeopardy Notice Interval	N/A
% Missed Installation Appointments	27.78%
Missed Repair Appointments	35.56%
Maintenance Average Duration	54.45 hours
% Repeat Troubles within 30 days	3.17%

January	Result
Average Completion Notice Interval	N/A
Average Jeopardy Notice Interval	N/A
% Missed Installation Appointments	0.00%
Missed Repair Appointments	20.28%
Maintenance Average Duration	18.24 hours
% Repeat Troubles within 30 days	2.85%

February	Result
Average Completion Notice Interval	N/A
Average Jeopardy Notice Interval	N/A
% Missed Installation Appointments	0.00%
Missed Repair Appointments	20.66%
Maintenance Average Duration	15.03 hours
% Repeat Troubles within 30 days	3.31%

REQUEST: Describe and identify any and all analysis BellSouth has conducted on the pay-outs that would have been required of BellSouth for the months of January 2001 and February 2001 based on the remedy plan proposed by BellSouth.

RESPONSE: BellSouth has not conducted analysis on the pay-outs that would have been required of BellSouth for the months of January 2001 and February 2001 based on the remedy plan proposed by BellSouth in the Tennessee Docket No. 01-00193.

REQUEST: Describe and identify any and all correlation studies and/or documents that BellSouth possesses or has caused to be prepared to justify its exclusion of measures from its remedies plan.

RESPONSE: BellSouth has not prepared a correlation study based upon a measure to justify its exclusion. Rather, justification for exclusion is based on a thorough understanding of the overall processes and the metrics associated with the processes and sub-processes.

However, a correlation analysis was performed on several metrics to calculate the correlation coefficient between pairs of measures. Since the characteristics, which determine a cell, differ between Provisioning and Maintenance measures, the correlation analysis can only be conducted within a specific category.

RESPONSE: (Cont'd)

The following tables summarize the results:

Provisioning

	ORDER COMP INTV	MISSED INSTALLATIONS	COMP NOTICE INTV	CYCLE TIME
ORDER COMP INTV	1.00	**0.27**	0.00	**0.61**
MISSED INSTALLATIONS		1.00	**0.04**	**0.22**
COMP NOTICE INTV			1.00	-0.04
CYCLE TIME				1.00

Maintenance

	OOS	MISSED REPAIRS	MAINT AVE DUR
OOS	1.00	**0.22**	**0.43**
MISSED REPAIRS		1.00	**0.43**
MAINT AVE DUR			1.00

Highlighted cells indicate significant correlation.

We see from the tables that, of the Provisioning measures, Order Completion Interval, Percent Missed Installations, and Total Service Order Cycle Time are all positively correlated, though at varying strengths. Completion Notice Interval is not correlated with any of the other three provisioning measures. Meanwhile, in the Maintenance category, all three measures are positively correlated at various degrees. These results indicate that if a specific, cell-level test passes (or fails) for a given measure, it is likely that the same cell-level test will pass (or fail) for other measures. Also, when performance metrics are calculated using the same underlying data a certain level of correlation is expected to be present.
BellSouth Telecommunications, Inc.

REQUEST: For the months of January, February, and March 2001, please state the times that network access lines or connections from BellSouth to LENS were accessible to CLECs.

RESPONSE:

January	99.42%
February	100.0%
March	100.0%

REQUEST: For the months of January, February, and March 2001, please state the times that the computer application system that supports LENS was accessible to CLECs.

RESPONSE:

January	99.96%
February	99.98%
March	99.97%

REQUEST: Provide all formulas required to compute the balancing critical value for proportion measures and please provide in an Excel spreadsheet, a numerical example illustrating the necessary computations.

RESPONSE: See attached.

BellSouth Telecommunications, Inc.
TRA Docket No. 01-00193
AT&T's 1st Set of Interrogatories
May 7, 2001
Item No. 68
Attachment No. 1

ATTACHMENT

The Balancing Critical Value

There are four key elements of the statistical testing process:

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

The decision rule[1] is

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

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

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

The probabilities of each type of each are:

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

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

The Balancing Critical Value (Cont'd)

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

It can be shown that.

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

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

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

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

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

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

The Balancing Critical Value (Cont'd)
Proportion Measure

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

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

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

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

The Balancing Critical Value (Cont'd)
Proportion Measure

Under this form of alternative hypothesis, the within cell asymptotic mean and variance of a_{1j} are given by[2]

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

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

where

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

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

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

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

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

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

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

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

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

The Balancing Critical Value (Cont'd)
Proportion Measure

Recall that the cell test statistic is given by

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

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

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

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

REQUEST: Please provide the BellSouth mean and standard deviation for installation intervals of residential lines requiring dispatch.

RESPONSE: Based on a special study of the data residing in PMAP, for the month of February 2001, the mean Order Completion Interval for retail residential lines requiring a dispatch were 6.90 days for less than 10 circuits. Standard deviations are not reported in PMAP.

REQUEST: Please provide the BellSouth mean and standard deviation for installation intervals of residential lines requiring dispatch.

RESPONSE: Based on the data residing in PMAP, for the month of February 2001, the mean Order Completion Interval for retail residential lines requiring a dispatch were 7.79 days for less than 10 circuits. Standard deviations are not reported in PMAP.

REQUEST: Please produce any and all documents you relied upon to respond to the Interrogatories above.

RESPONSE: Responsive documents are attached. These documents are proprietary and will be provided subject to a nondisclosure agreement.

REQUEST: Please produce any and all documents identified by BellSouth in responding to the Interrogatories above.

RESPONSE: These documents are proprietary and will be provided subject to a nondisclosure agreement.