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November 24, 2003

VIA HAND DELIVERY

Hon. Deborah Taylor Tate, Chairman
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, TN 37238

Re: *Implementation of the Federal Communications Commission's Triennial Review Order (Nine-month Proceeding)(Switching)*
Docket No. 03-00491

Dear Chairman Tate:

Enclosed please find BellSouth's public responses to discovery, which, due to volume, are being provided to the Authority today on CD ROM marked BellSouth Non-Proprietary Discovery Responses, Docket No. 03-00491. Proprietary responses are being submitted under separate cover. The proprietary information is being provided subject to the terms of the Protective Order entered in this proceeding. Paper copies should be available tomorrow for filing.

The parties to this proceeding are being provided access to BellSouth's responses in the following manner. Non-proprietary responses have been made available to the parties today via the following URL link to a BellSouth website:

BST's Responses to AT&T's 1st Set of Interrogatories
BST's Responses to MCI's 1st Set of Interrogatories and 1st Request for Production of Documents
BST's Responses to Cad's 1st Set of Interrogatories
BST's Responses to CompSouth's 1st Set of Interrogatories

Proprietary responses will be provided, subject to the terms of the Protective Order, via CD ROMs, which will be delivered, where possible, to parties of record today. Parties having only out-of-town counsel will receive copies of the CD ROMs by overnight mail.

Thank you for your attention to this matter.

Very truly yours,

Guy M. Hicks w/permission GH

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CERTIFICATE OF SERVICE

I hereby certify that on November 24, 2003, a copy of the foregoing document was served on the parties of record, via the method indicated:

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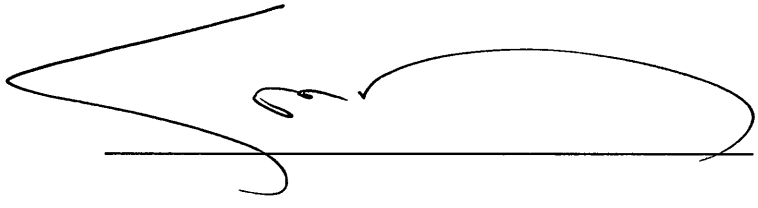


REQUEST: Please provide, a) on a statewide basis, and b) on a CLLI-code-specific basis, monthly data for each month since July 1, 2001 for your retail customer "churn" (*i.e.*, customer change from one carrier to another) on each of the following bases:

(a) number of customers changing carriers, and percentage of then-current customers changing carriers, by customer type (*e.g.*, residential, business with one to three DS-0/voice grade lines to a single customer premises; business with more than three DS-0/voice grade lines to a single customer premises);

(b) number of customers changing carriers, and percentage of then-current customers changing carriers, by service type (*i.e.*, local exchange voice service only; long distance voice service only; bundled local exchange and long distance voice services; bundled local exchange and DSL; and bundled local exchange, long distance, and DSL services);

(c) number of customers changing carriers, and percentage of then-current customers changing carriers, by customer type (*e.g.*, residential, business with one to three DS-0/voice grade lines to a single customer premises; business with more than three DS-0/voice grade lines to a single customer premises) by the following customer ages: 1) churn within the first three months after the customer's service is provisioned 2) churn within the first six months after the customer's service is provisioned.

RESPONSE: BellSouth objects to this Interrogatory on grounds that the information is not reasonably calculated to lead to the discovery of admissible evidence and it is not relevant to the subject matter of this action. BellSouth also objects to this Interrogatory on grounds that it is unduly burdensome, overly broad, and oppressive as written. Subject to these objections, and without waiving these objections, BellSouth is gathering information responsive to this request and will supplement its response no later than December 4, 2003.

REQUEST: Please provide, a) on a statewide basis, and b) on a CLLI-code-specific basis, monthly data for each month since July 1, 2001 for your retail customer "churn" (*i.e.*, the number of customers changing from one carrier to another) for residential local exchange customers between each of the following service configurations: 1) BellSouth voice only 2) BellSouth voice plus DSL; 3) BellSouth DSL only; 4) CLEC UNE-P voice only; 5) CLEC switch-based voice only; 6) CLEC line sharing; 7) CLEC line splitting; 8) CLEC DSL only [e.g., BellSouth voice only to CLEC UNE-P voice only; CLEC A switch-based voice only to CLEC B switch-based voice only].

RESPONSE: BellSouth objects to this Interrogatory on grounds that the information is not reasonably calculated to lead to the discovery of admissible evidence and it is not relevant to the subject matter of this action. BellSouth also objects to this Interrogatory on grounds that it is unduly burdensome, overly broad, and oppressive as written. Subject to these objections, and without waiving these objections, BellSouth is gathering information responsive to this request and will supplement its response no later than December 4, 2003.

REQUEST: Please provide, a) on a statewide basis, and b) on a CLLI-code-specific basis, monthly data for each month since July 1, 2001 for your retail customer "churn" (*i.e.*, the number of customers changing from one carrier to another) for business local exchange voice customers with one to three lines between each of the following service configurations: 1) BellSouth voice only 2) BellSouth voice plus DSL; 3) BellSouth DSL only; 4) CLEC UNE-P voice only; 5) CLEC switch-based voice only; 6) CLEC line sharing; 7) CLEC line splitting; 8) CLEC DSL only [e.g., BellSouth voice only to CLEC UNE-P voice only; CLEC A switch-based voice only to CLEC B switch-based voice only].

RESPONSE: BellSouth objects to this Interrogatory on grounds that the information is not reasonably calculated to lead to the discovery of admissible evidence and it is not relevant to the subject matter of this action. BellSouth also objects to this Interrogatory on grounds that it is unduly burdensome, overly broad, and oppressive as written. Subject to these objections, and without waiving these objections, BellSouth is gathering information responsive to this request and will supplement its response no later than December 4, 2003.

REQUEST: Please provide, a) on a statewide basis, and b) on a CLLI-code-specific basis, monthly data for each month since July 1, 2001 for your retail customer "churn" (*i.e.*, the number of customers changing from one carrier to another) for business local exchange voice customers with more than three lines between each of the following service configurations: 1) BellSouth voice only 2) BellSouth voice plus DSL; 3) BellSouth DSL only; 4) CLEC UNE-P voice only; 5) CLEC switch-based voice only; 6) CLEC line sharing; 7) CLEC line splitting; 8) CLEC DSL only [e.g., BellSouth voice only to CLEC UNE-P voice only; CLEC A switch-based voice only to CLEC B switch-based voice only].

RESPONSE: BellSouth objects to this Interrogatory on grounds that the information is not reasonably calculated to lead to the discovery of admissible evidence and it is not relevant to the subject matter of this action. BellSouth also objects to this Interrogatory on grounds that it is unduly burdensome, overly broad, and oppressive as written. Subject to these objections, and without waiving these objections, BellSouth is gathering information responsive to this request and will supplement its response no later than December 4, 2003.

REQUEST: Please provide, on a CLLI-code-specific basis, the number of loops that BellSouth has migrated through hot cuts (i.e., individual coordinated simultaneous transfer of DS-0/voice grade loops with live customers' service transferred) since July 1, 2001 that involved manual frame (MDF and/or IDF) jumper work, reported on a daily, weekly and monthly basis, from each of the following: 1) BellSouth retail analog services; 2) CLEC UNE loops. Please provide all supporting documents or information regarding such provisioning volumes.

RESPONSE: BellSouth objects to this Interrogatory on grounds that it is unduly burdensome, overly broad, and oppressive as written. Subject to this objection, and without waiving this objection, BellSouth is gathering information responsive to this request and will supplement its response no later than December 4, 2003.

REQUEST: For each CLLI code in Tennessee, please provide the number of individual cross connects/jumper jobs performed on (1) the MDF, and (2) any IDF(s), during each month since July 1, 2001.

RESPONSE: BellSouth objects to this Interrogatory on grounds that it is unduly burdensome, overly broad, and oppressive as written. Subject to this objection, and without waiving this objection, BellSouth is gathering information responsive to this request and will supplement its response no later than December 4, 2003.

RESPONSE PROVIDED BY: Wayne Gray

REQUEST: Please provide the actual (i.e., unadjusted and not subjected to performance measure metrics) minimum, maximum, and mean provisioning intervals for BellSouth provisioning of UNE loops for each month since July 1, 2001, reported on a CLLI code basis.

RESPONSE: BellSouth objects to this Interrogatory on grounds that it is unduly burdensome, overly broad, and oppressive as written. Subject to this objection, and without waiving this objection, provisioning interval data in BellSouth's performance measurements systems are only calculated and retained consistent with the business rules and exclusions for each applicable measure under BellSouth's Service Quality Measurement plan. For example, the provisioning interval calculated consistent with the Order Completion Interval ("OCI") measure excludes provisioning intervals that are extended due to CLEC reasons. With this clarification, see BellSouth's response to MCI's 1st Request for Production of Documents, No. 1 for statewide average OCI results for UNE Loops for the past 12 months.

RESPONSE PROVIDED BY: Dave Coon

REQUEST: For each CLLI code, and on a statewide basis in Tennessee, please provide the number of UNE-P orders that were fulfilled each month since July 1, 2001 in Tennessee.

RESPONSE: See BellSouth's response to MCI's 1st Request for Production of Documents, No. 1.

RESPONSE PROVIDED BY: Craig Williard

REQUEST: With regard to your response to Data Request 0, please provide on a CLLI code-specific basis, the number of trouble reports within the first five days after the hot cut.

RESPONSE: BellSouth objects to this Interrogatory on grounds that it is unduly burdensome, overly broad, and oppressive as written. Subject to this objection, and without waiving this objection, see BellSouth's response to MCI's 1st Request for Production of Documents, No. 1 for statewide trouble reports within seven days of a hot cut.

RESPONSE PROVIDED BY: Ken Ainsworth

REQUEST: With regard to your response to 0, please specify the percentage of hot cuts that were performed within the agreed-upon time frame (*e.g.*, as of the deadline set pursuant to an interconnection agreement or otherwise agreed to with the other carrier or pursuant to other state requirements). Please report this information on the same daily, weekly and monthly basis as in 0.

RESPONSE: BellSouth objects to this Interrogatory on grounds that it is unduly burdensome, overly broad, and oppressive as written. Subject to this objection, and without waiving this objection, BellSouth does not maintain records concerning the number of hot cuts performed within "the agreed-upon time frame" such as a deadline set pursuant to an interconnection agreement. However, information relating to BellSouth's hot cut performance is contained in two reports included in BellSouth's response to MCI's 1st Request for Production, No. 1. The first report -- Customer Coordinated Conversion Interval Report -- measures the average length of time required to start and complete a hot cut. The second report -- Hot Cut Timeliness Report -- measures the percentage of timely hot cuts peformed by BellSouth.

RESPONSE PROVIDED BY: Ken Ainsworth

REQUEST: With regard to your response to 0, please state whether the existing customer loop was re-used for each of the migrations identified. If the loop was not re-used, please provide a detailed explanation of the reasons why it was not re-used, and any consequence of not being able to reuse the loop (i.e., delayed installation interval, loss of customer telephone number, need for rewiring at remote terminal/FDI/customer NID, etc.).

RESPONSE: BellSouth objects to this Interrogatory on grounds that it is unduly burdensome, overly broad, and oppressive as written. Subject to this objection, and without waiving this objection, loops generally would not be re-used where existing service is provided by Integrated Digital Loop Carrier ("IDLC") system. When re-use facilities are not available, alternate facilities would be provided such as copper loop or universal digital loop carrier ("UDLC"), if available. These facilities will possibly require the due date to effectuate the migration but should not cause any delay in the installation interval. If there are installation delays, BellSouth's SEEMS plan will address that. Moreover, if the CLEC correctly ports the telephone number, there should be no loss of telephone number.

RESPONSE PROVIDED BY: Ken Ainsworth

REQUEST: With respect to the hot cuts identified in response to 0, please provide a detailed description of each work effort your personnel had to perform, the costs you incurred, and the maximum number of hot cuts that you have accomplished per day per CLLI code since July 1, 2001.

RESPONSE: BellSouth objects to this Interrogatory on grounds that it is unduly burdensome, overly broad, and oppressive as written. Subject to this objection, and without waiving this objection, BellSouth is gathering information responsive to this request and will supplement its response no later than December 4, 2003.

REQUEST: For each CLLI in Tennessee, provide the maximum number of hot cuts that can be performed per day, week and month with current workforce levels for (a) loops carrying voice only; and (b) loops carrying voice plus DSL. State the basis for the maximum number (e.g., methods and procedures, union work rules, informal guidelines, BellSouth policy, etc.).

RESPONSE: There is no set number of hot cuts for any loop that BellSouth has established for a particular office in any state, including Tennessee. BellSouth's hot cut process is based on load volumes and force. BellSouth uses plan size methods to monitor staffing levels to ensure that expected hot cut volumes will be met.

RESPONSE PROVIDED BY: Ken Ainsworth

REQUEST: State and describe in detail any plans to increase workforce levels in the next 12 months for job classifications that perform hot cuts, state whether such plans have received budgetary approval and funding, and provide a copy of the approved and funded budget and related documentation.

RESPONSE: BellSouth has no current plans to increase workforce levels in the next 12 months because BellSouth is adequately staffed to handle the current volumes of hot cuts as evidenced by its performance data. Should BellSouth receive relief from providing unbundled circuit switching, BellSouth will address any necessary increases in force as appropriate. BellSouth's hot cut process is fully scalable and will meet any expected volumes.

RESPONSE PROVIDED BY: Ken Ainsworth

REQUEST: Please state whether you agree that a proper hot cut process requires BellSouth to re-use the existing loop for the following migration types: a) UNE-P to UNE DS-0/voice grade loops; b) line sharing over UNE-P when the DSL service is removed; c) line sharing over UNE-P migrated to line split UNE loop. If you agree, do you always perform hot cuts for the listed migration types in this manner? If not, why not? If you disagree, please state concisely your reasons for disagreement.

RESPONSE: a) See BellSouth's response to MCI's First Set of Interrogatories, Item No. 11. BellSouth agrees that a proper hot cut process requires that BellSouth make a timely efficient transition to a serving UNE-L facility and that such facility provide the proper characteristics of the type loop being requested consistent with TR76300, whether that facility is re-used or otherwise assigned for DSO/voice grade loops.

b) It is unclear to what hot cut process this Interrogatory is referring because because there is no clearly stated "from" and "to" in the migration scenario described in subpart (b). Also, there is no arrangement for "line sharing over UNE-P" because Line Sharing, by FCC definition, requires that the voice service be provided by the ILEC, not a CLEC using UNE-P. Additionally, there is no arrangement for line splitting over UNE-P. In order to use a UNE-P for Line Splitting, the UNE-P must be converted as the FCC clearly explained in its Texas 271 Order, ¶ 325, "For instance, if a competing carrier is providing voice service using the UNE-platform, it can order an unbundled xDSL-capable loop terminated to a collocated splitter and digital subscriber line access multiplexer ("DSLAM") equipment and unbundled switching combined with shared transport, ***to replace its existing UNE-platform arrangement*** with a configuration that allows provisioning of both data and voice services." (emphasis added). Accordingly, a UNE-P cannot be used for Line Splitting. The CLEC would need to have a UNE Loop, a UNE Port and cross connects, not a UNE-P.

RESPONSE: (Cont.)

Subject to this clarification, it is assumed that MCI's request concerns "line splitting to UNE-L (when the xDSL service is removed)." In the context of "line splitting to UNE-L," should a CLEC request a hot cut, BellSouth is not "required" to use the existing loop unless the CLEC indicates on the service order for BellSouth to reuse the existing loop, and then only if the existing loop is capable of handling the new use and there are no other problems found with the existing loop. If the CLEC does not indicate on the service order to reuse the existing facilities, common practice would be to use the existing loop whenever possible, assuming that the existing loop is capable of handling the desired end migration (the "to" portion of this request). No date, no CLEC has requested a hot cut in connection with "line splitting to UNE-L."

c) See BellSouth's response to MCI's First Set of Interrogatories, Item 15(b)

RESPONSE PROVIDED BY: Ken Ainsworth
Tommy G. Williams

REQUEST: On a statewide basis and for each CLLI code, please identify all service disruptions of the type referenced in paragraphs 421, 422 and 459 of the Triennial Review Order that have occurred each month since July 1, 2001 during your hot cut process, and provide a detailed explanation of the cause of the service disruption. As part of your response, please quantify the subset of service disruptions where customers were unable to place or receive calls and/or data for a period of greater than five minutes.

RESPONSE: See BellSouth's response to MCI's 1st Request for Production of Documents, No. 1 for the percentage of hot cuts (by state and by CLLI) where that disruption is five minutes or less. During the normal hot cut process, a brief disruption of service is always necessary in order to effectuate the migration. Furthermore, because BellSouth is not required under its Service Quality Measurement Plans to identify and capture the cause for service disruptions in connection with a hot cut unless the service disruption is greater than 15 minutes per circuit, no data is available for the cause of the disruptions lasting five minutes or less as requested in this Interrogatory.

RESPONSE PROVIDED BY: Ken Ainsworth

REQUEST: On a statewide basis and for each CLLI code, reported monthly for each month since July 1, 2001, please provide a detailed description of UNE loop orders cancelled prior to customer migration. Your response should include the number and percentage of such order cancellations compared to the total number of UNE loop orders; a detailed description of the number and percentage of trouble reports during the hot cut process; and a detailed description of the reason the customer cancelled the order prior to migration.

RESPONSE: BellSouth objects to this Interrogatory on grounds that it is unduly burdensome, overly broad, and oppressive as written. Subject to this objection, and without waiving this objection, BellSouth does not maintain data that reflects the number of orders cancelled prior to customer migration or the reason given by the CLEC for canceling such an order.

RESPONSE PROVIDED BY: Ken Ainsworth

REQUEST: On a statewide basis and for each CLLI code, reported monthly for each month since July 1, 2001, please provide the percentage of hot cuts that were successfully completed and tested consistent with the time intervals specified in BellSouth's Methods and Procedures or other guidelines or work rules.

RESPONSE: See BellSouth's response to MCI First Set of Interrogatories, Item No. 10.

RESPONSE PROVIDED BY: Ken Ainsworth

REQUEST: Please provide the name(s) of the work group(s) whose members routinely perform cross connects/jumper jobs in BellSouth central offices, and provide the following information for each:

(a) a list and description of every job classification (e.g. frame technician) within such work group(s);
(b) whether each job classification is staffed by members of a union, and whether non-union employees may perform the same job function;
(c) for each job classification, the minimum job requirements, including training, job experience, education, etc;
(d) a description of all on-the-job training required or provided for each job classification once in the position;
(e) a copy of the methods and procedures or similar documents that contain any kind of instructions specifying the steps, processes, techniques, tasks, materials, etc. for performing cross connects/jumper jobs.

RESPONSE: BellSouth is gathering information responsive to this request and will supplement its response no later than December 4, 2003.

REQUEST: Please 1) state whether BellSouth's methods, procedures, scheduling, and/or completion intervals are different in any way, 2) provide a detailed explanation of all such differences, and 3) provide all Methods and Procedures and other documents that describe the work effort required for the following types of cross connects/jumper jobs:

(a) new retail service installation to a premises with no previous telephone service;
(b) adding a second line to a premises with existing service;
(c) performing a line and station transfer ("LST") that involves cross connects/jumper jobs at the MDF on a loop with live traffic;
(d) changing loops with live traffic from one type of retail service to another (e.g., POTS to ISDN);
(e) changing loops with live traffic from one type of provider to another (e.g., UNE-P to UNE loop; one CLEC UNE loop to another CLEC UNE loop)
(f) changing loops with live traffic from one service on a loop to two services on a loop (e.g., line shared DSL and voice; line split DSL and voice);
(g) any other type of cross connect/jumper job in the BellSouth central office not covered by (a) through (f) above.

RESPONSE: BellSouth is gathering information responsive to this request and will supplement its response no later than December 4, 2003.

REQUEST: For each type of cross connect/jumper job identified in response to 0, please identify each step or task in the process (e.g., obtain work order for frame wiring, review work order, travel to central office (if required), travel to remote terminal/FDI/customer premises serving terminal (if required), locate binder posts for service to be installed, locate binder posts for service to be removed (if any), remove old jumper(s), install new jumper(s), test for dial tone/connectivity, troubleshoot lack of dial tone/connectivity, enter job completion in work force administration system and/or other record(s), etc.)

RESPONSE: BellSouth is gathering information responsive to this request and will supplement its response no later than December 4, 2003.

REQUEST: On a statewide basis and for each CLLI code, for each type of cross connect/jumper job identified in response to 0, please identify the minimum, maximum and average actual work time(s) for 1) the total work effort and 2) each step or task in the work effort identified in response to 0, reported monthly for each month since July 1, 2001.

RESPONSE BellSouth objects to this Interrogatory on grounds that it is unduly burdensome, overly broad, and oppressive as written. Subject to this objection, and without waiving this objection, BellSouth is gathering information responsive to this request and will supplement its response no later than December 4, 2003.

REQUEST: On a statewide basis and for each CLLI code, for each type of cross connect/jumper job identified in response to 0, please identify the minimum, maximum and average work time(s) for 1) the total work effort and 2) each step or task in the work effort identified in response to 0, specified in: a) BellSouth union contracts covering workers who routinely perform cross connect/jumper jobs in the BellSouth central offices; b) BellSouth methods and procedures, guidelines, rules, regulations, specifications or any other written directive; c) employee performance evaluation criteria.

RESPONSE: BellSouth objects to this Interrogatory on grounds that it is unduly burdensome, overly broad, and oppressive as written. Subject to this objection, and without waiving this objection, BellSouth is gathering information responsive to this request and will supplement its response no later than December 4, 2003.

REQUEST: On a statewide basis and for each CLLI code, for each type of cross connect/jumper job identified in response to 0, and for cross connect/jumper jobs in general, please identify the minimum, maximum and average number of such jobs that must be performed by each individual employee or worker during the time interval specified in BellSouth employee performance requirements and/or union contracts (i.e., the number of cross connect/jumper jobs that must be performed per hour, day, shift, or other time interval).

RESPONSE: BellSouth objects to this Interrogatory on grounds that it is unduly burdensome, overly broad, and oppressive as written. Subject to this objection, and without waiving this objection, BellSouth is gathering information responsive to this request and will supplement its response no later than December 4, 2003.

REQUEST: Please state whether cross connect/jumper job performance has ever been the subject of litigation, arbitration, mediation, labor negotiations, formal labor disputes, informal labor disputes, or evaluation by any third party (e.g. federal or state agencies, etc.). If the answer is anything other than an unqualified no, please provide supporting details and documentation.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that it is not reasonably calculated to lead to the discovery of admissible evidence and it is not relevant to the subject matter of this action.

REQUEST: Please describe how you prioritize cross connects/jumper jobs during normal working conditions (e.g., first come first served, by service type, etc.) and state whether those priorities change during strikes and other labor related work disruptions. If the priorities change, please provide a detailed description of the manner in which they change.

RESPONSE: BellSouth objects to this Interrogatory on grounds that it is unduly burdensome, overly broad, and oppressive as written. Subject to this objection, and without waiving this objection, BellSouth is gathering information responsive to this request and will supplement its response no later than December 4, 2003.

REQUEST: Please provide all time and motion studies, special studies, or other evaluations of cross connect/jumper work times and processes.

RESPONSE: BellSouth objects to this Interrogatory on grounds that it is unduly burdensome, overly broad, and oppressive as written. Subject to this objection, and without waiving this objection, BellSouth is gathering information responsive to this request and will supplement its response no later than December 4, 2003.

REQUEST: Please provide the studies, analyses, and/or calculations of cross connect/jumper job work times and loaded labor costs from the most recent non-recurring cost study submitted by BellSouth to the Tennessee Regulatory Authority.

RESPONSE: BellSouth objects to this request for the reasons stated in General Objection No. 5 previously filed in this proceeding. Nevertheless and not withstanding this objection, BellSouth does not perform a specific nonrecurring cost study for the cost of placing a cross-connect/jumper. The cross-connect/jumper activity is a part of the provisioning process for the element(s) being connected. However, the central office technician (CO Install & Mtce Field – Ckt & Fac – JFC 431X) work times can be identified from the input files used to support the individual element. For a 2-wire cross-connect the last work times BellSouth filed with the TRA are 25 minutes to install and 10 minutes to disconnect. These work times can be found in file TNPHCOLL.xls on the Inputs worksheet that was filed in Docket No. 97-01262 on December 12, 1997.

Labor rates for the cost studies in Docket Nos. 97-01262 are furnished in the Laborate.xls file provided on the CD filed on December 12, 1997 (See directory titled Section 4). For an explanation of the labor rate methodology, see Section 4, TELRIC Labor Rates of the narrative contained on the same CD (See directory titled Section 1).

The above cost studies contain proprietary information and are subject to provisions of the nondisclosure agreement executed by MCI/Brooks Fiber.

RESPONSE PROVIDED BY:

Reginald Starks
Director
675 West Peachtree Street
Atlanta, Georgia 30375

Charles V. Lee
Director
3535 Colonnade Parkway
Birmingham, Alabama 35243

REQUEST: For each central office in Tennessee, for each month since July 1, 2001, please state:

(a) whether the central office was staffed with one or more resident frame technician(s) (or other job classification(s) that routinely perform cross connect/jumper jobs);
(b) for each central office that was so staffed, the hours during which it was staffed;
(c) for each central office that was so staffed, the number of person hours per day or per week devoted to cross connect/jumper jobs;
(d) for each central office that was not staffed, the number of person hours per day or per week devoted to cross connect/jumper jobs.

RESPONSE: BellSouth objects to this Interrogatory on grounds that it is unduly burdensome, overly broad, and oppressive as written. Subject to this objection, and without waiving this objection, BellSouth is gathering information responsive to this request and will supplement its response no later than December 4, 2003.

REQUEST: Please provide a list, detailed description, method of sampling, method of calculation, and monetary penalty for all UNE performance measures or metrics applicable in Tennessee. State which of these measurements or metrics you assert is relevant to the issues in this proceeding.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that it is not reasonably calculated to lead to the discovery of admissible evidence and it is not relevant to the subject matter of this action. BellSouth also objects to this Interrogatory on grounds that it is unduly burdensome, overly broad, oppressive as written, and seeks information that is already a matter of public record or is otherwise publicly available.

REQUEST: Please provide all UNE performance measure or metric reports applicable in Tennessee, including a report of any penalties paid, for each month since July 1, 2001.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that it is not reasonably calculated to lead to the discovery of admissible evidence and it is not relevant to the subject matter of this action. BellSouth also objects to this Interrogatory on grounds that it is unduly burdensome, overly broad, oppressive as written, and seeks information that is already a matter of public record or is otherwise publicly available.

REQUEST: Please provide all third party evaluations and/or reports addressing and/or assessing BellSouth performance under the UNE performance measures or metrics applicable in Tennessee.

RESPONSE: BellSouth objects to this Interrogatory to the extent it seeks information that is already a matter of public record or is otherwise publicly available. Subject to this objection, and without waiving this objection, information responsive to this request is contained in BearingPoint's Final Report, dated April, 30, 2003 at the Florida Public Service Commission, Bureau of Regulatory Review.

REQUEST: Please list, define and describe each type of migration of service from one carrier to another in Tennessee for which you have current methods and procedures (e.g., hot cut, coordinated hot cut, bulk hot cut, frame due time, project managed cutover, loop conversion, line and station transfer, etc.), and provide a copy of the business rules and methods and procedures for each such migration type.

RESPONSE: The following describes the types of migrations offered by BellSouth.

Coordinated/Time Specific hot cuts require BellSouth to convert the CLEC account at a time specified by the CLEC on the due date. When the CLEC elects this option, BellSouth contacts the requesting CLEC 24 to 48 hours prior to the due to verify that BellSouth's service order information agrees with the CLEC's request. BellSouth also confirms no jeopardy situation exists (for either the CLEC or for BellSouth), validates the specific conversion time requested, and provides to the CLEC the status of any dial tone test (that is, BellSouth's test of dial tone provided by the CLEC's switch). Coordination also requires CWINS to issue tickets to BellSouth's Network groups to coordinate the specific conversion time for BellSouth forces on the due date and the CLEC contact. CWINS will also contact the CLEC on the due date prior to the conversion time for a final validation that the migration is still a "go". The BellSouth CWINS technician communicates with the BellSouth's Network groups at the specified conversion time and makes the execution request to perform the hot cut. The CWINS technician stays on the call, awaiting Network completion notification. When the technician in BellSouth's Network group completes the hot cut, that technician notifies the CWINS technician who documents the hot cut completion. At this point, the hot cut is complete in BellSouth's network. The CWINS technician then attempts to notify the CLEC for acceptance of the order. Acceptance in this sense means that the CLEC agrees that the order has been fulfilled successfully and that is appropriate that BellSouth close the order as complete. Once CLEC acceptance is confirmed or default acceptance occurs the pending service orders are completed in BellSouth's systems by the CWINS technician. Default acceptance occurs when a CLEC does not reply to CWINS completion notification.

RESPONSE: (Cont.)

Coordinated hot cuts require BellSouth to convert the CLEC's customer account at a time coordinated with CWINS and BellSouth's Network group on the due date. Coordination also requires BellSouth to contact the requesting CLEC 24 to 48 hours prior to the due date to verify that BellSouth's service order information agrees with the CLEC's request. At that time, BellSouth also confirms no jeopardy situation exists (either for the CLEC or for BellSouth) and provides the CLEC the status of any dial tone test performed (that is, BellSouth's test of dial tone from the CLEC's switch). Coordination also requires the CWINS Center to issue tickets to BellSouth's Network groups to coordinate conversion activities and CWINS contact on the due date. CWINS will also contact the CLEC on the due date prior to the conversion time for a final validation that the migration is still a "go". The BellSouth CWINS technician communicates with the BellSouth's Network group prior to the conversion being started. Once all BellSouth personnel are in communication, the CWINS technician will make the execution request to perform the hot cut and stays on the call, awaiting Network completion notification. When the Network technician completes the hot cut, that technician notifies the CWINS technician who documents the completion. At this point, the hot cut is complete within BellSouth's network. The CWINS technician then attempts to notify the CLEC for acceptance. As discussed earlier, acceptance in this sense means that the CLEC agrees that the order has been fulfilled successfully and that is appropriate that BellSouth close the order as complete. Once CLEC acceptance is confirmed or default acceptance occurs, the pending service orders are completed by the CWINS technician.

Non-Coordinated hot cut requests are converted by BellSouth's Network personnel during normal business hours (8 a.m. to 5 p.m.) at various times on the due date based on the Network technicians' work load activity and schedule. Once the non-coordinated hot cut is completed by Network personnel, the technician completes the work order which generates a notification (either by facsimile or by e-mail) to the CLEC that the conversion is complete.

RESPONSE: (Cont.)

The service order processing methods available from BellSouth for service migration include: (1) an individual account migration service request, which applies to both residence and business service lines and may include single or multiple lines on one account; (2) project hot cuts service requests, which are for 15 or more non-complex residence and business services for a single account at a specific end-user location and which provide special handling with the inclusion of project management to assure additional coordination due to volumes; and (3) BellSouth's batch hot cut process for UNE-P to UNE-L.

Additional information responsive to this request is contained in the following documents, copies of which are included in BellSouth's response to MCI's 1st Request for Production, No. 1:

1. Checklist for UNEC Provisioning
2. CLEC to CLEC (C2C) Conversion Process
3. Network SSI&M / I&M, Methods and Procedures For Provisioning Unbundled Network Elements - Unbundled Voice Loops
4. LNP - REQTYP B & Non-Complex and Complex REQTYP C General Ordering / Process Guidelines
5. LNP-UNE to UNE Bulk Migration (UNE P to UNE L) [Mechanized Procedures]
6. Enhanced Delivery Initiative Process for SL1 Group
7. Screening Work Process for Designed and Non Designed Provisioning
8. Unbundled Non-Designed (SL1) Voice Grade Loops - SL1 Wiring and Testing Work Steps
9. Unbundled Designed (SL2) Voice Grade Loops - SL2 Voice Grade Wiring and Testing Work Steps
10. Turn Up – Designed Inside Cut Only, Conversions
11. Turn Up – Designed Outside Cut Only, Coordinated Conversions
12. Turn Up – Non-Designed Inside-Cut-Only Coordinated Conversion
13. Turn-Up – Designed Combined Inside and Outside Coordinated Conversions
14. Turn-Up – Non-Designed Outside Cut Only Coordinated Conversions

15. Turn-Up – Non-Designed Combined Inside and Outside Coordinated Conversions
16. Unbundled Local Loops (ULL)
17. UVL Job Aid
18. *BellSouth Business Rules for Local Ordering Handbook (BellSouth Business Rules"*, Release 15.0
    http://www.interconnection.bellsouth.com/guides/html/leo.html

RESPONSE PROVIDED BY: Ken Ainsworth

REQUEST: For each type of service migration in Tennessee listed in your response to Request MCI-33, please:

(a)provide the current total non-recurring charge(s);
(b)separately state the service ordering charge(s), the provisioning (cross connect/jumper job) charge(s), and any other charge(s);
(c) list and describe any current volume discounts applicable to non-recurring charges;
(d) list any changes in non-recurring charges and/or volume discounts planned or expected in the next 12 months.

RESPONSE:

(a) Charges vary and can be found either in the individual CLEC's Interconnection Agreement or the BellSouth standard Interconnection Agreement, which are a matter of public record or are otherwise publicly available.

(b) Charges vary and can be found either in the individual CLEC's Interconnection Agreement or the BellSouth standard Interconnection Agreement, which are a matter of public record or are otherwise publicly available. Charges include the CLEC to CLEC conversion rate element, Order Coordination/Hot Cut (chargeable option for UVL-SL1, UCL-ND and UCL-Designed), SOMAN, Collocation cross-connects.

(c) None.

(d) BellSouth is unaware of any planned or expected changes in nonrecurring charges currently contained in individual CLEC Interconnection Agreement or the BellSouth standard Interconnection Agreement.

RESPONSE PROVIDED BY: Karen Fields

REQUEST: For each type of service migration in Florida listed in your response to Request MCI-33, please:

(a)provide the current total non-recurring charge(s);
(b)separately state the service ordering charge(s), the provisioning (cross connect/jumper job) charge(s), and any other charge(s);
(c) list and describe any current volume discounts applicable to non-recurring charges;
(d) list any changes in non-recurring charges and/or volume discounts planned or expected in the next 12 months.

RESPONSE:

(a) Charges vary and can be found either in the individual CLEC's Interconnection Agreement or the BellSouth standard Interconnection Agreement, which are a matter of public record or are otherwise publicly available.

(b) Charges vary and can be found either in the individual CLEC's Interconnection Agreement or the BellSouth standard Interconnection Agreement, which are a matter of public record or are otherwise publicly available. Charges include the CLEC to CLEC conversion rate element, Order Coordination/Hot Cut (chargeable option for UVL-SL1, UCL-ND and UCL-Designed), SOMAN, Collocation cross-connects.

(c) None.

(d) BellSouth is unaware of any planned or expected changes in nonrecurring charges currently contained in individual CLEC Interconnection Agreement or the BellSouth standard Interconnection Agreement.

RESPONSE PROVIDED BY: Karen Fields

REQUEST: Please state the number of loops that you believe is appropriate to include in a single "batch," as the FCC uses that terminology and concept in ¶ 489 of the *Triennial Review Order,* and provide the basis for your belief and all documentation that supports your belief.

RESPONSE: BellSouth's "batch" hot cut process allows from 2 to 99 accounts with up to 25 lines each to be migrated on a single "batch" request. The CLEC would determine the appropriate number of loops to be submitted subject to the criteria stated above. In addition, CLECs may submit multiple batch migrations.

RESPONSE PROVIDED: Ken Ainsworth

REQUEST: Please provide a detailed description of the current ILEC OSS capabilities to support automated, flow-through processes for Pre-ordering for DS-0/voice-grade UNE loops on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to Telcordia documents, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: BellSouth objects to this Interrogatory to the extent it is overly broad and unduly burdensome. Subject to this objection, and without waiving this objection, BellSouth provides the following response:

This Interrogatory contains the term "flow-through process." The FCC, in the Second Louisiana Order ¶ 107, stated, "[a] competing carrier's orders 'flow through' if they are transmitted electronically through the gateway and accepted into BellSouth's back office order systems without manual intervention." Therefore, BellSouth defines flow-through as the activity that occurs when a CLEC takes information directly from an end user customer, inputs it directly into an electronic ordering interface without making any changes or manipulating the customer's information, and sends the complete and correct request downstream for mechanized service order generation. Thus, "flow-through processes" apply to BellSouth's electronic ordering interface applications only.

With this definition in mind, BellSouth assumes that this interrogatory is requesting pre-ordering information provided by BellSouth that can be obtained electronically.

RESPONSE: (Cont.)

The pre-ordering information provided by BellSouth consists of obtaining access to the following information and functions that a CLEC will need while negotiating an order with an end-user customer, including:

- street address validation;
- telephone number selection;
- availability of services and features;
- due date information;
- customer service record information; and
- loop makeup information.

This is the same information regardless of whether the UNE loops are provisioned on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC.

The preorder functionally offered by BellSouth is described in detail in the following BellSouth documents, posted to the Interconnection website:

BellSouth Local Ordering Handbook, Section 2, *Pre-Ordering (*TCIF9 / LSOG4, Release 13.0/ Version 13.0C)
http://interconnection.bellsouth.com/guides/leo/bbrlo_releases/13_0/pdf/130-2.pdf

BellSouth Pre-Ordering and Ordering Overview Guide
http://www.interconnection.bellsouth.com/guides/bpobr/pdf/bst_pr_1.pdf

Local Exchange Navigation System (LENS) User Guide
LENS Version 6.0 Training (Windows 95/98 2000 Platform)
LENS Version 6.0 Training (Windows NT 4.0 Platform)
http://www.interconnection.bellsouth.com/guides/html/lens_tafi.html

TAG User Guide (requires login/password for valid TAG user)
www.interconnection.bellsouth.com/oss/tag/tag_info.html

RESPONSE: (Cont.)

BellSouth EDI Specifications Guide for TCIF Issue 9 Pre-Order and Firm Order Query/Response
BellSouth EDI Specifications Guide for ELMS6 Pre-Order and Firm Order Query/Response
BellSouth IA EDI Implementation Guide
Pre-Order to Firm-Order Mapping Matrix (HTML Version)
CSR Job Aid (HTML Version)
http://www.interconnection.bellsouth.com/guides/html/bpobr.html

D/CLEC Pre-Ordering and Ordering Guide for Electronic Loop Makeup (LMU)
http://www.interconnection.bellsouth.com/guides/bpobr/pdf/dclecord.pdf

DLEC/CLEC Job Aid Loop Qualification System (LQS)
http://www.interconnection.bellsouth.com/guides/bpobr/pdf/lqs.pdf

BellSouth Loop Makeup (LMU) CLEC Pre-Ordering and Ordering Guides for Manual Loop Makeup
http://www.interconnection.bellsouth.com/guides/bpobr/docs/lmupo.doc

Also reference the individual CLEC Information Packages for specific services including but not limited to the BellSouth Unbundled Voice Loop - SL1 (Non-Designed) CLEC Information Package and the BellSouth Unbundled Voice Loop-SL2 CLEC Information Package Version 2, found at the Interconnection website at
http://interconnection.bellsouth.com/guides/html/unes.html

ICE Carrier Notification Letter
http://www.interconnection.bellsouth.com/notifications/carrier/carrier_pdf/91083411.pdf

ICE User Guide (online access requires login/password for valid ICE User)
https://ice.bellsouth.com/ICE_LOGON.ASP

RESPONSE: (Cont.)

Additional information response to this request is provided in BellSouth's response to MCI's 1st Request for Production, No. 1, which includes:

- ICE Overview dated July 2003
- ICE Work Around Processing of LSRs
- ICE User Guide Version 1.1
- ICE Web Site Application Map & Web Page Descriptors

RESPONSE PROVIDED BY: Ronald M. Pate

REQUEST: Please provide a detailed description of the current ILEC OSS capabilities to support automated, flow-through processes for Ordering for DS-0/voice-grade UNE loops on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to Telcordia documents, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: BellSouth objects to this Interrogatory to the extent that it is overly broad and unduly burdensome. Subject to this objection, and without waiving this objection, BellSouth provides the following response:

This Interrogatory contains the term "flow-through process." Flow-through processes apply to BellSouth's electronic ordering interface applications only, as explained in BellSouth's response to MCI First Set of Interrogatories, Item No. 36. This response is provided in that context.

BellSouth provides three electronic ordering applications: EDI, TAG, and LENS. EDI follows the industry protocol (EDI) for ordering and the Ordering and Billing Forum ("OBF") guidelines for LSRs. The TAG and LENS interfaces also follow the same OBF guidelines for LSRs.

The ordering process is the same regardless of whether the UNE loops are provisioned on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC.

The Flow-Through Matrix, which is provided in BellSouth's response to MCI's 1st Request for Production, No. 1 and which is also available at the Performance Measurement and Analysis Platform ("PMAP") website at http://pmap.bellsouth.com/content/documentation.aspx, provides detailed information about the services and UNEs that can be ordered and which interfaces may be used, and includes whether the process is currently fully electronic (i.e., flows through), partially electronic, or manual.

RESPONSE: (Cont.)

The ordering functionally offered by BellSouth is described in detail in the following BellSouth documents, posted to the Interconnection website:

LOH - Local Ordering Handbook (formerly named the "BellSouth Business Rules for Local Ordering TCIF 9/LSOG 4")
http://interconnection.bellsouth.com/guides/html/leo.html

Local Exchange Ordering (LEO) Implementation Guide - Volume 1
http://interconnection.bellsouth.com/guides/html/leo.html

BellSouth Local Ordering Handbook (Section 3 – Ordering, TCIF9 / LSOG 4, Release 13.0/ Version 13.0C)
http://interconnection.bellsouth.com/guides/leo/bbrlo_releases/13_0/pdf/130-3.pdf

BellSouth Pre-Ordering and Ordering Overview Guide
http://www.interconnection.bellsouth.com/guides/bpobr/pdf/bst_pr_1.pdf

Local Online Ordering Tutorial
http://interconnection.bellsouth.com/guides/tutorials/local_tutorial/pages/index.htm

Local Exchange Navigation System (LENS) User Guide
LENS Version 6.0 Training (Windows 95/98 2000 Platform)
LENS Version 6.0 Training (Windows NT 4.0 Platform)
http://www.interconnection.bellsouth.com/guides/html/lens_tafi.html

TAG User Guide (requires login/password for valid TAG user)
www.interconnection.bellsouth.com/oss/tag/tag_info.html

RESPONSE: (Cont.)

BellSouth EDI Specifications Guide for TCIF Issue 9 Pre-Order and Firm Order Query/Response
BellSouth EDI Specifications Guide for ELMS6 Pre-Order and Firm Order Query/Response
BellSouth IA EDI Implementation Guide
Pre-Order to Firm-Order Mapping Matrix (HTML Version)
CSR Job Aid (HTML Version)
http://www.interconnection.bellsouth.com/guides/html/bpobr.html

Issue Resolution Guide for Local Customers
http://interconnection.bellsouth.com/guides/issue_resolutions/local_issue_guide/tableOfContents.html

UNE to UNE Bulk Ordering Specifications for EDI TCIF Issue 9 Trading Partners
http://interconnection.bellsouth.com/guides/leo/pdf/tcif9_bulkspec.pdf

UNE to UNE Bulk Ordering Specifications for EDI ELMS6 Trading Partners
http://interconnection.bellsouth.com/guides/leo/pdf/elms_6_bulkspec.pdf

Also reference the individual CLEC Information Packages for specific services including but not limited to the BellSouth Unbundled Voice Loop - SL1 (Non-Designed) CLEC Information Package and the BellSouth Unbundled Voice Loop-SL2 CLEC Information Package Version 2, found at the Interconnection website at
http://interconnection.bellsouth.com/guides/html/unes.html

RESPONSE PROVIDED BY: Ronald M. Pate

REQUEST: Please provide a detailed description of the current ILEC OSS capabilities to support automated, flow-through processes for Provisioning for DS-0/voice-grade UNE loops on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to Telcordia documents, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: This Interrogatory contains the term "flow-through processes." Flow-through processes apply to BellSouth's electronic ordering interface applications only, as explained in BellSouth's response to MCI First Set of Interrogatories, Item No. 36. Consequently, there is no "automated, flow-through processes" for provisioning of DS-0/voice grade UNE loops of any service type.

RESPONSE PROVIDED BY: Ken Ainsworth

REQUEST: Please provide a detailed description of the current ILEC OSS capabilities to support automated, flow-through processes for Maintenance/Repair for DS-0/voice-grade UNE loops on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to Telcordia documents, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: This interrogatory contains the term "flow-through process." Flow-through processes apply to BellSouth's electronic ordering interface applications only, as explained in BellSouth's response to MCI's First Set of Interrogatorries, Item No. 36. Consequently, BellSouth assumes that this interrogatory is requesting information related to trouble reporting and tracking functions for maintenance and repair that are provided by BellSouth and that can be obtained electronically. This response is provided in that context.

BellSouth provides CLECs with nondiscriminatory access to its Operations Support Systems ("OSS") and the necessary information contained therein so that the CLEC user can execute the following functions with the same precision that a BellSouth user could for an equivalent Retail customer:

1. Enter a trouble report on a product/service provided by BellSouth,
2. Modify an existing trouble report,
3. Obtain the current status of an existing trouble report, and
4. Close an existing trouble report.

All of the products and services provided by BellSouth fall into one of two categories:

1. "Designed Services" (e.g., SL2 UNE Loop, DS0, etc.) supported by BellSouth's Work Force Administration (WFA) OSS, or
2. "Non-Designed Services" (e.g., SL1 UNE Loops, POTS, UNE-P, etc.) supported by BellSouth's Loop Maintenance Operations System (LMOS).

The Work and Force Administration (WFA) system product line manages and automates most of the work assignments required to install and repair client company facilities, such as message, trunks, special service circuits, carrier services, and business/residential lines.

The WFA product line includes the following systems:

- WFA/C system, the work assignment and control administration component of the WFA product line. Telcordia ™ Work and Force Administration/Internet Extension (WFA/IX) is a subsystem of WFA/C that supports the Trouble Management Process across multiple application instances.
- The Telcordia ™ Work and Force Administration/Dispatch In (WFA/DI) system, the force administration component that manages central office craft personnel.
- The Telcordia ™ Work and Force Administration/Dispatch Out (WFA/DO) system, the force administration component that manages outside technicians.
  NOTE: Information sent to the WFA/DO and WFA/DI dispatch systems is also sent to Telcordia™ Force, an automated dispatch system for inside and outside technicians.
- The Telcordia ™ Network and Services Database (NSDB), which stores data received from the TIRKS system and Service Order Analysis and Control (SOAC) system, distributes data to operations systems such as WFA/C and Service Delivery, and receives completions and updates from WFA/C and Service Delivery.

The LMOS family of systems provides POTS service activation and assurance. LMOS is an AT&T/Lucent developed system composed of the following major subsystems:

- LMOS Host runs on 5 IBM mainframes. Its key functions are to store and maintain detailed customer line record information, and create and maintain historical data on closed trouble reports and service orders. The Host interfaces with over 45+ applications.
- LMOS FE, another Lucent system, runs on 13 NCR mid-range platforms, and performs ticket management from entry to close-out. LMOS FE interfaces with 32 applications.

- LMOS Mapper, part of the Front End, assembles dispatchable orders requiring field work
- The Access Network System (ANS) ensures secure access to LMOS and runs on 11 HP mid-range platforms.
- The ARSB Datakit Network which provides data communication for LMOS.
- LEACS mechanically corrects more than 50% of the LMOS Database generated errors via terminal emulation. LMOS provides an interface to the Mechanized Loop Test (MLT) system for automated testing and analysis of telephone lines and equipment.

CLECs have access to the following interfaces that provide nondiscriminatory access to BellSouth's maintenance and repair OSS:

Electronic Communications Trouble Administration (ECTA)

ECTA is an Open System Interconnection (OSI) Network Management compliant platform providing Common Management Information Protocol (CMIP) services for supported applications. This "machine-to-machine" interface is built to the American National Standards Institute (ANSI) standards for the exchange of telecommunications trouble administration information as defined by the Electronic Communications Implementation Committee (ECIC) of the Alliance for Telecommunications Industry Solutions (ATIS). Specifically, these standards include T1.227-1995, T1.227A-1998, T1.228-1995 and T1.262-1998[2].

ECTA supports trouble reports for both Designed and Non-Designed services. In addition, ECTA allows the CLEC to obtain Mechanized Loop Test (MLT) results without submitting a trouble report.

ECTA is described in detail in the following BellSouth documents posted to the Interconnection website at:

Start-Up Guide:
http://www.interconnection.bellsouth.com/guides/activation/pdf/ecta_guide_a.pdf

Joint Implementation Agreement (Sample JIA):
http://www.interconnection.bellsouth.com/guides/activation/pdf/clec_jia.pdf

Circuit Provisioning Status System – Trouble Administration (CPSS-TA)
CPSS-TA is a "man-to-machine" Graphical User Interface (GUI) accessible via the public Internet, which supports trouble reports on Designed services.

CPSS-TA is described in detail in the following BellSouth document posted to the Interconnection website at:
http://www.interconnection.bellsouth.com/guides/statusing/pdf/eccpss.pdf

CLEC Trouble Administration Facilitation Interface (TAFI)
TAFI is a "man-to-machine" character based interface accessible via either a Local Area Network (LAN) connection or modem pool, which supports processing trouble reports on Non-Designed services.

TAFI is used by BellSouth's retail repair centers to process trouble reports for its customers. While there is only one set of TAFI code, the CLEC "version" of TAFI insures that the CLEC user can: (1) only access data for one of his customers and (2) can process trouble reports for both Residence and Business class of service customers on the same processor.

In addition to the functions listed above, TAFI attempts to resolve the customer's trouble condition on the initial customer contact. If TAFI cannot resolve the problem, it routes the report to the correct BellSouth resource for resolution.

TAFI is described in detail in the following BellSouth document posted to the Interconnection website at:
http://www.interconnection.bellsouth.com/guides/lens_tafi/pdf/tafi_is5.pdf

Other documentation that describes Maintenance/Repair processes for UNE loops capable of supporting DS-0/voice-grade UNE loops include the following:

The BellSouth Operational Understanding Guide establishes a foundation for a working relationship between the CLEC Maintenance Service Center and BST in support of Local Services. This document seeks to establish the roles and responsibilities for each work center, define the operational

requirements needed to perform the assigned responsibilities, and to ensure and facilitate a mutual understanding for the interactive support of Local Services during its implementation and production phases. This document is posted to the Interconnection website at: http://www.interconnection.bellsouth.com/guides/other_guides/html/gopeu001/index.htm

RESPONSE PROVIDED BY: Ronald M. Pate

REQUEST: Please provide a detailed description of the current ILEC OSS capabilities to support automated, flow-through processes for Billing for DS-0/voice-grade UNE loops on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to Telcordia documents, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: This Interrogatory contains the term "flow-through process." Flow-through processes apply to BellSouth's electronic ordering interface applications only, as explained in BellSouth's response to MCI's First Set of Interrogatorries, Item No. 36. Consequently, BellSouth assumes that this interrogatory is requesting information related to billing functions provided by BellSouth that can be obtained electronically. This response is provided in that context.

Non-design DS0/voice grade UNE loops are billed by Integrated Billing Solution (IBS). Service order processing is generally the same for all services billed by IBS. Orders for services billed by IBS are initially received into Customer Records Information System (CRIS) from the ordering system. The information is then programmatically audited to insure that all of the information needed for billing purposes is complete and accurate. Any errors found are investigated, corrected and service orders are sent back to CRIS for processing. Once the service orders have passed the various CRIS audits, the information is posted to the Customer Service Record (CSR) in CRIS with the exception of the appearance of recurring rates. Service order information is then sent from CRIS to IBS for rating and taxing purposes. Services ordered by customers are encoded on service orders using Universal Service Order Codes (USOCs). The USOCs indicate to the billing system which types of service are included on each of the orders. The rating tables in the billing systems contain the rates for each of the USOCs that should be billed. Rates for individual services ordered by CLECs are generally defined in the interconnection agreements negotiated between the CLEC and BellSouth. The rating process within the Tapestry component of IBS matches the USOCs in the service orders with the rates in the rating tables and determines how much should be charged to the customers. The rated

RESPONSE: (Cont.)

service order information is updated to the customer's account records to await the end of the customer's billing period and inclusion on the customer's invoice.

Billing system processing for design DS0/voice grade UNE loops is very similar to the processing mentioned above for non-design loops. However, design loops are billed by Carrier Access Billing System (CABS) and are not processed by CRIS or IBS. Service order processing is generally the same for all services billed by CABS. After service orders for design loops are received into CABS from the ordering system, the information is audited to insure that all of the information needed for billing purposes is complete and accurate. Any errors found are investigated, corrected and service orders are sent back to CABS for processing. Once the service orders have passed the various audits, the rating process begins. Services being ordered by a customer are encoded on service orders using Universal Service Order Codes (USOCs). The USOCs indicate to the billing system which type of service is included on each of the orders. The rating tables in the billing systems contain the rates for each of the USOCs that should be billed. Rates for individual services ordered by CLECs are generally defined in the interconnection agreements negotiated between the CLEC and BellSouth. The rating process in CABS matches the USOCs in the service orders with the rates in the rating tables and determines how much should be charged to the customers. The rated service order information is updated to the customer's account records in CABS to await the end of the customer's billing period and inclusion on the customer's invoice.

RESPONSE PROVIDED BY: Clyde Greene

REQUEST: Please provide a detailed description of the current ILEC OSS capabilities to support automated, flow-through processes for Pre-ordering for DSL-capable UNE loops on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to Telcordia documents, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: See BellSouth's response to MCI First Set of Interrogatories, Item No. 36.

RESPONSE PROVIDED BY: Ronald M. Pate

REQUEST: Please provide a detailed description of the current ILEC OSS capabilities to support automated, flow-through processes for Ordering for DSL-capable UNE loops on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to Telcordia documents, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: See BellSouth's response to MCI First Set of Interrogatories, Item No. 37. In addition to the ordering applications described in that response, BellSouth also offers the Interconnection CLEC Enabler (ICE) web-based application that allows CLECs and BellSouth Engineering offices to handle xDSL service inquiries (with firm order). The CLEC area of the application provides the functionality to enable the CLEC to perform the following tasks:

- Create a new XDSL Service Inquiry (with firm order)
- Cancel an existing, active XDSL Service Inquiry
- View the details of any existing XDSL Service Inquiry
- Respond to Service Inquiry Clarification requests.

The ordering process is the same regardless of whether the UNE loops are provisioned on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. It should be noted, however, that DSL-capable UNE loops typically require a loop facility consisting of only non-loaded metallic facilities. This is because some technologies, such as High Bit-rate Digital Subscriber Line (HDSL), cannot be transported via DLC due to the bandwidth employed.

RESPONSE: (Cont.)

When a customer is served by DLC, an Unbundled Local Loop providing such a wide bandwidth will not typically be available. This can be provided at either the loop level, as in a) all-copper facilities, but would only be provided at the sub-loop level, as in b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Refer to the Unbundled Local Loop - Technical Specifications TR73600 document located on the Interconnection website at http://www.interconnection.bellsouth.com/guides/html/tech_ref.html for the technical specifications for the Unbundled Local Loops offered by BellSouth, including DSL-capable loops.

Also reference the individual CLEC Information Packages for specific services including but not limited to the BellSouth Unbundled Copper Loop Non-Designed (UCL-ND), the BellSouth Unbundled ADSL/HDSL Compatible Loops (Revised CLEC Information Package), and the BellSouth Unbundled Copper Loop Designed (Revised CLEC Information Package) found at the Interconnection website at http://interconnection.bellsouth.com/guides/html/unes.html

RESPONSE PROVIDED BY: Ronald M. Pate

REQUEST: Please provide a detailed description of the current ILEC OSS capabilities to support automated, flow-through processes for Provisioning for DSL-capable UNE loops on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to Telcordia documents, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: This Interrogatory contains the term "flow-through processes." Flow-through processes apply to BellSouth's electronic ordering interface applications only, as explained in BellSouth's response to MCI First Set of Interrogatories, Item No. 36. Consequently, there is no "automated, flow-through processes" for provisioning of DSL-capable loops of any service type.

RESPONSE PROVIDED BY: Ken Ainsworth

REQUEST: Please provide a detailed description of the current ILEC OSS capabilities to support automated, flow-through processes for Maintenance/Repair for DSL-capable UNE loops on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to Telcordia documents, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: See BellSouth's response to MCI First Set of Interrogatories Item No. 39.

The ability for a CLEC to enter a trouble report is the same regardless of whether the UNE loops are provisioned on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC or c) hybrid fiber-copper facilities using UDLC or NGDLC. It should be noted, however, that DSL-capable UNE loops typically require a loop facility consisting of only non-loaded metallic facilities. This is because some technologies, such as High Bit-rate Digital Subscriber Line (HDSL), cannot be transported via DLC due to the bandwidth employed. When a customer is served by DLC, an Unbundled Local Loop providing such a wide bandwidth will not typically be available. This can be provided at either the loop level, as in a) all-copper facilities, but would only be provided at the sub-loop level, as in b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC.

RESPONSE PROVIDED BY: Ronald M. Pate

REQUEST: Please provide a detailed description of the current ILEC OSS capabilities to support automated, flow-through processes for Billing for DSL-capable UNE loops on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to Telcordia documents, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: This Interrogatory contains the term "flow-through process." Flow-through processes apply to BellSouth's electronic ordering interface applications only, as explained in BellSouth's response to MCI's First Set of Interrogatorries, Item No. 36. Consequently, BellSouth assumes that this interrogatory is requesting information related to billing functions provided by BellSouth that can be obtained electronically. This response is provided in that context.

Non-design DSL-capable UNE loops are billed by Integrated Billing Solution (IBS). Service order processing is generally the same for all services billed by IBS. Orders for services billed by IBS are initially received into Customer Records Information System (CRIS) from the ordering system. The information is then programmatically audited to insure that all of the information needed for billing purposes is complete and accurate. Any errors found are investigated, corrected and service orders are sent back to CRIS for processing. Once the service orders have passed the various CRIS audits, the information is posted to the Customer Service Record (CSR) in CRIS with the exception of the appearance of recurring rates. Service order information is then sent from CRIS to IBS for rating and taxing purposes. Services ordered by customers are encoded on service orders using Universal Service Order Codes (USOCs). The USOCs indicate to the billing system which types of service are included on each of the orders. The rating tables in the billing systems contain the rates for each of the USOCs that should be billed. Rates for individual services ordered by CLECs are generally defined in the interconnection agreements negotiated between the CLEC and BellSouth. The rating process within the Tapestry component of IBS matches the USOCs in the service orders with the rates in the rating tables and determines how much should be charged to the customers. The rated service order information is updated to the customer's account records to

RESPONSE: (Cont.)

await the end of the customer's billing period and inclusion on the customer's invoice.

Billing system processing for design DSL-capable UNE loops is very similar to the processing mentioned above for non-design loops, however, design loops are billed by Carrier Access Billing System (CABS) and are not processed by CRIS or IBS. Service order processing is generally the same for all services billed by CABS. After service orders for design loops are received into CABS from the ordering system, the information is audited to insure that all of the information needed for billing purposes is complete and accurate. Any errors found are investigated, corrected and service orders are sent back to CABS for processing. Once the service orders have passed the various audits, the rating process begins. Services being ordered by a customer are encoded on service orders using Universal Service Order Codes (USOCs). The USOCs indicate to the billing system which type of service is included on each of the orders. The rating tables in the billing systems contain the rates for each of the USOCs that should be billed. Rates for individual services ordered by CLECs are generally defined in the interconnection agreements negotiated between the CLEC and BellSouth. The rating process in CABS matches the USOCs in the service orders with the rates in the rating tables and determines how much should be charged to the customers. The rated service order information is updated to the customer's account records in CABS to await the end of the customer's billing period and inclusion on the customer's invoice.

RESPONSE PROVIDED BY: Clyde Greene

REQUEST: Please provide a detailed description of the current ILEC OSS capabilities to support automated, flow-through processes for Pre-ordering for UNE loops capable of supporting line splitting (*i.e.* voice service and DSL service carried on a single wire pair entering the customer's premises) on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to Telcordia documents, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: See BellSouth's response to MCI First Set of Interrogatories Item No. 36. In addition to these pre-ordering functions, an additional loop makeup/loop qualification pre-order function unique to shared loop products (including line splitting) is the "conditional qualification" process. This process provides additional options when performing a pre-qualification assessment and allows "conditional qualification" of a loop with a copper Digital Added Main Line ("DAML"). This process is described in detail in each of the CLEC information packages for the various line splitting products on the Interconnection website at: http://interconnection.bellsouth.com/guides/html/unes.html.

The pre-ordering information provided by BellSouth is the same information regardless of whether the UNE loops are provisioned on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC or c) hybrid fiber-copper facilities using UDLC or NGDLC. It should be noted, however, that UNE loops capable of supporting line splitting require a loop facility consisting of only non-loaded metallic facilities. This is described in the CLEC information packages for the various line splitting products on the Interconnection website at http://interconnection.bellsouth.com/guides/html/unes.html. Line splitting UNEs may be provided at either the loop level (CO-based line splitting), when served by a) all-copper facilities, but would only be provided at the sub-loop level (Remote Site Line Splitting), when served by b) hybrid fiber-copper facilities using IDLC or c) hybrid fiber-copper facilities using UDLC or NGDLC.

RESPONSE: (Cont.)

The pre-order functionally offered by BellSouth, as it relates to Line Splitting, is additionally described in detail in the following BellSouth documents, posted to the Interconnection website:

Line Splitting (Central Office Based) CLEC Information Package
http://interconnection.bellsouth.com/guides/html/unes.html

Letter of Authorization for Line Splitting CLEC Information Package
http://interconnection.bellsouth.com/guides/unedocs/loa.pdf

Remote Site Line Splitting CLEC Information Package
http://interconnection.bellsouth.com/guides/unedocs/rs_linesplit.pdf

BellSouth Line Splitting Service
http://interconnection.bellsouth.com/guides/unedocs/line_split_ser_desc.pdf

RESPONSE PROVIDED BY: Ronald M. Pate

REQUEST: Please provide a detailed description of the current ILEC OSS capabilities to support automated, flow-through processes for Ordering for UNE loops capable of supporting line splitting (*i.e.* voice service and DSL service carried on a single wire pair entering the customer's premises) on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to Telcordia documents, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: See BellSouth's response to MCI First Set of Interrogatories, Item No. 37. The ordering processes provided by BellSouth for line splitting are the same regardless of whether the UNE loops are provisioned on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC or c) hybrid fiber-copper facilities using UDLC or NGDLC. It should be noted, however, that UNE loops capable of supporting line splitting require a loop facility consisting of only non-loaded metallic facilities. This is described in the CLEC information packages for the various line splitting products listed below. Line splitting UNEs may be provided at either the loop level (CO-based line splitting), when served by a) all-copper facilities, but would only be provided at the sub-loop level (Remote Site Line Splitting), when served by b) hybrid fiber-copper facilities using IDLC or c) hybrid fiber-copper facilities using UDLC or NGDLC.

Prior to placing an order for UNE loops for Line Splitting, whether CO-based or remote site, DLEC/CLEC owned or BellSouth provided splitters and all equipment necessary for Line Splitting must be in place. This is accomplished by manually submitting the LSOD [Line Splitter Ordering Document] to the CRSG to order BellSouth provided splitters and CLEC cable pair activation.

RESPONSE: (Cont.)

Currently, only CO-based Line Splitting (UNE-P voice) with DLEC-owned splitter can be ordered electronically with flow-through.

Specific ordering information relative to Line Splitting may be obtained from the following BellSouth documents, posted to the Interconnection website:

Line Splitting (Central Office Based) CLEC Information Package
http://interconnection.bellsouth.com/guides/html/unes.html

Letter of Authorization for Line Splitting CLEC Information Package
http://interconnection.bellsouth.com/guides/unedocs/loa.pdf

Remote Site Line Splitting CLEC Information Package
http://interconnection.bellsouth.com/guides/unedocs/rs_linesplit.pdf

BellSouth Line Splitting Service
http://interconnection.bellsouth.com/guides/unedocs/line_split_ser_desc.pdf

RESPONSE PROVIDED BY: Ronald M. Pate

REQUEST: Please provide a detailed description of the current ILEC OSS capabilities to support automated, flow-through processes for Provisioning for UNE loops capable of supporting line splitting (*i.e.* voice service and DSL service carried on a single wire pair entering the customer's premises) on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to Telcordia documents, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: This Interrogatory contains the term "flow-through processes." Flow-through processes apply to BellSouth's electronic ordering interface applications only, as explained in BellSouth's response to MCI First Set of Interrogatories, Item No. 36. Consequently, there is no "automated, flow-through processes" for provisioning of UNE loops of any service type.

RESPONSE PROVIDED BY: Tommy G. Williams

REQUEST: Please provide a detailed description of the current ILEC OSS capabilities to support automated, flow-through processes for Maintenance/Repair for UNE loops capable of supporting line splitting (*i.e.* voice service and DSL service carried on a single wire pair entering the customer's premises) on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to Telcordia documents, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: See BellSouth's response to MCI First Set of Interrogatories Item No. 39. The ability for a CLEC to enter a trouble report is the same regardless of whether the UNE loops are provisioned on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. However, it should be noted that line splitting provides a service where voice and data operate on the same loop, and an unloaded, 2-wire copper loop must serve the end user. Therefore, the OSS capabilities described below apply to all-copper facilities (either CO-based or Remote Site-based) only. This can be provided at either the loop level, as in a) all-copper facilities, but would only be provided at the sub-loop level, as in b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC.

CLECs have access to the following interfaces that provide nondiscriminatory access to BellSouth's maintenance and repair OSS which support Line Splitting:

Trouble Administration Facilitation Interface (TAFI)

TAFI is a "man-to-machine" character-based interface accessible via either a Local Area Network (LAN) connection or modem pool, which supports processing trouble reports on Non-Designed (POTS) voice-grade services.

RESPONSE: (Cont.)

TAFI is used by BellSouth's retail repair centers to process trouble reports for its customers. While there is only one set of TAFI code, the CLEC "version" of TAFI insures that the CLEC user can: (1) only access data for one of his customers and (2) can process trouble reports for both Residence and Business class of service customers on the same processor.

In addition to the functions listed above, CLEC TAFI attempts to resolve the customer's trouble condition on the initial customer contact. If CLEC TAFI cannot resolve the problem, it routes the report to the correct BellSouth resource for resolution.

DLEC TAFI for Line Splitting is completely different from regular CLEC TAFI. Since the DLEC is providing high-speed data access over the same physical facilities via the Line Splitting methodology, the DLEC will be limited in TAFI to only processing Line Splitting and Line Share Data (LSD) reports. A separate password and DLEC TAFI account are required.

DLECs provide high-speed data over the same physical facilities as the POTS service to the end-user via the Line Splitting and/or Line Sharing methodologies. TAFI also provides DLECs with sufficient functionality to submit trouble reports on the services they provide. Specific DLEC functions include the ability to:

- Submit a trouble report
- Access trouble history on the end user's account
- Request a vendor meet
- Run a baseline MLT (Mechanized Loop Test)
- View a splitter signature on the loop

TAFI is described in detail in the following BellSouth document posted to the Interconnection website at:
http://www.interconnection.bellsouth.com/guides/lens_tafi/pdf/tafi_is5.pdf

RESPONSE: (Cont.)

Other documentation that describes Maintenance/Repair processes for UNE loops capable of supporting line splitting include the following:

BellSouth Line Sharing Collaboratives
Maintenance and Trouble Receipt Flows and the Line Splitting Maintenance Flow are available on the Collaborative website at:
http://www.interconnection.bellsouth.com/markets/lec/line_sharing_collab/index.html

RESPONSE PROVIDED BY: Ronald M. Pate

REQUEST: Please provide a detailed description of the current ILEC OSS capabilities to support automated, flow-through processes for Billing for UNE loops capable of supporting line splitting (*i.e.* voice service and DSL service carried on a single wire pair entering the customer's premises) on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to Telcordia documents, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: This Interrogatory contains the term "flow-through process." Flow-through processes apply to BellSouth's electronic ordering interface applications only, as explained in BellSouth's response to MCI's First Set of Interrogatorries, Item No. 36. Consequently, BellSouth assumes that this interrogatory is requesting information related to billing functions provided by BellSouth that can be obtained electronically. This response is provided in that context.

UNE loops capable of supporting line splitting are billed by Integrated Billing Solution (IBS). Service order processing is generally the same for all services billed by IBS. Orders for services billed by IBS are initially received into Customer Records Information System (CRIS) from the ordering system. The information is then programmatically audited to insure that all of the information needed for billing purposes is complete and accurate. Any errors found are investigated, corrected and service orders are sent back to CRIS for processing. Once the service orders have passed the various CRIS audits, the information is posted to the Customer Service Record (CSR) in CRIS with the exception of the appearance of recurring rates. Service order information is then sent from CRIS to IBS for rating and taxing purposes. Services ordered by customers are encoded on service orders using Universal Service Order Codes (USOCs). The USOCs indicate to the billing system which types of service are included on each of the orders. The rating tables in the billing systems contain the rates for each of the USOCs that should be billed. Rates for individual services ordered by CLECs are generally defined in the interconnection agreements negotiated between the CLEC and BellSouth. The rating process within the Tapestry component of IBS matches the

USOCs in the service orders with the rates in the rating tables and determines how much should be charged to the customers. The rated service order information is updated to the customer's account records to await the end of the customer's billing period and inclusion on the customer's invoice.

RESPONSE PROVIDED BY: Clyde Greene

REQUEST: To the extent that BellSouth's responses to MCI-36 to MCI-50 assert that BellSouth has in place OSS capabilities to support automated, flow-through processes, please provide for each response to Data Request MCI-36 to MCI-50, the statewide volumes that have been supported on an automated flow-through basis for each month since July 1, 2001.

RESPONSE: Information responsive to this request is contained in BellSouth's response to MCI's 1st First Request for Production of Documents No. 1.

RESPONSE PROVIDED BY: Al Varner

REQUEST: To the extent that BellSouth's responses to MCI-36 to MCI-50 assert that BellSouth has in place OSS capabilities to support automated, flow-through processes, please provide for each Data Request MCI-36 to MCI-50 the monthly fall-out rates (*i.e.*, percentage of transactions that were designed to flow through but did not) since July 1, 2001.

RESPONSE: Information responsive to this request is contained in BellSouth's response to MCI's 1st First Request for Production of Documents No. 1.

RESPONSE PROVIDED BY: Al Varner

REQUEST: To the extent that BellSouth's responses to MCI-36 to MCI-50 assert that BellSouth has in place OSS capabilities to support automated, flow-through processes, please provide for each response to Data Request MCI-36 to MCI-50 the maximum daily, weekly and monthly volumes that can currently be supported.

RESPONSE: This interrogatory contains the term "flow-through process." Flow-through processes apply to BellSouth's electronic ordering interfaces only, as was explained in BellSouth's response to MCI's First Set of Interrogatories Item No. 36. Subject to that clarification, all of BellSouth's existing OSS are scalable, and are designed to accommodate both current and projected volumes of LSRs. There are no "maximum" volumes.

RESPONSE PROVIDED BY: Ronald M. Pate

REQUEST: To the extent that BellSouth's responses to MCI-36 to MCI-50 state that BellSouth does not have in place OSS capabilities to support automated, flow-through processes, please provide for each response to Data Request MCI-36 to MCI-50 a detailed estimate of the costs, work effort and timeframes associated with any OSS modification or upgrade necessary to convert BellSouth's manual and/or semi-mechanized process to an automated, flow-through process for each of the OSS functions and each of the service types in MCI-36 to MCI-50. Please provide a copy of all documents describing these modifications or upgrades, including but not limited to documents sent to or received from Telcordia, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: BellSouth objects to the request to the extent that it is overly broad and unduly burdensome. Subject to this objection, and without waiving this objection, BellSouth has no information responsive to this request.

There are currently no pending conversions of any manual and/or semi-mechanized processes for the electronic ordering interfaces referenced in MCI-36 to MCI-50. Changes to the ordering OSS or the associated processes for ordering through the OSS are managed through BellSouth's Change Control Process (CCP). To the extent that BellSouth does not have in place OSS capabilities to support automated flow-through processes for products and/or services as described in Items 36-50 previous, a CLEC desiring such capabilities may submit to the CCP a change request for the automation of any product and/or service. At that time (assuming viability and acceptance of the change request by the CCP), all information as requested above would be developed and provided to the CLECs via the CCP.

RESPONSE: (Cont.)

For the sake of efficiency for both CLEC and BellSouth operations, BellSouth attempts to be proactive in providing electronic ordering and flow-through capabilities for as many product/service offerings as practical. BellSouth's decision to mechanize is based upon a number of variables, including projected LSR submission volume, regulatory requirements, technical feasibility, and available release capacity for development and implementation.

RESPONSE PROVIDED BY: Ronald M. Pate

REQUEST: To the extent that BellSouth's responses to MCI-36 to MCI-50 state that BellSouth does not have in place OSS capabilities to support automated, flow-through processes, please provide a detailed description of the current manual and/or semi-mechanized ILEC OSS processes for each of the OSS functions and each of the service types in MCI-36 to MCI-50. Please provide a copy of all documents describing these processes, including but not limited to documents sent to or received from Telcordia, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: BellSouth objects to this Interrogatory to the extent that it is overly broad and unduly burdensome. Subject to this objection, and without waiving this objection, BellSouth provides CLECs with nondiscriminatory access to its Operations Support Systems (OSS) and the necessary information contained therein in order that the functions of pre-ordering, ordering, provisioning, maintenance and repair, and billing can be performed. Nondiscriminatory access does not require that all detailed information about loops must be available electronically and involve no manual processes. BellSouth provides detailed information about the services and UNEs that can be ordered and which interfaces may be used, and includes whether the process is currently fully electronic (i.e., flows through), partially electronic, or manual. This list is provided in the Flow-Through Matrix, and was provided in the response to Interrogatory Item No. 37. The Flow-Through Matrix is also available at the Performance Measurement and Analysis Platform ("PMAP") website at http://pmap.bellsouth.com/content/documentation.aspx.

RESPONSE: (Cont.)

CLECs may also manually order resale and UNE POTS-type services. LSRs for services and UNEs may be faxed to the Local Carrier Service Center ("LCSC"). The LCSC is dedicated to handling CLEC LSRs and pre-ordering transactions, along with associated expedite requests and escalations. The LCSC also processes LSRs that are transmitted electronically via EDI, TAG, or LENS, but fall out by design or due to errors for manual handling, as well as those LSRs that cannot be submitted electronically. A list of LSRs that have fallen out for manual handling, whether by design or in error, is maintained in the Local Exchange Ordering System ("LEO") or Work Item Manager ("WIM") (WIM contains the list of LSRs for xDSL-compatible loops and UCLs that have fallen out for manual handling.)

CLECs and DLECs may manually report their end-user's voice and/or data troubles directly to the CWINS (Customer Wholesale Interconnection Network Services) Center. Maintenance Administrators (MAs) and/or Testing Technicians (TTs) utilize the proper OSS to handle the trouble condition. (For example, MAs use TAFI to process non-designed voice, Line Sharing and Line Splitting problems while TTs use WFA to enter trouble reports on designed services.)

BellSouth provides sufficient personnel and processes for the handling of manual processes and manages the personnel and processes in a manner that complies with the performance requirements of the various state public service commissions for timeliness and accuracy.

The current manual and/or semi-mechanized OSS processes for each of the service types in MCI-36 to MCI-50 offered by BellSouth is described in detail in the following BellSouth documents, posted to the Interconnection website:

RESPONSE: (Cont.)

BellSouth Local Ordering Handbook, Section 2, *Pre-Ordering (*TCIF9 / LSOG4, Release 13.0/ Version 13.0C)
http://interconnection.bellsouth.com/guides/leo/bbrlo_releases/13_0/pdf/130-2.pdf

BellSouth Pre-Ordering and Ordering Overview Guide
http://www.interconnection.bellsouth.com/guides/bpobr/pdf/bst_pr_1.pdf

BellSouth Loop Makeup (LMU) CLEC Pre-Ordering and Ordering Guides for Manual Loop Makeup
http://www.interconnection.bellsouth.com/guides/html/bpobr.html

LOH - Local Ordering Handbook (formerly named the "BellSouth Business Rules for Local Ordering TCIF 9/LSOG 4")
http://interconnection.bellsouth.com/guides/html/leo.html

Local Exchange Ordering (LEO) Implementation Guide - Volume 1
http://interconnection.bellsouth.com/guides/html/leo.html

BellSouth Local Ordering Handbook (Section 3 – Ordering, TCIF9 / LSOG 4, Release 13.0/ Version 13.0C)
http://interconnection.bellsouth.com/guides/leo/bbrlo_releases/13_0/pdf/130-3.pdf

BST Customized LSOG4 Forms
LSR Request
Form Instructions
http://www.interconnection.bellsouth.com/guides/html/leo.html

Also reference the individual CLEC Information Packages for specific services, found at the Interconnection website at
http://interconnection.bellsouth.com/guides/html/unes.html

RESPONSE PROVIDED BY: Ronald M. Pate/Ken Ainsworth

REQUEST: Please provide a detailed description of the planned ILEC OSS capabilities to support automated, flow-through processes for Pre-ordering for DS-0/voice-grade UNE loops on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to documents sent to or received from Telcordia, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: BellSouth objects to this Interrogatory to the extent that it is overly broad and unduly burdensome. Subject to this objection, and without waiving this objection, BellSouth provides the following response.

This interrogatory contains the phrase "flow-through processes." Flow-through processes apply to BellSouth's electronic ordering interfaces only, as explained in BellSouth's response toMCI First Set of Interrogatories Item No. 36. With this definition in mind, BellSouth assumes that this interrogatory is requesting pre-ordering information provided by BellSouth that can be obtained electronically. This response is provided in that context.

BellSouth plans enhancements to the Interconnection CLEC Enabler (ICE) web-based application that allows CLECs and BellSouth Engineering offices to handle xDSL and Manual Loop Make Up service inquiries. The enhanced functionality will enable the CLEC to perform the following additional tasks:

RESPONSE: (Cont.)

- Cloning: Provides the ICE user the ability to clone both LMU and XDSL Service Inquiries. Once cloned, the duplicate service inquiry can then be updated and submitted via the ICE application to the proper centers for processing. This feature allows the CLEC to quickly create a new service inquiry based on data associated with an existing service inquiry without the CLEC having to type the majority of the information in a second time.

- LSR Supplement and Version (Update and/or Cancel): This functionality will allow a CLEC to update and/or cancel an existing service order, previously submitted via the ICE web based GUI application.

ICE preorder functionally offered by BellSouth is described in detail in the ICE documents provided in the response to MCI Interrogatory Item No. 36. One additional document, "ICE Requirements Specification and Cost Estimates," that supports the proposed ICE functionality, targeted for implementation in 4Q2003, is being provided in response to MCI's 1st Request for Production of Documents, No. 1

RESPONSE PROVIDED BY: Ronald M. Pate

REQUEST: Please provide a detailed description of the planned ILEC OSS capabilities to support automated, flow-through processes for Ordering for DS-0/voice-grade UNE loops on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to documents sent to or received from Telcordia, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: BellSouth objects to this Interrogatory to the extent that it is overly broad and unduly burdensome. Subject to this objection, and without waiving this objection, BellSouth currently has no planned enhancements to its ordering OSS to support automated flow-through processes for ordering for DS0/voice grade UNE loops.

RESPONSE PROVIDED BY: Ronald M. Pate

REQUEST: Please provide a detailed description of the planned ILEC OSS capabilities to support automated, flow-through processes for Provisioning for DS-0/voice-grade UNE loops on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to documents sent to or received from Telcordia, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: This Interrogatory contains the term "flow-through processes." Flow-through processes apply to BellSouth's electronic ordering interface applications only, as explained in BellSouth's response to MCI First Set of Interrogatories, Item No. 36. Consequently, there are no "automated, flow-through processes" for provisioning of UNE loops of any service type, and BellSouth currently has no planned OSS capabilities responsive to this request.

RESPONSE PROVIDED BY: Jerry Latham

REQUEST: Please provide a detailed description of the planned ILEC OSS capabilities to support automated, flow-through processes for Maintenance/Repair for DS-0/voice-grade UNE loops on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to documents sent to or received from Telcordia, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: BellSouth objects to this request to the extent it is overly broad and unduly burdensome. Subject to this objection, and without waiving this objection, BellSouth provides the following response.

This interrogatory contains the term "flow-through processes." Flow-through processes apply to BellSouth's electronic ordering interface applications only, as explained in BellSouth's response to MCI First Set of Interrogatories Item No. 36. With this definition in mind, BellSouth's assumes that this interrogatory is requesting information related to trouble reporting and tracking functions for maintenance and repair that are provided by BellSouth and that can be obtained electronically.

The following maintenance and repair process enhancements are planned to the TAFI system related to DS0/voice-grade UNE loops. This functionality is targeted for 1Q2004 implementation:

- Modify the diagnostic flow to prohibit the user from changing direction if a Mechanized Loop Testing ("MLT") test has been initiated and the results have not been returned yet. Once the results have been returned, the user can change direction if necessary.
- Modify the diagnostic flow to prohibit the user from changing direction if a Predictor query (CO translation check) has been initiated and the results have not been returned yet. Once the results have been returned, the user can change direction if necessary.
- Enhance the Class of Service ("COS") determination (to determine if the customer is either Residence or Business) to look at the Loop Maintenance Operations System (LMOS) "COS" field if the

RESPONSE: (Cont.)

existing CENT Fid (Centralized Customer Service Field Identifier) process yields indeterminate results.

The following documents, which are provided in BellSouth's response to MCI's 1st Request for Production of Documents No. 1 describe in detail the enhancements listed above:

- TAFI Work Request #969 – Modify Diagnostic Flow
- TAFI Work Request #970 - COS determination

RESPONSE PROVIDED BY: Ronald M. Pate

REQUEST: Please provide a detailed description of the planned ILEC OSS capabilities to support automated, flow-through processes for Billing for DS-0/voice-grade UNE loops on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to documents sent to or received from Telcordia, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: This Interrogatory contains the term "flow-through processes," which apply to BellSouth's electronic ordering interface applications only, as explained in BellSouth's response to MCI First Set of Interrogatories, Item No. 36. Consequently, there are no "automated, flow-through processes" for billing of UNE loops of any service type, and BellSouth currently has no planned OSS capabilities responsive to this request.

RESPONSE PROVIDED BY: Clyde Greene

REQUEST: Please provide a detailed description of the planned ILEC OSS capabilities to support automated, flow-through processes for Pre-ordering for DSL-capable UNE loops on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to documents sent to or received from Telcordia, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: See BellSouth's response to MCI First Set of Interrogatories Item No. 56.

RESPONSE PROVIDED BY: Ronald M. Pate

REQUEST: Please provide a detailed description of the planned ILEC OSS capabilities to support automated, flow-through processes for Ordering for DSL-capable UNE loops on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to documents sent to or received from Telcordia, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: BellSouth objects to this Interrogatory to the extent that it is overly broad and unduly burdensome. Subject to this objection, and without waiving this objection, BellSouth provides the following response.

This interrogatory contains the term "flow-through processes." Flow-through processes apply to BellSouth's electronic ordering interface applications only, as was defined in Interrogatory Item No. 36. This response is provided in that context.

CLECs should refer to technical reference TR73600 (found at http://www.interconnection.bellsouth.com/guides/html/tech_ref.html) and the CLEC Information Packages (found at BellSouth's interconnection website, http://www.interconnection.bellsouth.com/guides/html/unes.html) for the requested product/service to determine whether the individual product is supported on copper, IDLC or UDLC/NGDLC. BellSouth's ordering processes are the same regardless of the transmission media type used to provision the product/service.

RESPONSE: (Cont.)

Following are the change requests pending implementation through BellSouth's Change Control Process (CCP):

CR0563 – Mechanization of XDSL, Request Type A, Activity Type of T for transfers. Submitted by Covad; targeted for implementation in Release 17.0, 3rd quarter 2004.

CR0622 – Loop Modification process to eliminate cancellation of CLEC order if BellSouth technician finds loaded loops exist on assigned facilities. Submitted by Covad; targeted for implementation in Release 16.0, 2nd quarter 2004.

CR0676 – Electronic Ordering of Line Sharing with DLEC Splitter. Submitted by AT&T; targeted for implementation in Release 15.0, 1st quarter 2004.

CR1147 – Allowing Line Sharing Data Migration without ECCKT. Submitted by Rhythms/WorldCom; targeted for implementation in Release 18.0, 4th quarter 2004.

Detailed explanations and statuses for these change requests may be found at the BellSouth interconnection website at http://www.interconnection.bellsouth.com/markets/lec/ccp_live/ccp_ccs.html. User requirement information for each feature of each release, as it is developed according to the CCP, may be found at BellSouth's interconnection website at http://www.interconnection.bellsouth.com/markets/lec/ccp_live/index.html (select "Final User Requirements" from the pull-down list; login/password required).

RESPONSE PROVIDED BY: Ronald M. Pate

REQUEST: Please provide a detailed description of the planned ILEC OSS capabilities to support automated, flow-through processes for Provisioning for DSL-capable UNE loops on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to documents sent to or received from Telcordia, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: This Interrogatory contains the term "flow-through processes." Flow-through processes apply to BellSouth's electronic ordering interface applications only, as explained in BellSouth's response to MCI First Set of Interrogatories, Item No. 36. Consequently, there are no "automated, flow-through processes" for provisioning of DSL-capable loops, and BellSouth currently has no planned OSS capabilities responsive to this request.

RESPONSE PROVIDED BY: Jerry Latham

REQUEST: Please provide a detailed description of the planned ILEC OSS capabilities to support automated, flow-through processes for Maintenance/Repair for DSL-capable UNE loops on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to documents sent to or received from Telcordia, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: Please BellSouth's response to MCI First Set of Interrogatories Item No. 59.

The ability for a CLEC to enter a trouble report is the same regardless of whether the UNE loops are provisioned on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC or c) hybrid fiber-copper facilities using UDLC or NGDLC. However, it should be noted that DSL-capable UNE loops typically require a loop facility consisting of only non-loaded metallic facilities. This is because some technologies, such as High Bit-rate Digital Subscriber Line (HDSL), cannot be transported via DLC due to the bandwidth employed. When a customer is served by DLC, an Unbundled Local Loop providing such a wide bandwidth will not typically be available. This can be provided at either the loop level, as in a) all-copper facilities, but would only be provided at the sub-loop level, as in b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC.

RESPONSE PROVIDED BY: Ronald M. Pate

REQUEST: Please provide a detailed description of the planned ILEC OSS capabilities to support automated, flow-through processes for Billing for DSL-capable UNE loops on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to documents sent to or received from Telcordia, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: This Interrogatory contains the term "flow-through processes," which apply to BellSouth's electronic ordering interface applications only, as explained in BellSouth's response to MCI First Set of Interrogatories, Item No. 36. Consequently, there are no "automated, flow-through processes" for billing of DSL-capable UNE loops, and BellSouth currently has no planned OSS capabilities responsive to this request.

RESPONSE PROVIDED BY: Clyde Greene

REQUEST: Please provide a detailed description of the planned ILEC OSS capabilities to support automated, flow-through processes for Pre-ordering for UNE loops capable of supporting line splitting (*i.e.* voice service and DSL service carried on a single wire pair entering the customer's premises) on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to documents sent to or received from Telcordia, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: See BellSouth's response to MCI First Set of Interrogatories Item No. 56.

RESPONSE PROVIDED BY: Ronald M. Pate

REQUEST: Please provide a detailed description of the planned ILEC OSS capabilities to support automated, flow-through processes for Ordering for UNE loops capable of supporting line splitting (*i.e.* voice service and DSL service carried on a single wire pair entering the customer's premises) on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to documents sent to or received from Telcordia, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: BellSouth objects to the Interrogatory to the extent that it is overly broad and unduly burdensome. Subject to this objection, and without waiving this objection, BellSouth provides the following response.

This interrogatory contains the term "flow-through processes." Flow-through processes apply to BellSouth's electronic ordering interface applications only, as was defined in Interrogatory Item No. 36. This response is provided in that context.

The ordering processes provided by BellSouth are the same regardless of whether the UNE loops are provisioned on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC or c) hybrid fiber-copper facilities using UDLC or NGDLC. However, it should be noted that UNE loops capable of supporting line splitting require a loop facility consisting of only non-loaded metallic facilities. Line splitting UNEs may be provided at either the loop level (CO-based line splitting), when served by a) all-copper facilities, but would only be provided at the sub-loop level (Remote Site Line Splitting), when served by b) hybrid fiber-copper facilities using IDLC or c) hybrid fiber-copper facilities using UDLC or NGDLC.

RESPONSE: (Cont.)

Following are the change requests pending implementation through BellSouth's Change Control Process (CCP):

CR0622 – Mechanization of Loop Modification. Submitted by Covad; currently in "S" (Scheduled) status. Currently targeted for Release 16.0, 2nd quarter 2004.

CR1155 – Electronic Ordering for BellSouth-Owned Splitters in CLEC/DLEC Line Splitting Arrangements. Submitted by MCI; currently in "RC" (Candidate Request) status. Prioritized #8 of 21 in the CCP prioritization meeting held on 9/24/03; targeted for implementation in Release 18.0, 4th quarter 2004.

CR1262 – Change Due Date Interval for Line Splitting. Submitted by BellSouth; currently in "S" (Scheduled) status. Currently targeted for Release 15.0, 1st quarter 2004.

Detailed explanations and statuses for these change requests may be found at the BellSouth interconnection website at http://www.interconnection.bellsouth.com/markets/lec/ccp_live/ccp_ccs.html. User requirement information for each feature of each release, as it is developed according to the CCP, may be found at BellSouth's interconnection website at http://www.interconnection.bellsouth.com/markets/lec/ccp_live/index.html (select "Final User Requirements" from the pull-down list; login/password required).

RESPONSE PROVIDED BY: Ronald M. Pate

REQUEST: Please provide a detailed description of the planned ILEC OSS capabilities to support automated, flow-through processes for Provisioning for UNE loops capable of supporting line splitting (*i.e.* voice service and DSL service carried on a single wire pair entering the customer's premises) on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to documents sent to or received from Telcordia, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: This Interrogatory contains the term "flow-through processes." Flow-through processes apply to BellSouth's electronic ordering interface applications only, as explained in BellSouth's response to MCI First Set of Interrogatories, Item No. 36. Consequently, there is no "automated, flow-through processes" for provisioning of UNE loops capableof supporting line splitting.

RESPONSE PROVIDED BY: Tommy Williams

REQUEST: Please provide a detailed description of the planned ILEC OSS capabilities to support automated, flow-through processes for Maintenance/Repair for UNE loops capable of supporting line splitting (*i.e.* voice service and DSL service carried on a single wire pair entering the customer's premises) on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to documents sent to or received from Telcordia, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: See BellSouth's response to MCI First Set of Interrogatories Item No. 59.

The ability for a CLEC to enter a trouble report is the same regardless of whether the UNE loops are provisioned on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC or c) hybrid fiber-copper facilities using UDLC or NGDLC. However, it should be noted that UNE loops capable of supporting line splitting require a loop facility consisting of only non-loaded metallic facilities. Line splitting UNEs may be provided at either the loop level (CO-based line splitting), when served by a) all-copper facilities, but would only be provided at the sub-loop level (Remote Site Line Splitting), when served by b) hybrid fiber-copper facilities using IDLC or c) hybrid fiber-copper facilities using UDLC or NGDLC.

CLEC Trouble Administration Facilitation Interface (TAFI)
BellSouth plans to enhance the TAFI system by modifying the TAFI flows to accommodate trouble reports on Remote Site Line Splitting. This functionality is targeted for 1Q2004 implementation. There are currently no documents responsive to this request.

RESPONSE PROVIDED BY: Ronald M. Pate

REQUEST: Please provide a detailed description of the planned ILEC OSS capabilities to support automated, flow-through processes for Billing for UNE loops capable of supporting line splitting (*i.e.* voice service and DSL service carried on a single wire pair entering the customer's premises) on a) all-copper facilities; b) hybrid fiber-copper facilities using IDLC and c) hybrid fiber-copper facilities using UDLC or NGDLC. Please provide a copy of all documents describing these processes, including but not limited to documents sent to or received from Telcordia, BellSouth Methods and Procedures, Workgroup User Manuals, Guidelines, Bulletins, etc.

RESPONSE: This Interrogatory contains the term "flow-through processes," which apply to BellSouth's electronic ordering interface applications only, as explained in BellSouth's response to MCI First Set of Interrogatories, Item No. 36. Consequently, there are no "automated, flow-through processes" for billing of UNE loops capable of supporting line splitting, and BellSouth currently has no planned OSS capabilities responsive to this request.

RESPONSE PROVIDED BY: Clyde Greene

REQUEST: To the extent that BellSouth's responses to 56 to 70 assert that BellSouth plans to deploy OSS capabilities to support automated, flow-through processes, please provide for each Data Request 56 to 70 the maximum daily, weekly and monthly volumes that could be supported.

RESPONSE: See BellSouth's response to MCI First Set of Interrogatories Item No. 53.

RESPONSE PROVIDED BY: Ronald M. Pate

REQUEST: Please provide a detailed description of current and planned BellSouth OSS capabilities to support automated, flow-through single-order migration between each of the following service configurations: 1) BellSouth voice only 2) BellSouth voice plus data; 3) BellSouth data only; 4) CLEC UNE-P voice only; 5) CLEC switch-based voice only; 6) CLEC line sharing; 7) CLEC line splitting; 8) CLEC data only [e.g., BellSouth voice only to CLEC UNE-P voice only; CLEC A switch-based voice only to CLEC B switch-based voice only].

RESPONSE: The Flow-Through Matrix, referenced in the response to Interrogatory Item No. 37 and also available at the Performance Measurement and Analysis Platform ("PMAP") website at http://pmap.bellsouth.com/content/documentation.aspx provides information responsive to this request relative to current BellSouth OSS capabilities. The Flow Through Matrix provides detailed information about the services and UNEs that can be ordered and which interfaces may be used, and includes whether the process is currently fully electronic (i.e., flows through), partially electronic, or manual, on the single LSR process.

The OSS capabilities offered by BellSouth supporting migrations are described in detail in the following BellSouth documents, posted to the Interconnection website:

LOH - Local Ordering Handbook (formerly named the "BellSouth Business Rules for Local Ordering TCIF 9/LSOG 4")
http://interconnection.bellsouth.com/guides/html/leo.html

UNE-P to UNE-L Bulk Migration CLEC Information Package
http://interconnection.bellsouth.com/guides/html/unes.html

UNE to UNE Bulk Ordering Specifications for EDI TCIF Issue 9 Trading Partners
http://interconnection.bellsouth.com/guides/leo/pdf/tcif9_bulkspec.pdf

RESPONSE: (Cont.)

UNE to UNE Bulk Ordering Specifications for EDI ELMS6 Trading Partners
http://interconnection.bellsouth.com/guides/leo/pdf/elms_6_bulkspec.pdf

CLEC to CLEC Conversion for Unbundled Loops
http://interconnection.bellsouth.com/guides/html/unes.html

Also, please reference the individual CLEC Information Packages for specific products and services, found at the Interconnection website at
http://interconnection.bellsouth.com/guides/html/unes.html

As for planned changes to flow-through capabilities, please see the flow-through change requests at
http://www.interconnection.bellsouth.com/markets/lec/ccp_live/ccp_ccs.html.

RESPONSE PROVIDED BY: Ronald M. Pate

REQUEST: Please provide a detailed description of current and planned BellSouth OSS capabilities to support automated, flow-through single-order migration from 1) BellSouth to CLEC; 2) CLEC to CLEC and 3) CLEC to BellSouth, for each of the following: a) adding or dropping local exchange voice service from line shared or line split DSL; b) adding or dropping DSL service from line shared or line split local exchange voice service.

RESPONSE: The following is responsive to the request for current and planned BellSouth OSS for migration from 1) BellSouth to CLEC and 2) CLEC to CLEC:

The Line Splitting/Line Sharing Scenario Matrix, the Product Matrix, and the Line Sharing Subsequent Order Matrix documents provided in response to MCI's 1st Request for Production, No. 1 and also available at the Line Sharing Collaboratives Website at http://www.interconnection.bellsouth.com/markets/lec/line_sharing_collab/index.html provides information responsive to this request relative to current BellSouth OSS capabilities. These matrices provide detailed information about the UNEs that can be ordered and includes whether the process is currently fully electronic (i.e., flows through), partially electronic, or manual, on the single LSR process. Those UNEs that can be ordered electronically may be ordered using any of the electronic ordering interfaces (TAG, EDI or LENS).

The OSS capabilities offered by BellSouth supporting migrations are described in detail in the following BellSouth documents, posted to the Interconnection website:

LOH - Local Ordering Handbook (formerly named the "BellSouth Business Rules for Local Ordering TCIF 9/LSOG 4")
http://interconnection.bellsouth.com/guides/html/leo.html

RESPONSE: (Cont.)

CLEC to CLEC Conversion for Unbundled Loops
http://interconnection.bellsouth.com/guides/html/unes.html

CO-Based Line Sharing

BellSouth Owned Splitter

- ADSL to DLEC Data Migration
- BellSouth Voice to CLEC Voice
- Customer Movement Answers
- DLEC to ADSL Data Migration
- DLEC to DLEC Data Migration

CLEC Owned Splitter

- ADSL to DLEC Data Migration
- BellSouth Voice to CLEC Voice
- DLEC to ADSL Data Migration
- DLEC to DLEC Data Migration

RS Based - Line Sharing

BellSouth Owned Splitter

- ADSL to DLEC Data Migration
- DLEC to ADSL Data Migration
- DLEC to DLEC Data Migration

CLEC Owned Splitter

- ADSL to DLEC Data Migration
- DLEC to ADSL Data Migration
- DLEC to DLEC Data Migration

CO Based - Line Splitting

BellSouth Owned Splitter

- LSpl to BST Voice Move
- LSpl to CLEC Voice Move

CLEC Owned Splitter

- LSpl to BST Voice Move
- LSpl to CLEC Voice Move
- UNE-P to Line Splitting Order Process Flow

RESPONSE: (Cont.)

RS Based - Line Splitting
CLEC Owned Splitter
- RS Line Splitting Ph 1 Scenarios

http://www.interconnection.bellsouth.com/markets/lec/line_sharing_collab/index.html

Also, please reference the individual CLEC Information Packages for specific products and services, found at the Interconnection website at http://interconnection.bellsouth.com/guides/html/unes.html

As for planned changes to flow-through capabilities, there is one outstanding Change Request:

CR1155 – Electronic Ordering for BellSouth-Owned Splitters in CLEC/DLEC Line Splitting Arrangements. Submitted by MCI; currently in "RC" (Candidate Request) status. Prioritized #8 of 21 in the CCP prioritization meeting held on 9/24/03; targeted for implementation in Release 18.0, 4th quarter 2004.

Detailed explanations for this change request may be found at the BellSouth interconnection website at http://www.interconnection.bellsouth.com/markets/lec/ccp_live/ccp_ccs.html. User requirement information for each feature of each release, as it is developed according to the CCP, may be found at BellSouth's interconnection website at http://www.interconnection.bellsouth.com/markets/lec/ccp_live/index.html (select "Final User Requirements" from the pull-down list; login/password required).

RESPONSE: (Cont.)

The following is responsive to the request for current and planned BellSouth OSS for migration from 3) CLEC to BellSouth:

a) adding or dropping local exchange voice service from line shared or line split DSL - Line shared DSL service is provisioned on an existing local exchange voice service, therefore, it is impossible to add local exchange voice service to line shared DSL, and there are no current or planned OSS capabilities to support this type of migration. Line Shared DSL service is disconnected if the underlying local exchange service is disconnected. Should the CLEC desire to continue to provide the DSL service after the underlying local exchange service is disconnected, they have the option of purchasing the entire loop. There are currently no plans being developed to support automated, flow-through single-order migration of DSL service when local exchange voice service is migrated from a CLEC to BellSouth. Line Split DSL is provisioned over a UNE-Loop, and one of the two CLEC parties has ownership of the loop, and may add or drop local exchange service as they wish, unbeknownst to BellSouth. Therefore, there are currently no plans being developed to support automated, flow-through single-order OSS capabilities.

b) adding or dropping DSL service from line shared or line split local exchange voice service - All BellSouth DSL orders for lines that have existing CLEC DSL service via line sharing or line splitting fall out for manual processing. Once the existing DSL service is identified, the service representative handling the order will follow the disconnect process consistent with the interconnection agreement, and then provision the BellSouth DSL service on the line. There are currently no plans being developed to support automated, flow-through single-order migration of DSL service from a CLEC to BellSouth.

RESPONSE PROVIDED BY: Ronald M. Pate/Eric Fogle

REQUEST: Please state whether BellSouth provides CLECs with real-time, read-only access to all data in all BellSouth OSS (including what some ILECs have called back-office systems) related to loop and transport facilities.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that information concerning loop and transport facilities is not reasonably calculated to lead to the discovery of admissible evidence and it is not relevant to the subject matter of this action, which concerns switching.

REQUEST: To the extent that the response to 74 indicates that CLECs have real time, read-only access to the described data, please provide a detailed description of the manner in which CLECs may access and use all data in BellSouth OSS related to loop and transport facilities on a real-time, read-only basis.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that information concerning loop and transport facilities is not reasonably calculated to lead to the discovery of admissible evidence and it is not relevant to the subject matter of this action, which concerns switching.

REQUEST: Please provide a list of all OSS used by BellSouth for pre-ordering, ordering, provisioning, maintenance and repair and billing for BellSouth retail services, including all of the following: 1) full name of system; 2) acronym for system (if any); 3) detailed description of capabilities and function of system; 4) whether system was developed and is maintained by BellSouth or by third party (and name of third party).

RESPONSE: BellSouth objects to this Interrogatory on the grounds that information concerning the OSS used by BellSouth's retail services it is not reasonably calculated to lead to the discovery of admissible evidence and it is not relevant to the subject matter of this action.

REQUEST: Please provide a list of all OSS used by BellSouth for pre-ordering, ordering, provisioning, maintenance and repair and billing for services offered by a BellSouth subsidiary or affiliate, including all of the following: 1) full name of system; 2) acronym for system (if any); 3) detailed description of capabilities and function of system; 4) whether system was developed and is maintained by BellSouth or by third party (and name of third party).

RESPONSE: BellSouth objects to this Interrogatory on the grounds that information concerning the OSS used by BellSouth's subsidiaries or affiliates it is not reasonably calculated to lead to the discovery of admissible evidence and it is not relevant to the subject matter of this action.

REQUEST: Please provide a list of all OSS used by BellSouth for pre-ordering, ordering, provisioning, maintenance and repair and billing for CLEC UNE-P including all of the following: 1) full name of system; 2) acronym for system (if any); 3) detailed description of capabilities and function of system; 4) whether system was developed and is maintained by BellSouth or by third party (and name of third party).

RESPONSE: See BellSouth's response to MCI's 1st Request for Production, No. 1 for a list of all OSS used by BellSouth for pre-ordering, ordering, provisioning, maintenance and repair and billing for CLEC UNE-P.

RESPONSE PROVIDED BY: Ronald M. Pate

REQUEST: Please provide a list of all OSS used by BellSouth for pre-ordering, ordering, provisioning, maintenance and repair and billing for UNE loop and transport facilities, including all of the following: 1) full name of system; 2) acronym for system (if any); 3) detailed description of capabilities and function of system; 4) whether system was developed and is maintained by BellSouth or by third party (and name of third party).

RESPONSE: BellSouth objects to the Interrogatory on grounds that information concerning loop and transport facilities is not reasonably calculated to lead to the discovery of admissible evidence and it is not relevant to the subject matter of this action, which concerns switching.

REQUEST: Please provide a schematic drawing showing the interrelationships between all OSS used by BellSouth for pre-ordering, ordering, provisioning, maintenance and repair and billing for BellSouth retail services, including but not limited to the following: 1) full name of system; 2) acronym for system (if any).

RESPONSE: BellSouth objects to this Interrogatory on the grounds that information concerning the OSS used by BellSouth's retail services it is not reasonably calculated to lead to the discovery of admissible evidence and it is not relevant to the subject matter of this action.

REQUEST: Please provide a schematic drawing showing the interrelationships between all OSS used by BellSouth for pre-ordering, ordering, provisioning, maintenance and repair and billing for services offered by a BellSouth subsidiary or affiliate, including but not limited to the following: 1) full name of system; 2) acronym for system (if any).

RESPONSE: BellSouth objects to this Interrogatory on the grounds that information concerning the OSS used by BellSouth's subsidiaries or affiliates is not reasonably calculated to lead to the discovery of admissible evidence and it is not relevant to the subject matter of this action.

REQUEST: Please provide a schematic drawing showing the interrelationships between all OSS used by BellSouth for pre-ordering, ordering, provisioning, maintenance and repair and billing for CLEC UNE-P including but not limited to the following: 1) full name of system; 2) acronym for system (if any).

RESPONSE: BellSouth objects to this Interrogatory to the extent it seeks information in a format not maintained by BellSouth in the ordinary course of its business on the grounds that it is overly broad, unduly burdensome, and oppressive. Subject to this objection, and without waiving this objection, see BellSouth's response to MCI's 1st Request for Production, No. 1 for a diagram showing the interrelationships between all BellSouth OSS for pre-ordering, ordering, provisioning, maintenance and repair and billing for CLEC UNE-P. See BellSouth's response to MCI First Set of Interrogatories Item No. 78 for the full system name and a description of the capabilities and function of each system.

RESPONSE PROVIDED BY: Ronald M. Pate

REQUEST: Please provide a schematic drawing showing the interrelationships between all OSS used by BellSouth for pre-ordering, ordering, provisioning, maintenance and repair and billing for UNE loop and transport facilities, including but not limited to the following: 1) full name of system; 2) acronym for system (if any).

RESPONSE: BellSouth objects to this Interrogatory on the grounds that information concerning loop and transport facilities is not reasonably calculated to lead to the discovery of admissible evidence and it is not relevant to the subject matter of this action, which concerns switching.

REQUEST: Please provide a detailed process flow chart for all OSS used by BellSouth for pre-ordering, ordering, provisioning, maintenance and repair and billing for BellSouth retail services, including but not limited to the following: 1) full name of system; 2) acronym for system (if any).

RESPONSE: BellSouth objects to this Interrogatory on the grounds that information concerning the OSS used by BellSouth's retail services it is not reasonably calculated to lead to the discovery of admissible evidence and it is not relevant to the subject matter of this action.

REQUEST: Please provide a detailed process flow chart for all OSS used by BellSouth for pre-ordering, ordering, provisioning, maintenance and repair and billing for services offered by a BellSouth subsidiary or affiliate, including but not limited to the following: 1) full name of system; 2) acronym for system (if any).

RESPONSE: BellSouth objects to this Interrogatory on the grounds that information concerning the OSS used by BellSouth's subsidiaries or affiliates is not reasonably calculated to lead to the discovery of admissible evidence and it is not relevant to the subject matter of this action.

REQUEST: Please provide a detailed process flow chart for all OSS used by BellSouth for pre-ordering, ordering, provisioning, maintenance and repair and billing for CLEC UNE-P including but not limited to the following: 1) full name of system; 2) acronym for system (if any).

RESPONSE: See BellSouth's response to MCI First Set of Interrogatories Item No. 82.

RESPONSE PROVIDED BY: Ronald M. Pate

REQUEST: Please provide a detailed process flow chart for all OSS used by BellSouth for pre-ordering, ordering, provisioning, maintenance and repair and billing for UNE loop and transport facilities, including but not limited to the following: 1) full name of system; 2) acronym for system (if any).

RESPONSE: BellSouth objects to this Interrogatory on the grounds that information concerning loop and transport facilities is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action, which concerns switching.

REQUEST: Please provide a complete set of the current business rules for all OSS used by BellSouth for pre-ordering, ordering, provisioning, maintenance and repair and billing for BellSouth retail services, including but not limited to the following: 1) full name of system; 2) acronym for system (if any).

RESPONSE: BellSouth objects to this Interrogatory on the grounds that information concerning the OSS used by BellSouth's retail services it is not reasonably calculated to lead to the discovery of admissible evidence and it is not relevant to the subject matter of this action.

REQUEST: Please provide a complete set of the current business rules for all OSS used by BellSouth for pre-ordering, ordering, provisioning, maintenance and repair and billing for services offered by a BellSouth subsidiary or affiliate, including but not limited to the following: 1) full name of system; 2) acronym for system (if any).

RESPONSE: BellSouth objects to this Interrogatory on the grounds that information concerning the OSS used by BellSouth's subsidiaries or affiliates is not reasonably calculated to lead to the discovery of admissible evidence and it is not relevant to the subject matter of this action.

REQUEST: Please provide a complete set of the current business rules for all OSS used by BellSouth for pre-ordering, ordering, provisioning, maintenance and repair and billing for CLEC UNE-P including but not limited to the following: 1) full name of system; 2) acronym for system (if any).

RESPONSE: BellSouth objects to this Interrogatory to the extent it seeks information that is already a matter of public record or is otherwise publicly available BellSouth further objects to this Interrogatory to the extent it seeks information in a format not maintained by BellSouth in the ordinary course of its business on the grounds that it is overly broad, unduly burdensome, and oppressive. Subject to these objections, and without waiving these objections, BellSouth provides the following response.

BellSouth's business rules for its various OSS functions are inclusive of all services available to CLECs via the interface for which the specific business rules apply. Rules related specifically to UNE-P are included as a subset of the business rules.

BellSouth indicates below the websites for available business rule documentation and contain the specified or implied rules for UNE-P services, as applicable.

REQUEST: (Cont.)

The BellSouth Local Ordering Handbook (LOH) contains the business rules for BellSouth's pre-ordering and ordering OSS, including Local Exchange Navigation System (LENS), Telecommunications Access Gateway (TAG), and Electronic Data Interchange (EDI). The LOH is available at the BellSouth interconnection website at http://interconnection.bellsouth.com/guides/index.html

BellSouth's maintenance and repair OSS include the following, and the business rules for those systems may be found at the BellSouth interconnection at website shown below:

Circuit Provisioning Status System – Trouble Administration (CPSS-TA)
http://www.interconnection.bellsouth.com/guides/statusing/pdf/eccpss.pdf

Trouble Analysis Facilitation Interface (TAFI)
http://www.interconnection.bellsouth.com/guides/html/lens_tafi.html

Electronic Communications Trouble Administration System (ECTA)
http://www.interconnection.bellsouth.com/guides/activation/pdf/clec_jia.pdf

BellSouth offers to CLECs the ability to receive billing information in a variety of bill formats through different delivery options. The business rules for BellSouth's billing OSS are found at the BellSouth interconnection website at
http://www.interconnection.bellsouth.com/guides/html/billing.html

RESPONSE PROVIDED BY: Ronald M. Pate

REQUEST: Please provide a complete set of the current business rules for all OSS used by BellSouth for pre-ordering, ordering, provisioning, maintenance and repair and billing for UNE loop and transport facilities, including but not limited to the following: 1) full name of system; 2) acronym for system (if any).

RESPONSE: BellSouth objects to this Interrogatory on the grounds that information concerning loop and transport facilities is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action, which concerns switching.

REQUEST: Please provide a detailed description of any current BellSouth processes that you claim will support batch cuts (as defined in Rule 51.319(d)(2)(ii)) between each of the following service configurations: 1) BellSouth voice only 2) BellSouth voice plus DSL; 3) BellSouth DSL only; 4) CLEC UNE-P voice only; 5) CLEC switch-based voice only; 6) CLEC line sharing; 7) CLEC line splitting; 8) CLEC DSL only [e.g., BellSouth voice only to CLEC UNE-P voice only; CLEC A switch-based voice only to CLEC B switch-based voice only].

RESPONSE: BellSouth objects to this interrogatory on the grounds that it seeks information that is not relevant to this proceeding and is not reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving that objection, BellSouth states that it has a batch hot cut process. The requirements for the process are set forth on Bellsouth's website.

For the configurations listed in this request that are not addressed by BellSouth's batch hot cut process, BellSouth offers the process described in response to MCI First Set of Interrogatories Item No. 94. This process will accommodate up to 14 "hot cuts" using standard intervals and will accommodate 15 or more "hot cuts" using intervals set according the Project Management process.

RESPONSE PROVIDED BY: Ken Ainsworth
Jerry Latham

REQUEST: With regard to your response to 92, please indicate whether your electronic back end systems can accomplish each migration type on each of the following bases:
(a) automated flow-through batch cuts [please indicate the maximum number of simultaneous loop migrations that you can support];
(b) automated flow-through individual loop hot cuts;
(c) manual batch cuts [please indicate the maximum number of simultaneous loop migrations that you can support]
(d) manual individual loop hot cuts.

RESPONSE: Electronic individual and batch hot cut orders can and do flow-through BellSouth's ordering systems. With respect to the provisioning systems, see BellSouth's response in MCI First Set of Interrogatories Item Nos. 13, 33, 35, 36 & 38. All of BellSouth's systems, whether electronic or manual, are scalable.

RESPONSE PROVIDED BY: Ken Ainsworth

REQUEST: Please provide a detailed description of any current BellSouth processes to support individual loop hot cuts between each of the following service configurations: 1) BellSouth voice only 2) BellSouth voice plus DSL; 3) BellSouth DSL only; 4) CLEC UNE-P voice only; 5) CLEC switch-based voice only; 6) CLEC line sharing; 7) CLEC line splitting; 8) CLEC DSL only [e.g., BellSouth voice only to CLEC UNE-P voice only; CLEC A switch-based voice only to CLEC B switch-based voice only]. Please provide a copy of all documents or information describing or discussing such processes.

RESPONSE: BellSouth objects to this request on the grounds that it seeks information not relevant to this proceeding and not reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving this objection, BellSouth has a very well documented process for performing hot cuts, which ensures end user service outage is minimal. BellSouth's process provides for:

1. Pre-wiring and pre-testing of all wiring prior to the due date.
2. Verification of dial tone from the CLEC's switch.
3. Verification of correct telephone number from the CLEC switch using a capability referred to as Automatic Number Announcement ("ANAC").
4. Monitoring of the line prior to actual wire transfer to ensure end user service is not interrupted.
5. Notification to the CLEC that the transfer has completed.

In addition to the activities listed above, coordinated hot cuts (including Time Specific Coordinated hot cuts) also include:

1. Notification to the CLEC of CLEC wiring errors, dial tone or ANI problems.

RESPONSE: (Cont.)

2. Verification of end user information with the CLEC prior to the conversion.
3. Verification with the CLEC of cut date and or time 24 – 48 hours prior to the conversion date.
4. Joint acceptance testing, if necessary, with the CLEC to ensure the transfer is successful and number porting is complete.

Further, BellSouth has processes in place to prevent premature disconnect of an end user line where changes have occurred to the due date for the conversion, whether the change is due to BellSouth or CLEC reasons.

Additional information response to this request is contained in BellSouth's response to MCI First Set of Interrogatories Item No. 33.

RESPONSE PROVIDED BY: Jerry Latham

REQUEST: Please provide a detailed description of any planned BellSouth processes to support batch cuts between each of the following service configurations: 1) BellSouth voice only 2) BellSouth voice plus DSL; 3) BellSouth DSL only; 4) CLEC UNE-P voice only; 5) CLEC switch-based voice only; 6) CLEC line sharing; 7) CLEC line splitting; 8) CLEC DSL only [e.g., BellSouth voice only to CLEC UNE-P voice only; CLEC A switch-based voice only to CLEC B switch-based voice only]. Please provide a copy of all documents or information describing or discussing such processes.

RESPONSE: BellSouth objects to this request on the grounds that it seeks information that is not relevant to this proceeding and not reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving that objection, BellSouth responds that this request is not applicable.

RESPONSE PROVIDED BY: Jerry Latham

REQUEST: Please provide a detailed description of any planned BellSouth processes to support individual customer hot cuts between each of the following service configurations: 1) BellSouth voice only 2) BellSouth voice plus DSL; 3) BellSouth DSL only; 4) CLEC UNE-P voice only; 5) CLEC switch-based voice only; 6) CLEC line sharing; 7) CLEC line splitting; 8) CLEC DSL only [e.g., BellSouth voice only to CLEC UNE-P voice only; CLEC A switch-based voice only to CLEC B switch-based voice only]. Please provide a copy of all documents or information describing or discussing such processes.

RESPONSE: BellSouth objects to this request on the grounds that it seeks information that is not relevant to this proceeding and not reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving that objection, BellSouth responds that this request is not applicable.

RESPONSE PROVIDED BY: Jerry Latham

REQUEST: For each switch you use to provide local exchange service to Tennessee customers, please provide the following information for the switch and/or the switch location:

(a) the 11-digit common language location identifier ("CLLI") code as it appears in the Local Exchange Routing Guide ("LERG");
(b) V&H coordinates;
(c) street address, city and zip code;
(d) switch manufacturer and model;
(e) currently loaded version of switch software;
(f) currently equipped line side capacity in (1) DS-0/voice grade circuits and (2) DS-1 circuits;
(g) currently utilized line side capacity in (1) DS-0/voice grade circuits and (2) DS-1 circuits;
(h) current switch processor capacity in CCS;
(i) busy hour and busy season utilized switch processor capacity in CCS;
(j) function of the switch (e.g., stand-alone, host, or remote, other [e.g. DLC node with no intelligence and/or no or limited switching capability]);
(k) the initial cost of the switch, including equipment, software, and EF&I ("engineered, furnished and installed") costs;
(l) number of (1) DS-0/voice grade circuits and (2) DS-1 circuits equipped at the time of installation;
(m) any central offices or wire centers currently served by your switch for which you are considering discontinuing service for any reason within the next 12 months.

RESPONSE:
a) This information is being provided in BellSouth's response to MCI's 1st Request for Production, No. 1. This information is proprietary and is being provided subject to the terms of the non-disclosure agreement in this proceeding.
b) This information is being provided in BellSouth's response to MCI's 1st Request for Production, No. 1. This information is proprietary and is being provided subject to the terms of the non-disclosure agreement in this proceeding.
c) This information is being provided in BellSouth's response to MCI's 1st Request for Production, No. 1. This information is proprietary and is being provided subject to the terms of the non-disclosure agreement in this proceeding.

d) This information is being provided in BellSouth's response to MCI's 1st Request for Production, No. 1. This information is proprietary and is being provided subject to the terms of the non-disclosure agreement in this proceeding.
e) This information is being provided in BellSouth's response to MCI's 1st Request for Production, No. 1. This information is proprietary and is being provided subject to the terms of the non-disclosure agreement in this proceeding.
f) This information is being provided in BellSouth's response to MCI's 1st Request for Production, No. 1. This information is proprietary and is being provided subject to the terms of the non-disclosure agreement in this proceeding.
g) This information is being provided in BellSouth's response to MCI's 1st Request for Production, No. 1. This information is proprietary and is being provided subject to the terms of the non-disclosure agreement in this proceeding.
h) This information is being provided in BellSouth's response to MCI's 1st Request for Production, No. 1. This information is proprietary and is being provided subject to the terms of the non-disclosure agreement in this proceeding.
i) This information is being provided in BellSouth's response to MCI's 1st Request for Production, No. 1. This information is proprietary and is being provided subject to the terms of the non-disclosure agreement in this proceeding.
j) This information is being provided in BellSouth's response to MCI's 1st Request for Production, No. 1. This information is proprietary and is being provided subject to the terms of the non-disclosure agreement in this proceeding.
k) This information is not available.
l) This information is not available.
m) None.

RESPONSE PROVIDED BY: W. Keith Milner

REQUEST: For each switch identified in response to 0 above, please provide the information requested in TABLE F-3.

TABLE F-3

Switch CLLI	Number Of Loops Per End-User Customer Premises	Number of Local Service End-User Customers	Type of End-User Customer	Number of Voice Only End User Customers[1]	Number of DSL Only End User Customers	Number of Line Shared/Line Split DSL End User Customers[2]
ABC	1	e.g. 10,155	Residential	e.g. 10,000	e.g. 5	e.g. 100
	1	e.g. 5,300	Business	e.g. 5,000	e.g. 100	e.g. 100
	2		Residential			
	2		Business			
	3		Residential			
	3		Business			
	. . . (continue pattern as above)					
	18		Residential			
	18		Business			
	19-24		Residential			
	19-24		Business			
	one DS-1		Residential			
	one DS-1		Business			
	more than one DS-1		Business			

[1] This category includes loops used for fax and/or modem-only traffic.

[2] This category includes voice and DSL on the same wire pair (i.e. line sharing, line splitting, and ILEC voice plus data).

RESPONSE: BellSouth objects to this Interrogatory to the extent it seeks information that may not be within BellSouth's possession, custody, or control. BellSouth also objects to this Interrogatory to the extent that it seeks information in a format that is neither maintained in the ordinary course of BellSouth's business nor available to BellSouth on grounds that it is overly broad, unduly burdensome, and oppressive. Subject to these objections, and without waiving these objections, BellSouth is gathering information responsive to this request and will supplement its response no later than December 4, 2003.

REQUEST: Please provide the following information regarding the Class 5 (end office) circuit switch most recently installed in Tennessee by BellSouth: a) manufacturer, b) model, c) date placed in service, d) location (street address, city, and zip code), e)CLLI code and f) V&H coordinates.

RESPONSE: See BellSouth's Response to MCI's 1st Request for Production, No. 1.

RESPONSE PROVIDED BY: W. Keith Milner

REQUEST: Please provide the following information regarding any planned new installations of a Class 5 (end office) circuit switch in Tennessee by BellSouth: a) manufacturer, b) model, c) date to be placed in service, d) location (street address, city, and zip code), e)CLLI code and f) V&H coordinates.

RESPONSE: See BellSouth's Response to MCI's 1st Request for Production, No. 1.

RESPONSE PROVIDED BY: W. Keith Milner

REQUEST: For each switch identified in your response to 0 above other than circuit switches, please provide the following:

(a) any differences in quality of service compared to local exchange service provided on circuit switches (i.e., reliability, throughput, ubiquity, outages, mean time to repair, etc.)
(b) the date(s) on which you installed the switch and began providing local exchange service on the switch;
(c) the geographic area served by the switch compared to the geographic area served by any circuit switches you use to provide local exchange service;
(d) any differences in the technical or operational requirements for the customer to obtain local exchange service from the switch, including customer premises equipment or software (i.e., specialized phone set; availability of computer, cable modem, set top box), access method (i.e., DSL, cable television, satellite service), provisioning interval;
(e) any central offices or wire centers currently served by your switch for which you are considering discontinuing service for any reason within the next 12 months.

RESPONSE: Not Applicable

RESPONSE PROVIDED BY: Eric Fogle

REQUEST: Please identify all switches, other than circuit switches, currently in use by cable operators to provide local exchange voice service, and provide the following information:
(a) the identity of the cable operator;
(b) the number of units passed (reported separately by residential and business units) by the portion of the cable operator's network capable of supporting local exchange voice service;
(c) the number of residential units passed by the cable operator's network that are subscribing to cable (video) services;
(d) the number of residential units passed by the cable operator's network that are subscribing to broadband data services;
(e) the number of residential units subscribing to cable (video) services that also obtain local exchange voice service from the cable operator;
(f) the date on which the cable operator first began providing local exchange voice service;
(g) the price of local exchange voice service provided by the cable operator;
(h) service quality of local exchange service provided by CMRS operators compared to local exchange service provided by BellSouth (e.g., service outages, dropped calls; E911, etc.);
(i) maps of the cable operator's serving territories with locations of ILEC central offices or wire centers identified;
(j) any business cases, analysis, or projections for entry of cable companies into the broadband data and/or local exchange voice markets (whether the information or documents were prepared by you, on your behalf, or by a third party).

RESPONSE: BellSouth objects to this Interrogatory to the extent that it seeks to obligate BellSouth to respond on behalf of persons that are not parties to this case on the grounds that such discovery is overly broad, unduly burdensome, oppressive and not permitted by applicable discovery rules. Specifically, this request seeks information about switches in use by non-party cable operators – information that MCI should seek from the cable operators themselves, and not BellSouth.

REQUEST: Please identify all switches, other than circuit switches, currently in use by CMRS operators to provide local exchange voice service, and provide the following information:

(a) the identity of the CMRS operator;
(b) the number of customers of the CMRS operator who are subscribing to local exchange voice services;
(c) the number of customers of the CMRS operator who are subscribing to broadband data services;
(d) the minimum, maximum and average throughput rate for the CMRS operator's broadband data services each month for the last 12 months;
(e) the date on which the CMRS operator first began providing local exchange voice service;
(f) the price of local exchange voice service provided by the CMRS operator;
(g) the service quality of local exchange service provided by the CMRS operator compared to local exchange service provided by BellSouth (e.g., service outages, dropped calls. etc.);
(h) a description of the entire service territory the CMRS operator can reach;
(i) the percentage of BellSouth's serving territory (by central office or wire center) that the CMRS operator can reach;
(j) the percentage of BellSouth's serving territory (by central office or wire center) to which the CMRS operator is providing local exchange voice service;
(k) the percentage of BellSouth's serving territory (by central office or wire center) to which the CMRS operator is providing broadband data service;
(l) any business cases, analysis, or projections for entry of CMRS operators into the broadband data and/or local exchange voice markets (whether the information or documents were prepared by you, on your behalf, or by a third party).

RESPONSE: BellSouth objects to this Interrogatory to the extent that it seeks to obligate BellSouth to respond on behalf of persons that are not parties to this case on the grounds that such discovery is overly broad, unduly burdensome, oppressive and not permitted by applicable discovery rules. Specifically, this request seeks information about switches in use by CMRS operators – information that MCI should seek from the CMRS operators themselves, and not BellSouth.

REQUEST: For each CLEC and other carrier collocation arrangement in each BellSouth wire center in Tennessee, please provide the following information, reported by CLLI code, street address and zip code:
(a) name of CLEC or other carrier;
(b) type of collocation arrangement (e.g. caged, cageless, virtual, etc.);
(c) size of collocation arrangement;
(d) amount of power (including both "A" and "B" DC feeds and AC power) supplied to the collocation arrangement;
(e) number of 2-wire cross connects currently provisioned from the MDF to the collocation arrangement;
(f) number of 4-wire cross connects currently provisioned from the MDF to the collocation arrangement;
(g) all equipment installed in the collocation arrangement, including make, model, and total installed capacity for each piece of equipment;
(h) type(s) of BellSouth transport connected to the collocation arrangement (e.g., special access, UNE transport, etc.);
(i) capacity(ies) of BellSouth transport connected to the collocation arrangement (e.g., DS-1, DS-3, OC-3, etc., and number of circuits at each level of capacity).

RESPONSE: BellSouth objects to this Interrogatory to the extent it seeks information that is subject to the FCC's Customer Proprietary Network Information rules that cannot be shared with other carriers. BellSouth also objects to this Interrogatory on grounds that information concerning specific collocation arrangements, including the type, size, and facilities serving each such arrangement is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action.

Subject to these objections, and without waiving these objections, see BellSouth's response to MCI First Request for Production of Documents No.1 for: (1) the name and location of each BellSouth wire center in Tennessee that currently has at least one collocator; (2) the aggregate number of physical and virtual collocation arrangements for each wire center in Tennessee; (3) the aggregate amount of collocation space currently occupied by carriers in Tennessee; (4) the approximate square footage of collocation floor space for each wire center in Tennessee in which there are currently collocators; (5) the aggregate number of 2-wire cross connects directly

RESPONSE: (Cont.)

provisioned from the MDF to collocation arrangements in BellSouth's wire centers in Tennessee; (6) the aggregate number of 4-wire cross connects directly provisioned from the MDF to collocation arrangements in BellSouth's wire centers in Tennessee; (7) the types of BellSouth transport connected to the collocation arrangement in Tennessee (this information is proprietary and is provided subject to non-disclosure agreement in this docket); and (8) the aggregate number of cross connects by type of BellSouth transport that has been provisioned to the collocation arrangements in BellSouth's wire centers in Tennessee.

RESPONSE PROVIDED BY: Wayne Gray

REQUEST: For each BellSouth wire center in Tennessee, please identify the amount of available unused collocation space, in terms of total square feet of space and type(s) of collocation for which available space can be used. Please identify each wire center in which collocation space has been exhausted, or for which collocation space exhaustion is anticipated in the next 3 years, including the date of exhaust or expected exhaust.

RESPONSE: See BellSouth's Response to MCI's 1st Request for Production No. 1 for a list of those wire centers in Tennessee in which there is currently collocation space available. As shown on this exhibit, collocation space is available in all of BellSouth's wire centers in Tennessee. Those wire centers in the BellSouth region that currently have no available space for collocation purposes are included on BellSouth's Space Exhaust List that is posted on BellSouth's website at:

http://interconnection.bellsouth.com/notifications/carrier/carrier_pdf/91081451-C.pdf

BellSouth provides this information to CLECs via a "Space Availability Report" pursuant to 47 CFR §51.323. Upon request from a carrier and at the carrier's expense, BellSouth will provide a written report describing in detail the space that is available for collocation at a particular wire center. This report includes not only the amount of collocation space available at the wire center requested, but also the number of collocators present at the wire center any modifications in the use of the space since the last report

RESPONSE (Cont'd.):

on the wire center requested (if a previous report had been performed), and the measures BellSouth is taking to make additional space available for collocation arrangements. However, a Space Availability Report does not reserve space at the wire center for which the report was requested. The interval for providing this report is negotiable when information on more than five wire centers is requested at the same time. BellSouth does not keep a running total of how much collocation space is available in each wire center. The amount of collocation space available in each individual wire center could conceivably change from day to day or even many times throughout the day, depending upon the number of applications BellSouth receives from carriers for new collocation space, the augmentation or termination of existing collocation space, and the reservation of future collocation space (up to 24 months). Furthermore, the amount of space available in an individual wire center could also change based on space that is utilized or reserved (up to 24 months) by BellSouth for its own operations during the course of the day.

The question regarding which wire centers in Tennessee are anticipated to reach space exhaustion in the next three years is extremely nebulous and would only reflect BellSouth's speculation of what may occur in the future. Currently, BellSouth does not anticipate any other wire centers in Tennessee to reach space exhaustion within the next 3 years, and there is no way for BellSouth to know what the specific business plans are for those carriers that have chosen to operate in the state of Tennessee or that are currently studying the possibility of going into business in Tennessee. These plans may or may not include a carrier's placement of telecommunications equipment in collocation space in BellSouth's premises and BellSouth would not be privy to this information.

RESPONSE PROVIDED BY: Pam Tipton

REQUEST: Please identify all wire centers that you previously listed as out of space for collocation that now have space available. Please provide a detailed explanation of what was done to free up space, and produce a copy of all documents on which you relied for your response, or that are relevant to this request.

RESPONSE: See BellSouth's response to Item No. 105.

RESPONSE PROVIDED BY: Wayne Gray

REQUEST: With regard to all CLEC to CLEC cross connections you have provisioned, please identify the following, reported by wire center:

(a) number of such cross connections that you have provisioned;
(b) the identity of both CLECs to whom you provisioned the cross connect
(c) the type of collocation arrangement of both CLECs;
(d) the minimum, maximum and , average provisioning time for CLEC to CLEC cross connections;
(e) the identity of the entity or personnel who performs the cross connect (e.g. ILEC central office technician, certified CLEC technician, etc.)

RESPONSE: (a) BellSouth does not have information that reflects the number of co-carrier cross connects (where collocation arrangements of two different carriers in the same central office or wire center are directly connected to each other) that exist in each BellSouth wire center in Tennessee. BellSouth permits two collocators to directly cross-connect their collocation space in BellSouth's wire centers. If the two collocation spaces are not contiguous, then the collocators must employ a BellSouth Certified Supplier to run their cabling between the two collocation arrangements utilizing BellSouth's common cable support structure. If the collocator 's equipment and the equipment of the other carrier are located in contiguous caged collocation space, the collocator may use its own technician to install a co-carrier cross connect between the equipment of both collocated carriers by constructing a dedicated cable support structure between the two contiguous cages.

(b) See BellSouth's response to MCI First Set of Interrogatories Item No. 104. Furthermore, as stated above, BellSouth allows two collocators to provision the co-carrier cross connects directly between their collocation arrangements. However, a BellSouth Certified Supplier must be hired to run the cabling between the two arrangements, which utilizes BellSouth's common cable support structure. If the two collocation spaces are contiguous, then BellSouth permits the collocators to use their own technicians to install the co-carrier cross connects between the equipment of both carriers by constructing a dedicated cable support structure between the two contiguous cages.

RESPONSE (Cont'd.):

(c) See BellSouth's response to MCI First Set of Interrogatories Item No. 105.

(d) Since the two collocators would be contracting with a BellSouth Certified Supplier to provision the co-carrier cross connects between their collocation arrangements, the provisioning time would be determined by the collocators, not BellSouth. The actual provisioning time would be dependent upon when one of the two collocators submits a Method of Procedure ("MOP") to the BellSouth foreman in the specific wire center in which the co-carrier cross connect will be placed and the BellSouth Certified Supplier hired by the collocator begins the placement of the necessary cabling in the central office.

(e) A BellSouth Certified Supplier, employed by the one of the two cross connecting collocators, would be the entity performing the installation of the cabling that would allow the two collocators to cross connect to each other's collocation space. BellSouth's personnel would not perform any activities associated with the installation of co-carrier cross connects in wire centers in Tennessee.

RESPONSE PROVIDED BY: Wayne Gray

REQUEST: For each BellSouth central office or wire center at which loops and transport are connected at collocation arrangements to form EELs, please provide the following information:

(a) the CLLI code, street address, zip code, and V&H coordinates of the BellSouth central office or wire center where such EELs are created;
(b) the CLLI code, street address, zip code, V&H coordinates, and owner(s) of the switch(es) to which such EELs are connected;
(c) number of such EELs that comprise DS-0/voice grade transport connected to DS-0/voice grade loops;
(d) number of such EELs that comprise DS-1 transport connected to multiplexed DS-0/voice grade loops;
(e) number of such EELs that comprise DS-1 transport connected to multiplexed and concentrated DS-0/voice grade loops, and the loop-to-transport concentration ratio;
(f) number of such EELs that comprise DS-3 transport connected to multiplexed DS-0/voice grade loops;
(g) number of such EELs that comprise DS-3 transport connected to multiplexed and concentrated DS-0/voice grade loops, and the loop-to-transport concentration ratio;
(h) number of such EELs that comprise DS-1 transport connected to DS-1 loops;
(i) number of such EELs that comprise DS-3 transport connected to multiplexed DS-1 loops;
(j) number of such EELs that comprise DS-3 transport connected to multiplexed and concentrated DS-1 loops, and the loop-to-transport concentration ratio;
(k) what equipment is required to deploy EELs;
(l) whether collocation is required for CLECs to utilize EELs;
(m) the concentration ratio allowed for EELs.

RESPONSE: (a) See BellSouth's response to MCI's 1st Request for Production, No. 1. This information is proprietary and is being provided subject to the terms of the non-disclosure agreement in this proceeding.

(b) See BellSouth's response to MCI's 1st Request for Production, No. 1. This information is proprietary and is being provided subject to the terms of the non-disclosure agreement in this proceeding.

RESPONSE: (Cont.)

(c) number of such EELs that comprise DS-0/voice grade transport connected to DS-0/voice grade loops is 8;
(d) number of such EELs that comprise DS-1 transport connected to multiplexed DS-0/voice grade loops is none;
(e) number of such EELs that comprise DS-1 transport connected to multiplexed and concentrated DS-0/voice grade loops, and the loop-to-transport concentration ratio is none;
(f) number of such EELs that comprise DS-3 transport connected to multiplexed DS-0/voice grade loops is none;
(g) number of such EELs that comprise DS-3 transport connected to multiplexed and concentrated DS-0/voice grade loops, and the loop-to-transport concentration ratio is none;
(h) number of such EELs that comprise DS-1 transport connected to DS-1 loops is 1666;
(i) number of such EELs that comprise DS-3 transport connected to multiplexed DS-1 loops is 66;
(j) number of such EELs that comprise DS-3 transport connected to multiplexed and concentrated DS-1 loops, and the loop-to-transport concentration ratio is none.
(k) The components of the local loop and transport are the only required components of an EEL. This does not consider any requirements of the TRO.
(l) A collocation requirement is dependent upon the interconnection agreement between BellSouth and the CLEC.
(m) Concentration ratios are dependent upon concentrator equipment specifications and not the EEL components.

RESPONSE PROVIDED BY: Michael Hurst

REQUEST: For each BellSouth central office or wire center at which loops and transport are connected to form EELs *without* using collocation, please provide the following information
(a) the CLLI code, street address, zip code, and V&H coordinates of the BellSouth central office or wire center where such EELs are created;
(b) the CLLI code, street address, zip code, V&H coordinates, and owner(s) of the switch(es) to which such EELs are connected;
(c) number of such EELs that comprise DS-0/voice grade transport connected to DS-0/voice grade loops;
(d) number of such EELs that comprise DS-1 transport connected to multiplexed DS-0/voice grade loops;
(e) number of such EELs that comprise DS-1 transport connected to multiplexed and concentrated DS-0/voice grade loops, and the loop-to-transport concentration ratio;
(f) number of such EELs that comprise DS-3 transport connected to multiplexed DS-0/voice grade loops;
(g) number of such EELs that comprise DS-3 transport connected to multiplexed and concentrated DS-0/voice grade loops, and the loop-to-transport concentration ratio;
(h) number of such EELs that comprise DS-1 transport connected to DS-1 loops;
(i) number of such EELs that comprise DS-3 transport connected to multiplexed DS-1 loops;
(j) number of such EELs that comprise DS-3 transport connected to multiplexed and concentrated DS-1 loops, and the loop-to-transport concentration ratio.

RESPONSE: (a) See BellSouth's response to MCI's 1st Request for Production, No. 1. This information is proprietary and is being provided subject to the terms of the non-disclosure agreement in this proceeding.

(b) See BellSouth's response to MCI's 1st Request for Production, No. 1. This information is proprietary and is being provided subject to the terms of the non-disclosure agreement in this proceeding.

RESPONSE: (Cont.)

(c) number of such EELs that comprise DS-0/voice grade transport connected to DS-0/voice grade loops is 14;
(d) number of such EELs that comprise DS-1 transport connected to multiplexed DS-0/voice grade loops is none;
(e) number of such EELs that comprise DS-1 transport connected to multiplexed and concentrated DS-0/voice grade loops, and the loop-to-transport concentration ratio is none;
(f) number of such EELs that comprise DS-3 transport connected to multiplexed DS-0/voice grade loops is none;
(g) number of such EELs that comprise DS-3 transport connected to multiplexed and concentrated DS-0/voice grade loops, and the loop-to-transport concentration ratio is none;
(h) number of such EELs that comprise DS-1 transport connected to DS-1 loops is 42;
(i) number of such EELs that comprise DS-3 transport connected to multiplexed DS-1 loops is 58;
(j) number of such EELs that comprise DS-3 transport connected to multiplexed and concentrated DS-1 loops, and the loop-to-transport concentration ratio is none.

RESPONSE PROVIDED BY: Michael Hurst

REQUEST: Please provide the definition you use internally for business purposes for the following terms: (1) "mass market customer" and (2) "enterprise customer," in terms of type of customer (e.g., residential vs. business), number of lines per customer, use of analog loop facilities vs. DS-1s, or any other basis you use to distinguish these terms.

RESPONSE: BellSouth is gathering information responsive to this request and will supplement its response no later than December 4, 2003.

REQUEST: Please state whether you view a crossover point between mass market customers and enterprise customers set at 4 DS-0/voice grade lines per customer to have any economic, engineering, operational, or business basis from the perspective of your non-regulatory business purposes. If your response is not an unqualified "no," please explain such basis in detail and provide supporting documentation.

RESPONSE: BellSouth is gathering information responsive to this request and will supplement its response no later than December 4, 2003.

REQUEST: Please provide your calculation, estimate, or view of the economic crossover point , in terms of number of DS-0/voice grade lines to a single customer premises, at which you offer service at a DS-1 level rather than using a number of analog lines, and provide the basis for that crossover point (e.g., equivalency point of analog service rates and DS-1 service rates, consideration of whether the customer premises equipment can accept a DS-1 interface, etc.).

RESPONSE: BellSouth is gathering information responsive to this request and will supplement its response no later than December 4, 2003.

REQUEST: With respect to each of the two customer categories identified in response to 0, please provide the following information:
(a) the number of customers in each category, reported by central office/wire center for each month since July 1, 2001;
(b) the percentage of your total customer base in Tennessee in each of the two categories;
(c) whether you target your business plans or marketing to particular sub-sets of customers within each of the two categories identified in response to 110.

RESPONSE: BellSouth is gathering information responsive to this request and will supplement its response no later than December 4, 2003.

REQUEST: Please identify, by CLLI code, city, street address and zip code, all switches you have deployed in Tennessee in density zone 1 of the top 50 largest Metropolitan Statistical Areas (MSAs), and whether each of those switches is subject to the FCC's unbundled switching "carve out."

RESPONSE: See BellSouth's response to MCI's 1st Request for Production, No. 1 for BellSouth switches in Tennessee in density zone 1 of the Nashville MSA which are subject to the FCC's unbundled switching "carve out."

RESPONSE PROVIDED BY: Kathy Blake

REQUEST: Please state the technical characteristics and capabilities of all loops that you consider to be a DS-0 and/or voice grade loop, and provide any relevant public and/or confidential technical publications and any other documents that describe these characteristics and capabilities.

RESPONSE: Loops used to provide voice grade services, sometimes denoted as 'DS0' loops, were historically defined in IEEE-820. Because that document is outdated, Committee T1 has written a new document entitled, "Technical Report No. 60, Unbundled Voice Grade Analog Loops." This new document describes the characteristics and capabilities of voice grade loops and is provided in BellSouth's Response to MCI's 1st Request for Production, No. 1.

BellSouth also maintains a document on unbundled loops, some of which are voice grade loops. That document is entitled, "Technical Reference 73600, Unbundled Loop Technical Specifications." This document addresses some specifications that are not included in the industry-wide document and is provided in BellSouth's Response to MCI's 1st Request for Production, No. 1.

RESPONSE PROVIDED BY: W. Keith Milner

REQUEST: Please state the technical characteristics and capabilities of a DSL-capable loop, and provide any relevant public and/or confidential technical publications and any other documents that describe these characteristics and capabilities.

RESPONSE: It should be recognized that the term "DSL-capable" can be interpreted a number of different ways. Some DSL technologies, such as Asymmetrical Digital Subscriber Line ('ADSL"), can be used over much longer loops than can other DSL technologies, such as Very high data rate Digital Subscriber Line ("VDSL"). Even if the focus of this question is limited to only ADSL, there is still some imprecision. Some carriers, for instance, might want their ADSL to provide several megabits per second, which necessarily requires shorter loops. Others might be interested in providing service on longer loops, which typically result in lower data rates.

A standard sometimes used to classify a loop as "DSL-capable" is the absence of load coils. The industry has written a specification for such loops entitled, "Technical Requirement for Non-loaded Metallic Loops Supporting Basic Voicegrade Services." A copy of that document (T1.TRQ.7-2002) is provided in BellSouth's Response to MCI's 1st Request for Production, No. 1.

BellSouth also maintains a document on unbundled loops, some of which are DSL-capable. That document is entitled, "Technical Reference 73600, Unbundled Loop Technical Specifications." This document addresses some specifications that are not included in the industry-wide document. A copy of TR-73600 is also provided in BellSouth's Response to MCI's 1st Request for Production, No. 1.

RESPONSE PROVIDED BY: W. Keith Milner

REQUEST : Please state the technical characteristics and capabilities of loops capable of supporting 1) line sharing and 2) line splitting (*i.e.* voice service and DSL service carried on a single wire pair entering the customer's premises), and provide any relevant public and/or confidential technical publications and any other documents that describe these characteristics and capabilities.

RESPONSE: The following is the most recent version (distributed with the Agenda for the November 13, 2003 BST-Line Splitting/Line Sharing Collaborative meeting (of which MCI is a member)

Proposed Standards and Procedures for Line Sharing/Splitting Loop Parameters

The following standards apply to loops that will be shared for the provision of voice and high-speed data services (such as ADSL) to an end user through line sharing or line splitting services. Stand-alone UNE loops used to provide data services already have standards established, and while similar, are not addressed with this document.

Line Sharing / Line Splitting Loop

- In order to qualify as loop capable of line sharing or line splitting, the facility must be a non-loaded copper circuit, 1300 Ohms or less.
- BST will not unload loops longer than 18kft that are presently loaded.
- CLECs are required to qualify a circuit prior to issuing an order for line sharing or line splitting.
- If, during its qualification search, a CLEC discovers a copper loop that does not meet these standards, but the circuit could be made to meet the standards through routine network modifications, BST, at the request of the CLEC, will condition the circuit according to the ULM process.
- The loop shall meet the Specifications found in sections 3.9, 3.10, and 3.11 of Bellsouth TR73600, Issue 7 (June 2003). It should be noted, though, that foreign voltage (covered in section 3.9) and insulation resistance (covered in section 3.10) cannot be accurately measured on a line-sharing loop in the normal condition. These

RESPONSE: (continued)

parameters can be measured using BellSouth's switch-based test system, or they can be measured with a CLEC's test equipment, if the CO line circuit is disconnected.

RESPONSE PROVIDED BY: Tommy G. Williams

REQUEST: Please provide, a) on a statewide basis, and b) on a CLLI-code-specific basis, monthly data since July 1, 2001 on the number of loops carrying DS-0/voice grade service on all of the following bases: 1) total loops in service 2) residential loops in service; 3) business loops for business with 1-3 loops in service; 4) business loops for businesses with more than 3 loops in service; 5) UNE loops.

RESPONSE: 1) See BellSouth's response to MCI's 1st Request for Production, No. 1. This information is proprietary and is being provided subject to the terms of the non-disclosure agreement in this docket.

2) See BellSouth's response to MCI's 1st Request for Production, No. 1. This information is proprietary and is being provided subject to the terms of the non-disclosure agreement in this docket.

3) BellSouth does not separate Business Voice Grade 1-3 loops and more than 3 loops. Accordingly this data is not available. However, the total of all business loops is contained in BellSouth's response to MCI's 1st Request for Production, No. 1. This information is proprietary and is being provided subject to the terms of the non-disclosure agreement in this docket.

4) BellSouth does not separate Business Voice Grade 1-3 loops and more than 3 loops. Accordingly this data is not available. However, the total of all business loops is contained in BellSouth's response to MCI's 1st Request for Production, No. 1. This information is proprietary and is being provided subject to the terms of the non-disclosure agreement in this docket.

5) See BellSouth's response to MCI's 1st Request for Production, No. 1. This information is proprietary and is being provided subject to the terms of the non-disclosure agreement in this docket.

RESPONSE PROVIDED BY: Steve Bigelow
Craig Williard

REQUEST: Please provide, a) on a statewide basis, and b) on a CLLI-code-specific basis, monthly data since July 1, 2001 on the number of loops carrying standalone DSL service on all of the following bases: 1) total loops in service 2) residential loops in service; 3) business loops for business with 1-3 loops in service; 4) business loops for businesses with more than 3 loops in service; 5) UNE loops.

RESPONSE: 1) See BellSouth's Response to MCI's 1st Request for Production, No. 1. This information is proprietary and is being provided subject to the terms of the non-disclosure agreement executed in this proceeding.

2) See BellSouth's Response to MCI's 1st Request for Production, No. 1. This information is proprietary and is being provided subject to the terms of the non-disclosure agreement executed in this proceeding.

3) See BellSouth's Response to MCI's 1st Request for Production, No. 1. This information is proprietary and is being provided subject to the terms of the non-disclosure agreement executed in this proceeding.

4) As of November 17th, 2003, there were no Stand Alone DSL products provisioned to business locations with 4 or more lines.

5) When a CLEC purchases a UNE Loop from BellSouth, the CLEC is not required to inform BellSouth of the CLEC's, or CLEC's end user's, ultimate intended purpose for the UNE Loop. Accordingly, BellSouth is unable to determine the number of UNE Loops that may be used to carry standalone DSL service.

RESPONSE PROVIDED BY: Eric Fogle/Tommy Williams

REQUEST: Please provide, a) on a statewide basis, and b) on a CLLI-code-specific basis, monthly data since July 1, 2001 on the number of loops carrying line shared voice plus DSL service on all of the following bases: 1) total loops in service 2) residential loops in service; 3) business loops for business with 1-3 loops in service; 4) business loops for businesses with more than 3 loops in service; 5) UNE loops.

RESPONSE:

Monthly data since July1, 2001 on the number of loops carrying line shared voice plus DSL service on all of the following bases:

a) STATEWIDE

1) TOTAL LOOPS IN SERVICE

Jul 2001	361
Aug 2001	432
Sep 2001	444
Oct 2001	441
Nov 2001	505
Dec 2001	559
Jan 2002	617
Feb 2002	712
Mar 2002	680
Apr 2002	783
May 2002	760
Jun 2002	784
Jul 2002	802
Aug 2002	833
Sep 2002	731
Oct 2002	722
Nov 2002	737
Dec 2002	689
Jan 2003	724
Feb 2003	986
Mar 2003	1045
Apr 2003	1058

RESPONSE: (a. continued)

May 2003	1121
Jun 2003	1200
Jul 2003	1300
Aug 2003	1389
Sep 2003	1486
Oct 2003	1584

2) RESIDENTIAL LOOPS IN SERVICE
BellSouth captures data regarding Line Sharing on the CLEC record in CABS and not the end user's record. Accordingly, information regarding the CLEC's customers is not available to BellSouth.

3) BUSINESS LOOPS FOR BUSINESS WITH 1-3 LOOPS IN SERVICE
BellSouth captures data regarding Line Sharing on the CLEC record in CABS and not the end user's record. Accordingly, information regarding the CLEC's customers is not available to BellSouth. .

4) BUSINESS LOOPS FOR BUSINESSES WITH MORE THAN 3 LOOPS IN SERVICE
BellSouth captures data regarding Line Sharing on the CLEC record in CABS and not the end user's record. Accordingly, information regarding the CLEC's customers is not available to BellSouth. .

5) UNE LOOPS
When a CLEC purchases a UNE Loop from BellSouth, the CLEC is not required to inform BellSouth of the CLEC's, or CLEC's end user's, ultimate intended purpose for the UNE Loop. Accordingly, this CLEC proprietary data is not available to BellSouth, and BellSouth is unable to answer this Interrogatory.

b) CLLI-CODE-SPECIFICc
CLLI-code-specific monthly data since July 1, 2001 on the number of loops carrying line shared voice plus DSL service is not available.

RESPONSE PROVIDED BY: Tommy G. Williams

REQUEST: Please provide, a) on a statewide basis, and b) on a CLLI-code-specific basis, monthly data since July 1, 2001 on the number of loops carrying line split voice plus DSL service on all of the following bases: 1) total loops in service 2) residential loops in service; 3) business loops for business with 1-3 loops in service; 4) business loops for businesses with more than 3 loops in service; 5) UNE loops.

RESPONSE:

Monthly data since July1, 2001 on the number of loops carrying line split voice plus DSL service on all of the following bases:

a) STATEWIDE

1) TOTAL LOOPS IN SERVICE
Jul 2001 – Oct 2003 NONE

2) RESIDENTIAL LOOPS IN SERVICE
Jul 2001 – Oct 2003 NONE

3) BUSINESS LOOPS FOR BUSINESS WITH 1-3 LOOPS IN SERVICE
BellSouth does not separate Business Line Splitting into 1-3 loops and more than 3 loops. Accordingly this data is not available. However, the total of all Business loops is as follows:
Jul 2001 – Oct 2003 NONE

4) BUSINESS LOOPS FOR BUSINESSES WITH MORE THAN 3 LOOPS IN SERVICE
BellSouth does not separate Business Line Splitting into 1-3 loops and more than 3 loops. Accordingly this data is not available. However, the total of all Business loops is as follows:
Jul 2001 – Oct 2003 NONE

5) UNE LOOPS
When a CLEC purchases a UNE Loop from BellSouth, the CLEC is not required to inform BellSouth of the CLEC's, or CLEC's end user's, ultimate intended purpose for the UNE Loop. Accordingly, this CLEC proprietary data is not available to BellSouth, and BellSouth is unable to answer this Interrogatory.

b) CLLI-CODE-SPECIFICc
CLLI-code-specific monthly data since July 1, 2001 on the number of loops carrying line split voice plus DSL service is not available.

RESPONSE PROVIDED BY: Tommy G. Williams

REQUEST: Please provide, a) on a statewide basis, and b) on a CLLI-code-specific basis, monthly data since July 1, 2001 on the number of loops that are 1) all-copper; 2) hybrid fiber/copper; 3) all-fiber.

RESPONSE: 1) See BellSouth's response to MCI's 1st Request for Production, No. 1.
2) See BellSouth's response to MCI's 1st Request for Production, No. 1.
3) BellSouth assumes that all-fiber facilities, as suggested by the FCC, means Fiber-To-The-Home ("FTTH") and as such, BellSouth has not deployed any all-fiber FTTH loops other than a trial in Georgia.

This information is proprietary and is being provided subject to the terms of the non-disclosure agreement executed in this proceeding.

RESPONSE PROVIDED BY: W. Keith Milner

REQUEST: Please provide, a) on a statewide basis, and b) on a CLLI-code-specific basis, monthly data since July 1, 2001 on the number of loops that are provisioned using 1) IDLC; 2) UDLC; 3) NGDLC; 4) DAML.

RESPONSE: See BellSouth's response to MCI's 1st Requests for Production, No. 1. BellSouth does not maintain historical data on NGDLC or DAML, only current data.

This information is proprietary and is being provided subject to the terms of the non-disclosure agreement executed in this proceeding.

RESPONSE PROVIDED BY: W. Keith Milner

REQUEST: Please state whether you currently provision UNE loops over loops provisioned using 1) IDLC and 2) NGDLC. Please provide a copy of any methods and procedures, technical service descriptions, and other technical documents that describe the service arrangement and/or identify the supported features, functions and supported throughput rates.

RESPONSE: BellSouth provisions UNE loops over both IDLC and NGDLC. See BellSouth's response to MCI's 1st Request for Production, No. 1 for BellSouth's Methods and Procedures concerning such provisioning. This information is proprietary and is being provided subject to the terms of the non-disclosure agreement executed in this proceeding.

BellSouth also maintains a document on unbundled loops, some of which are voice grade loops. That document is entitled, "Technical Reference 73600, Unbundled Loop Technical Specifications" and is being provided in BellSouth's response to MCI's 1st Request for Production, No. 1. This information is proprietary and is being provided subject to the terms of the non-disclosure agreement executed in this proceeding.

See BellSouth's response to MCI's 1st Request for Production, No. 1, for responsive technical service descriptions. This information is proprietary and is being provided subject to the terms of the non-disclosure agreement executed in this proceeding.

RESPONSE PROVIDED BY: W. Keith Milner

REQUEST: Please provide, on a CLLI-code-specific basis, detailed information concerning copper feeder plant that 1) has been retired since January 1, 2000 or 2) BellSouth plans to or is considering retiring in the next three years.

RESPONSE: BellSouth objects to this Interrogatory to the extent that it is overly broad, unduly burdensome, and oppressive. Subject to this objection, and without waiving this objection, BellSouth retires copper feeder facilities due to public requirements (e.g. road work or road moves) and non-discretionary replacements (e.g. damage to plant caused by storms).

BellSouth also has a website for disclosure of work associated with the above. The *Network Disclosures* will be found at: www.interconnection.bellsouth.com/notifications/network

BellSouth cannot predict, particularly in the situation regarding public requirements, where or when copper plant will be retired because BellSouth does not know of the Tennessee Department of Transportation's plans except when advised.

RESPONSE PROVIDED BY: W. Keith Milner

REQUEST: Please provide, on a CLLI-code-specific basis, detailed information concerning BellSouth's plans over the next three years to use copper feeder plant that has been replaced with fiber-feeder plant, for reinforcement to meet growth needs on shorter all-copper feeder routes.

RESPONSE: BellSouth objects to this Interrogatory to the extent that it is overly broad, unduly burdensome, and oppressive. Subject to this objection, and without waiving this objection, BellSouth understands that this request addresses the re-allocation of copper feeder pairs that have been replaced with fiber-feeder, to cross boxes closer to central offices. Standard planning procedures, as outlined in the Loop Technology Deployment Directives ("LTDD"), consider the use of copper close in for reinforcement to meet growth needs. See BellSouth's response to MCI's 1st Request for Production, No. 1. This information is proprietary and is being provided subject to the terms of the non-disclosure agreement executed in this docket.

RESPONSE PROVIDED BY: W. Keith Milner

REQUEST: Please provide a detailed description of BellSouth's current policy regarding maintenance of copper outside plant facilities once those facilities have been retired. Please provide a copy of all documents, including Methods and Procedures, guidelines, bulletins, business rules and/or business analysis on which you relied, or that are relevant to this Request. Also please state whether BellSouth is considering revising this policy, and if so, when such revision is anticipated.

RESPONSE: Once BellSouth facilities are retired there is no maintenance of these facilities. Aerial and underground cables are removed for salvage and buried cables are abandoned in place where allowed, or removed from the ground where required. Any buried pedestals are removed and the cables cut off below the ground. Retired plant is assumed to be non-usable without any worth so BellSouth does not maintain any of the abandoned plant. BellSouth has no immediate plans to change or revise this policy.

RESPONSE PROVIDED BY: W. Keith Milner

REQUEST: Please provide detailed information, including supporting and related documents, regarding BellSouth's plans, incentives, justification, benefits and/or analysis of upgrading its loop plant in Tennessee by installing additional 1) hybrid copper/fiber loops; 2) all-fiber loops.

RESPONSE: Each BellSouth Outside Plant District analyzes and develops plans for facility relief and upgrading its loop plant using the Loop Technology Deployment Directives ("LTDD"), which is referenced in Item No. 126.

RESPONSE PROVIDED BY: W. Keith Milner

REQUEST: Please provide, on a wire center basis, detailed information concerning dark fiber in the loop plant that is currently available for use by CLECs.

RESPONSE: BellSouth objects to the Interrogatory on the grounds that information concerning dark fiber in the loop plant is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action, which concerns switching.

REQUEST: On a statewide and CLLI-code-specific basis in Tennessee, please state the percentage of working loops used or available to support BellSouth retail services that are configured as "connect through"/"warm line" (i.e., loops that have electrical continuity between the customer premises and the BellSouth switch, and over which a person at the customer premises can call 911 and BellSouth repair service).

RESPONSE: BellSouth objects to this Interrogatory on the grounds that information concerning BellSouth's retail services is not reasonably calculated to lead to the discovery of admissible evidence and it is not relevant to the subject matter of this action. BellSouth also objects to this Interrogatory on grounds that it is overly broad, unduly burdensome, and oppressive.

REQUEST: Please state whether collocation rates, terms and conditions in BellSouth's service territory in Tennessee are controlled by tariff, interconnection agreements, documents controlled by BellSouth (e.g., CLEC handbook) or a combination of these documents. Please provide a complete copy (including attachments or amendments) of each such document.

RESPONSE: Collocation rates, terms and conditions in BellSouth's service territory in Tennessee are controlled by either BellSouth's Standard Interconnection Agreement for Collocation (Attachment 4), a BellSouth and Carrier-Specific Negotiated Interconnection Agreement (that includes Collocation in Attachment 4), or the Tennessee Statement of Generally Available Terms and Conditions ("SGAT"). All of the rates, terms and conditions associated with BellSouth's Standard Interconnection Agreement, which includes BellSouth's Collocation Offering (Attachment 4), can be found at the following BellSouth website:

http://www.interconnection.bellsouth.com/become_a_clec/html/ics_agreement.html

Copies of BellSouth's executed collocation agreements with Specific Carriers, which contain the negotiated collocation rates, terms and conditions, are posted on the following BellSouth website:

http://cpr.bellsouth.com/clec/docs/all_states/index7.htm

The current BellSouth SGAT for Tennessee, which contains the rates, terms and conditions for Collocation under Attachment 4, is on file with the Tennessee Regulatory Authority ("TRA"). It is a public document and, as such, can be accessed by MCI from the TRA's website.

RESPONSE PROVIDED BY: Wayne Gray

REQUEST: With respect to 131, if the collocation rates, terms and/or conditions vary among interconnection agreements, please provide a copy of each different collocation section.

RESPONSE: BellSouth objects to this Interrogatory to the extent it seeks information that is in the public record or otherwise publicly available. Subject to this objection, and without waiving this objection, copies of BellSouth's executed interconnection and collocation agreements with CLECs are posted on the following BellSouth website: http://cpr.bellsouth.com/clec/docs/all_states/index7.htm. Collocation rates, terms and conditions can be found in the CLEC-specific collocation attachments included on this web site.

Additionally, collocation terms, conditions and rates can be found in Attachment 4 of BellSouth's Standard Interconnection Agreement, which is located at the following BellSouth website: http://www.interconnection.bellsouth.com/become_a_clec/html/ics_agreement.html.

RESPONSE PROVIDED BY: Wayne Gray

REQUEST: With respect to 131, please state whether BellSouth is considering changing the type of document that controls collocation rates, terms and conditions (e.g. using tariffs instead of interconnection agreements). If BellSouth is considering such change, please provide all documents that address such change.

RESPONSE: No.

RESPONSE PROVIDED BY: Wayne Gray

REQUEST: Please list and describe all types of physical collocation offered by BellSouth in Tennessee.

RESPONSE: Physical collocation is an arrangement for the placement of carrier-owned facilities and equipment in BellSouth central offices and may include any type of equipment that is necessary for interconnection to BellSouth's network or access to unbundled network elements in the provision of telecommunications services.

In Tennessee, BellSouth's offers the following types of physical collocation:

Cageless collocation – Cageless collocation enables a carrier to place its equipment and facilities within a BellSouth central office, without requiring the construction of a cage or similar structure, and have direct access to its equipment and facilities. BellSouth makes cageless collocation available in single bay increments. Except where the carrier's equipment requires special technical considerations (e.g., special cable racking, isolated ground plane), BellSouth will locate cageless arrangements in conventional equipment rack lineups where technically feasible on a space-available basis. If the carrier's equipment requires special technical considerations, the carrier must provide the equipment layout, including spatial dimensions, and will be responsible for constructing all special technical requirements associated with such equipment. A BellSouth Certified Supplier must be used to perform all engineering and installation work required in the collocation space.

Caged collocation – Caged collocation is the enclosure of a carrier's equipment and facilities in compliance with the carrier's collocation request. BellSouth will permit a carrier, at its sole expense, to arrange with a BellSouth Certified Supplier to construct a collocation arrangement enclosure in accordance with BellSouth's guidelines and specifications prior to starting equipment installation. BellSouth makes caged collocation available in increments small enough to collocate a single rack, or bay, of equipment.

RESPONSE (Cont'd.):

Shared caged collocation - In a shared caged collocation arrangement, a carrier may allow other carriers to share its caged collocation arrangement pursuant to terms and conditions agreed to by the carrier ("Host") and the other carriers ("Guests"), except where the BellSouth central office is located within a leased space and BellSouth is prohibited by the lease from offering such an option. The Host must indemnify and hold harmless BellSouth from any and all claims, actions, causes of actions, of whatever kind or nature arising out of the presence of the Guests in the Collocation Space. Furthermore, the carriers' sharing agreement must contain a certification that incorporates by reference the terms and conditions of the Interconnection Agreement between BellSouth and the Host.

Adjacent collocation space - Where physical collocation space is legitimately exhausted in a particular BellSouth central office, a carrier will be permitted to locate its equipment in an adjacent controlled environmental vault or similar structure located on BellSouth's premises (e.g., land owned, controlled or leased where the lessor does not prohibit such activity) subject to technical feasibility. The adjacent arrangement cannot interfere with access to existing or planned structures or facilities on the BellSouth premises and must be permitted by zoning and other applicable state and local regulations. The carrier must arrange with a BellSouth Certified Supplier to construct an adjacent arrangement structure in accordance with BellSouth's guidelines and specifications. The filing and receipt of any required zoning, permits and/or licenses for construction of the adjacent arrangement is the responsibility of the carrier and its BellSouth Certified Supplier. The carrier must provide a concrete pad, the structure housing the arrangement, heating/ventilation/air conditioning, lighting, and all facilities that connect the structure (e.g., racking and conduits) to the BellSouth point of demarcation. As with caged collocation, and under similar terms and conditions, a carrier may allow other carriers to share its adjacent collocation arrangement.

RESPONSE (Cont'd.):

Remote site collocation - BellSouth will grant a carrier the right to occupy a certain area designated by BellSouth within a BellSouth Remote Site Location, of a size that is specified by the carrier and agreed to by BellSouth. BellSouth Remote Site Locations include cabinets, huts, and controlled environmental vaults owned or leased by BellSouth that house BellSouth network facilities.

Microwave collocation - Where technically feasible and space is available, BellSouth will provide for physical collocation of microwave equipment on the roofs of BellSouth's central office buildings. Microwave collocation includes placements of supporting masts, non-penetrating roof mounts, penetrating pipe stands, parapet mounts and microwave antenna(e) on the rooftop or other suitable exterior spaces of BellSouth's central offices, excluding towers.

RESPONSE PROVIDED BY: Wayne Gray

REQUEST: Please provide the non-recurring (including EF&I charges) and monthly recurring charges that BellSouth charges for all elements of all types of collocation.

RESPONSE: BellSouth objects to this Interrogatory to the extent it seeks information that is in the public record or otherwise publicly available. Subject to this objection, and without waiving this objection, all of the rates, terms and conditions associated with BellSouth's Standard Interconnection Agreement, which includes BellSouth's Collocation Offering (Attachment 4), can be found at the following BellSouth website: http://www.interconnection.bellsouth.com/become_a_clec/html/ics_agreement.html

RESPONSE PROVIDED BY: Wayne Gray

REQUEST: Please list and describe all restrictions on the types and/or quantities of equipment or facilities that may be placed in BellSouth collocation space in Tennessee. For each such restriction, please provide the rationale for the restriction and the basis for the restriction (e.g. ILEC business decision, FCC order, Tennessee Regulatory Authority order, etc.).

RESPONSE: BellSouth does not have a specified list of equipment or facilities that is restricted from collocation, nor does BellSouth have any restrictions on the quantity of equipment or facilities that may be collocated in Tennessee. BellSouth complies with Title 47 of the FCC's Code of Federal Regulations, Sections 51.323 (b) and (c), which describe the restrictions that Incumbent Local Exchange Carriers ("ILECs") may place on equipment that Competitive Local Exchange Carriers ("CLECs") seek to collocate. These rules were initially created and have evolved pursuant to various orders issued by the FCC in CC Docket No. 98-147, *In the Matter of Deployment of Wireline Services Offering Advanced Telecommunications Capability*.

BellSouth has denied requests to place equipment when a review of the collocation application indicates the requested equipment is not being utilized for interconnection or for access to unbundled network elements. For example, BellSouth denied a request to place equipment in collocation space when such equipment was intended solely for wireless services. BellSouth has also denied a request to place equipment when such equipment was intended solely for enhanced services.

RESPONSE PROVIDED BY: Wayne Gray

REQUEST: With respect to 136, please provide all documents that support or address the restriction or the basis for the restriction.

RESPONSE: See BellSouth's Response to MCI First Set of Interrogatories Item No. 136.

RESPONSE PROVIDED BY: Wayne Gray

REQUEST: On an individual wire center basis, please provide the following for BellSouth in Tennessee:
a) total collocation space (used and unused space stated in square feet) for each type of collocation you offer;
b) total collocation space currently occupied by carriers (in square feet; for caged collocation, state the number of cages);
c) names of carriers currently occupying collocation space;
d) collocation space (stated in square feet) held by carriers who are currently in bankruptcy proceedings;
e) collocation space (stated in square feet) occupied by CLECs no longer operating;
f) total unoccupied collocation space (stated in square feet) available for carriers; and
g) total non-collocation space available or suitable for conversion to collocation space.

RESPONSE: a) See BellSouth's response to Item No. 105.

b) The approximate square footage of collocation floor space for each wire center in Tennessee in which there are currently collocators has been provided in BellSouth's Response to Item No. 104. BellSouth designates individual wire center floor space as "collocation space" when it is assigned to a collocator that has submitted a valid collocation application. The floor space remains designated as "collocation space" until the carrier physically removes its equipment and the collocation arrangement is reduced or terminated.

BellSouth cannot identify the total square footage of caged collocation floor space currently occupied by carriers on a wire center basis. However, see BellSouth's response to MCI's 1st Request for Production, No. 1 for the total number of caged collocation spaces in-service in the state of Tennessee as of September 30, 2003.

RESPONSE (Cont'd.):

c) BellSouth objects to this Interrogatory to the extent it seeks information that is subject to the FCC's Customer Proprietary Network Information rules that cannot be shared with other carriers.

d) BellSouth has determined that collocation space (in square feet) held by carriers who are currently in Chapter 7 bankruptcy proceedings is not contained in BellSouth's electronic records. However, see BellSouth's response to MCI's 1st Request for Production, No. 1 for the number and type of collocation spaces, by wire center, still assigned to carriers who are no longer in business, including those that are currently in Chapter 7 bankruptcy proceedings.

BellSouth is currently in the process of reclaiming space that contains the equipment/facilities of carriers that have abandoned or terminated their collocation space. In addition, BellSouth has begun the process of reclaiming space for those carriers that have completed the bankruptcy process and are no longer operating as viable entities. Upon a carrier's abandonment, termination or Chapter 7 bankruptcy filing, BellSouth immediately reclaims any vacant collocation space. If the carrier abandons or terminates its collocation space and leaves its equipment/facilities in the space, then BellSouth's reclamation process requires that the owner of the equipment/facilities (which may be a finance company, instead of the actual collocator) be contacted by BellSouth for disposition of the equipment/facilities. If the carrier files for Chapter 7 bankruptcy protection, then BellSouth must petition the bankruptcy court and request direction regarding the disposition of the equipment/facilities in the collocation space. As soon as the equipment/facilities have been removed from BellSouth's premises by the owner of the equipment or pursuant to the requirements of the

RESPONSE (Cont'd.):

bankruptcy court, BellSouth will proceed with its reclamation of the collocation space. If collocation space is needed in a BellSouth wire center in which there is space still held by a carrier that is no longer in business, then BellSouth will take whatever steps are needed to immediately make this space available for use by the requesting carrier for collocation purposes. BellSouth will not deny collocation space to a requesting carrier in an office in which there is space still assigned to a carrier that is no longer in business.

e) BellSouth has determined that collocation space (in square feet) occupied by CLECs no longer operating as viable entities is not contained in BellSouth's electronic records. However, see BellSouth's response to MCI's 1st Request for Production, No. 1 for the number and type, by wire center, of collocation spaces still assigned to carriers who are no longer in business.

f) See BellSouth's Response to Item No. 105.

BellSouth complies with Title 47 of the FCC's Code of Federal Regulations, Section 51.323, which requires that BellSouth make space available within or on its premises to requesting telecommunications carriers on a first-come, first-served basis. If physical collocation space is unavailable in a given wire center, BellSouth will relinquish any space held for future use before denying a request for virtual collocation on the grounds of space limitations, unless BellSouth proves to the Tennessee Regulatory Authority that virtual collocation is not technically feasible. Currently, BellSouth has collocation space available in all of its individual wire centers in Tennessee.

g) See BellSouth's Response to Item No. 105.

The total non-collocation space available or suitable for conversion to collocation in each Tennessee wire center is not contained anywhere in BellSouth's records. BellSouth will utilize any unused space and remove any obsolete equipment to make additional space available in a given Tennessee wire center if space for collocation is needed.

RESPONSE (Cont'd.):

If all unused space and obsolete equipment space has been utilized and there is no physical collocation space available in a given wire center, BellSouth will relinquish any space held for future use to provide the carrier with virtual collocation. BellSouth will never deny a request for virtual collocation on the grounds of space limitations, unless BellSouth proves to the Tennessee Regulatory Authority that virtual collocation is not technically feasible.

RESPONSE PROVIDED BY: Wayne Gray

REQUEST: Please list, by CLLI code and street address, the central offices in Tennessee where collocation space of any type is exhausted.

RESPONSE: See BellSouth's response to Item No. 105.

RESPONSE PROVIDED BY: Wayne Gray

REQUEST: For cross-connects between CLEC collocation arrangements in your central offices in Tennessee, please provide:

(a) name(s) of the CLECs whose collocation arrangements are cross-connected to each other;
(b) your Methods and Procedures, guidelines, and practices relevant to, or describing cross-connects between CLEC collocation arrangements;
(c) non-recurring charges;
(d) monthly recurring charges;
(e) applicable performance measures and penalties;
(f) complaints from CLECs regarding any aspect of such cross-connects (e.g., cost, timeliness, etc.);
(g) your response to and resolution of any such complaints.

RESPONSE: (a) The primary purpose of collocation is for a telecommunications carrier to interconnect with BellSouth's network or to access BellSouth's unbundled network elements for the provision of telecommunications services. BellSouth will permit a carrier to interconnect between its virtual or physical collocation arrangement(s) and that (those) of another collocated telecommunications carrier within the same "BellSouth Premises". Both the ordering carrier's agreement and the other collocated telecommunications carrier's agreement must contain the Co-Carrier Cross Connect ("CCXC") rates, terms and conditions before BellSouth will permit the provisioning of CCXCs between the two collocated carriers. The carrier is prohibited from using the Collocation Space for the sole or primary purpose of cross-connecting to other collocated telecommunications carriers.

A carrier must contract with a BellSouth Certified Supplier to place the CCXC. The CCXC shall be provisioned using facilities owned by the ordering carrier. Such cross-connections to other collocated telecommunications carriers may be made using either electrical or optical facilities. The ordering carrier will be responsible for providing a letter of authorization ("LOA"), with the application, to BellSouth from the other collocated telecommunications carrier to which it will be cross-connecting. The carrier-provisioned CCXC shall utilize BellSouth common cable support structure. There will be a recurring charge per linear foot, per cable, of common cable support structure used by the carrier to provision the CCXC to the other collocated telecommunications carrier. In those instances where the

RESPONSE (Cont'd.):

ordering carrier's equipment and the equipment of the other collocated telecommunications carrier are located in contiguous caged Collocation Space, the ordering carrier may use its own technicians to install co-carrier cross connects using either electrical or optical facilities between the equipment of both collocated telecommunications carriers by constructing a dedicated cable support structure between the two contiguous cages. The ordering carrier must deploy such electrical or optical cross-connections directly between its own facilities and the facilities of another collocated telecommunications carrier without being routed through BellSouth's equipment. The ordering carrier may not provision CCXC on any BellSouth distribution frame, POT (Point of Termination) Bay, DSX (Digital System Cross-Connect) or LGX (Light Guide Cross-Connect). The ordering carrier is responsible for ensuring the integrity of the signal.

To place an order for CCXCs, the ordering carrier must submit an Initial Application or Subsequent Application to BellSouth. If no modification to the Collocation Space were requested other than the placement of CCXCs, the Subsequent Application Fee for CCXCs would apply. If other modifications, in addition to the placement of CCXCs, are requested, either an Initial Application or Subsequent Application Fee will apply, pursuant to ordering carrier's interconnection agreement. BellSouth will bill this nonrecurring fee on the date that it provides an Application Response to the ordering carrier.

All of the rates, terms and conditions associated with BellSouth's Standard Interconnection Agreement, which includes BellSouth's CCXC offering (in Attachment 4 for Collocation), can be found at the following BellSouth website:

http://www.interconnection.bellsouth.com/become_a_clec/html/ics_agreement.html

RESPONSE (Cont'd.):

(b) See BellSouth's Response to (a).

(c) See BellSouth's Response to (a).

(d) BellSouth is gathering information responsive to this request and will supplement its response no later than December 4, 2003.

(e) BellSouth is unaware of any complaints from CLECs regarding any aspect of their provisioning of co-carrier cross connects in BellSouth's central offices in Tennessee. See BellSouth's Response to Item No. 107.

(f) Not Applicable

RESPONSE PROVIDED BY: Wayne Gray

REQUEST: Please state the rates you charge for flat and measured local exchange service for all 1) residential and 2) business customers in Tennessee, and if the rate varies by location, please identify the geographic coverage of the area to which the rate applies (e.g., wire center, rate zone, etc.) and the statewide average rate you charge for each category. If the rates you charge vary by central office, please identify the rate that applies to each central office by CLLI code, and the rate zone applicable to each central office.

RESPONSE: BellSouth objects to this Interrogatory to the extent that it seeks information that is in the public record or is otherwise publicly available. Subject to this objection, and without waiving this objection, the requested information is publicly available and can be obtained from BellSouth's Tennessee General Subscriber Services Tariff.

RESPONSE PROVIDED BY: Kathy Blake

REQUEST: Please identify the average monthly revenue per line that you consider to constitute low revenue, average revenue and high revenue for 1) residential customers and 2) business customers. Please provide a detailed explanation of whether high revenue customers typically purchase a single service, or a bundle of services, and if they purchase a bundle, which services, features or functions are included in the bundle.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that information concerning BellSouth's retail customers is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action.

REQUEST: Please identify, by CLLI code, all wire centers for which you receive universal service fund subsidies and provide the following information for each:
(a) whether the subsidy is from federal or state sources
(b) the amount of the subsidy on a per loop or per customer basis
(c) whether the subsidy applies to all customers served by the central office/wire center, or only a portion thereof;
(d) if the subsidy applies only to a portion of the customers, please provide the number of customers and the percentage of those customers to the total number of customers served in the central office/wire center.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that information concerning universal service fund subsidies received by BellSouth is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action.

REQUEST: With respect to any subsidies that you contend are implicit and/or explicit in your Tennessee retail rates for any service, please:
(a) identify and describe the service;
(b) state separately the amount of the subsidy you contend is implicit and/or explicit in the non-recurring and monthly recurring rates for the service;
(c) provide all cost studies, calculations, and other materials that directly support your contention that the service is implicitly and/or explicitly being subsidized.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that information concerning universal service fund subsidies received by BellSouth is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action.

REQUEST: With respect to each of the voice-grade loops identified in response to F-3 above, please state the average total monthly revenues earned each month per line in Tennessee since July 1, 2001 by wire center, local access and transport area ("LATA") and metropolitan serving area ("MSA"). Also please identify the source of those revenues by service and/or feature type (i.e., local voice only, local voice plus vertical features, local long distance only, DSL only, bundles of any of the above, and/or other services or features).

RESPONSE: BellSouth objects to this Interrogatory on the grounds that information concerning BellSouth's retail revenues is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action.

REQUEST: For each switch identified in your response to 97 above other than circuit switches, please provide the following for each switch:
(a) all costs arising from the provision of local exchange service using the switch (including the recurring and non-recurring charges for the switch, software, installation, maintenance, loops, collocation, transmission/concentration equipment, etc.);
(b) the average total monthly revenues earned per line in Tennessee since July 1, 2001, reported by wire center, LATA and metropolitan statistical area ("MSA"). Also please identify the source of those revenues by service and/or feature type (i.e., local voice only, local voice plus vertical features, local long distance only, DSL only, bundles of any of the above, and/or other services or features);

RESPONSE: BellSouth objects to this Interrogatory on the grounds that information concerning BellSouth's retail costs and revenues is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action.

REQUEST: With respect to each of the two customer categories identified in response to 110, please provide the following:

(a) all categories and amounts of costs arising from providing local exchange service to each customer category (including the recurring and non-recurring charges for the switch, software, installation, maintenance, loops, collocation, transmission/concentration equipment, transport, hot cuts, OSS, signaling, etc.);
(b) the average total monthly revenues earned per line since July 1, 2001 for each customer category, reported by wire center, local access and transport area ("LATA") and metropolitan serving area serving area ("MSA").
(c) the source of all revenues derived from each category loop identified in subpart (b) by service and/or feature type (i.e., local voice only, local voice plus vertical features, local long distance only, DSL only, bundles of any of the above, and/or other services or features).

RESPONSE: BellSouth objects to this Interrogatory on the grounds that information concerning BellSouth's retail costs and revenues is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action.

REQUEST: For each type of digital loop carrier ("DLC") equipment deployed by BellSouth, please state the minimum and maximum configuration deployed in Tennessee, in terms of number of lines supported.

RESPONSE: Configurations for currently approved NGDLC systems deployed in a non-controlled environment are as follows:

- DISC*S Metallic distribution = 384 lines min./2,016 maximum
- DISC*S FITL-A distribution = 480 lines min./2,016 maximum
- DISC*S MX FITL distribution = 864 lines (hybrid metal/fitl) min./ 3,360 maximum
- Litespan 2000 distribution = 448 lines min./1,904 maximum

Additional DLC equipment as follows:

- DS1Urban - 544 line minimum and maximum
- FDLC - 384 line minimum/1152 maximum
- SLC96 - 96 line minimum/384 maximum
- SLC5 - 192 line minimum/1344 maximum
- PGFlex - 6 line minimum/24 maximum
- GoDigital - 8 line minimum and maximum

RESPONSE PROVIDED BY: W. Keith Milner

REQUEST: For each type of digital loop carrier ("DLC") equipment deployed by BellSouth in Tennessee, please provide BellSouth's equipment capital costs for minimum, average and maximum configurations, in terms of number of lines supported.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that information concerning BellSouth's DLC costs is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action.

REQUEST: For each type of digital loop carrier ("DLC") equipment deployed by BellSouth in Tennessee, please provide BellSouth's Engineered, Furnished and Installed ("EF&I") costs for minimum, average and maximum configurations, in terms of number of lines supported.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that information concerning BellSouth's DLC costs is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action.

REQUEST: Please provide all non-recurring and recurring rates and charges applicable in Tennessee for UNE loops of all types as found in:

(a) intrastate tariffs
(b) interstate tariffs
(c) currently effective Interconnection Agreement(s) with CLEC(s)
(d) your Statement of Generally Available Terms ("SGAT").

RESPONSE: BellSouth objects to this Interrogatory on grounds that information concerning loop rates is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action, which concerns switching. BellSouth further objects to this Interrogatory to the extent it seeks information that is in the public record or is otherwise publicly available.

REQUEST: Please provide all non-recurring and recurring rates and charges applicable in Tennessee for UNE transport of all types as found in:
(a) intrastate tariffs
(b) interstate tariffs
(c) currently effective Interconnection Agreement(s) with CLEC(s)
(d) your Statement of Generally Available Terms ("SGAT").

RESPONSE: BellSouth objects to this Interrogatory on grounds that information concerning transport rates is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action, which concerns switching. BellSouth further objects to this Interrogatory to the extent it seeks information that is in the public record or is otherwise publicly available.

REQUEST:

Please provide a copy of all business cases, business analysis, cost studies, or other analyses or evaluations concerning whether entry into the mass market is economically feasible without access to BellSouth's switches, including those analyses and studies that were submitted to the FCC, performed but not submitted to the FCC, and performed since February 22, 2003. Provide all supporting documentation and work papers, in electronic format if available.

RESPONSE: BellSouth objects to this Interrogatory on grounds that it is unduly burdensome, overly broad, and oppressive as written. Subject to this objection, and without waiving this objection, BellSouth is gathering information responsive to this request and will supplement its response no later than December 4, 2003.

REQUEST: Please state whether you have deployed facilities of any type (e.g. switches, loops, transport, DLC, DSLAMs, splitters, etc.) to provide local services as a CLEC in any state or other geographic area outside your ILEC serving territory. If so, please provide all of the following:

(a) all states, cities or other geographic area in which you have deployed facilities;
(b) a detailed description of the facilities for each geographic region;
(c) a detailed description of the criteria you used to choose the geographic areas in which you would deploy facilities;
(d) a copy of all business cases, business analysis, cost studies, or other analyses or evaluations (whether created by you or on your behalf) regarding competitive entry into the geographic area outside your ILEC serving territory;
(e) the date on which you first began providing competitive local services using your own facilities in each state, city or other geographic region outside your ILEC serving territory;
(f) the number of 1) residential and 2) business customers at the most granular level for which data has been retained (e.g., ILEC wire center, city, state, etc.) for your operations outside your ILEC serving territory for each month since such operations began;
(g) all categories and amounts of costs arising from providing competitive local services in each state, city or other geographic region outside your ILEC serving territory (including the recurring and non-recurring charges for the switch, software, installation, maintenance, loops, collocation, transmission/concentration equipment, transport, hot cuts, OSS, signaling, etc.);
(h) the average total monthly revenues earned per customer for each customer type (e.g., residential, small business, enterprise) served in each state, city or other geographic region outside your ILEC serving territory, reported by CLLI, LATA, MSA;
(i) the source of all revenues derived from each customer type identified in your response to subpart (h) by service and/or feature type (i.e., local voice only, local voice plus vertical features, local long distance only, DSL only, bundles of any of the above, and/or other services or features).

RESPONSE:

(a) BellSouth Telecommunications, Inc. ("BST") does not provide local service as a CLEC outside of its nine state region. However, BST does provide local services as a CLEC ("BST-CLEC"), using its facilities, in the following geographic areas inside of its nine state region but outside of its ILEC serving territory:

Florida: Orlando and near Jacksonville
Kentucky: Lexington
Alabama: Lincoln
North Carolina: Research Triangle Park and one customer in Catawba County.

NOTE: In addition to the local services that BST-CLEC is provisioning in Lincoln, Alabama using its own facilities, it is also providing local services to certain locations across the state outside of its serving territory using the facilities of local independent telephone companies.

(b) The predominant facilities deployed by BST-CLEC to provide service in the above listed areas of Alabama, Florida, Kentucky and North Carolina are cable and wire facilities and the related electronics. In addition, in Florida, BST-CLEC has deployed a DS0 switch. BST-CLEC provides both switched and non-switched services using DS0, DS1, DS3 and/or OC3. In addition, services in North Carolina are provided with 10 MBPS, 100 MBPS and OC48; services in North Florida are provided with OC12, 150M and OC48+.

(c) BST has extended dedicated facilities over negotiated right-of –way access to serve customers outside of its ILEC serving territory on a customer-specific basis where an existing BellSouth customer with locations outside of the ILEC serving territory requested the same services for its locations outside of the ILEC serving territory. These customers generally have locations inside and outside the BST serving territory in close proximity and desire local services through one network with one bill from BST. BellSouth evaluated these customer situations based upon the location and strategic value of these customers requesting services from us.

(d) BST does not have any business cases or analyses regarding generic expansion plans outside of its ILEC serving territory. Any "business cases" prepared by or for BST are customer-specific business cases where incremental investment and revenues were the major factors in the decision to offer service to BST customers with locations outside of its serving territory. Such customer-specific business cases are not being provided on the basis that they are not relevant and not responsive to the question.

(e) Certificates to operate in outside of BST's serving territory were approved on the following dates by the state commissions. Installations began after the certificate approval dates below.

Florida: May 23, 1996

North Carolina: June 15, 1999

Alabama: September 5, 2000

Kentucky: December 31, 1998*

* KY customers as of 10/31/01 are grandfathered, but no new customers can be added.

(f) BST-CLEC does not currently provide any residential services. The number of business customers in each location provided in (a) above has not fluctuated greatly over time. Therefore, and because provision of monthly data would be burdensome, BellSouth is providing the number of customers for the month of October, 2003.

State	Number of Customers
Alabama	106
Florida	150
Kentucky	13
North Carolina	15

(g) The actual amounts of costs relating specifically to the provisioning of competitive local services are not readily identifiable in the BellSouth's accounting records. As explained in the response to Item No.154(c), BellSouth is providing local service outside of its ILEC serving territory in Alabama, Florida, Kentucky, and North Carolina. These services are being provisioned using facilities placed outside of the ILEC serving territory as well as existing facilities located inside the ILEC serving territory. The Company uses the Federal Communications Commission's (FCC) Part 64 cost allocation rules to segregate the costs of these activities from the costs associated with the provisioning of these same services in the ILEC serving territory. The Part 64 cost allocation process also includes costs associated with many nonregulated activities such as inside wire maintenance and Internet services. Many of the Part 64 cost allocation factors are developed on an aggregate basis, and as a result, many of the costs associated with specific activities cannot be separately identified.

However, in an effort to be responsive, below is the total amount of investment by state as of December 31, 2002 placed to provide service outside of BellSouth's ILEC serving territory. This investment represents the original cost of the facilities described in response to Item No.154(b). Also provided below is the total amount of expense by state for January through September 2003 that can be identified as relating to the provision of service outside of BellSouth's ILEC serving territory. For the reasons discussed above, these expenses are not all inclusive but do include expenses related to the use of any existing facilities located inside BellSouth's ILEC territory as well as the plant related expenses associated with the facilities placed outside of the ILEC territory.

	Investment As of 12/31/02	Expense Sept. 2003 YTD
Alabama	$ 339,939	$ 193,283
Florida	$13,495,996	$3,153,644
Kentucky	$ 2,526,895	$ 640,005
North Carolina	$ 2,820,708	$1,244,272
Total	$19,183,538	$5,231,204

(h) The average total recurring revenue per customer for the month of October, 2003 is listed below. As stated above, these are all business customers.

State	Revenue/Customer/Month
Alabama	$182
Florida	$1,123
Kentucky	$2,014
North Carolina	$2,776

(i) BellSouth provides its customers outside its ILEC serving territory the range of services allowed under its filed and approved state GSST and Access tariffs under the certificate approved by the relevant public service commission. Rates charged to end user out-of-serving territory customers are either tariff rates or competitively-bid and negotiated Contract Service Arrangement (CSA) contracts.

RESPONSE PROVIDED BY: Kathy Blake

REQUEST: Please state whether you have ever offered, or are currently offering, local services via UNE-P as a CLEC in any state or other geographic area outside your ILEC serving territory. If so, please provide all of the following:

(a) all states, cities or other geographic area in which you have, or are, offering local services;
(b) a detailed description of the criteria you used to choose the geographic areas in which you would offer local services;
(c) a copy of all business cases, business analysis, cost studies, or other analyses or evaluations (whether created by you or on your behalf) regarding competitive entry into the geographic area outside your ILEC serving territory;
(d) the date on which you first began providing competitive local services using UNE-P in each state, city or other geographic region outside your ILEC serving territory;
(e) the number of 1) residential and 2) business customers at the most granular level for which data has been retained (e.g., ILEC wire center, city, state, etc.) for your operations outside your ILEC serving territory for each month since such operations began;
(f) all categories and amounts of costs arising from providing competitive local services in each state, city or other geographic region outside your ILEC serving territory;
(g) the average total monthly revenues earned per customer for each customer type (e.g., residential, small business, enterprise) served in each state, city or other geographic region outside your ILEC serving territory, reported by CLLI, LATA and MSA;
(h) the source of all revenues derived from each customer type identified in subpart (g) by service and/or feature type (i.e., local voice only, local voice plus vertical features, local long distance only, DSL only, bundles of any of the above, and/or other services or features).

RESPONSE: No.

RESPONSE PROVIDED BY: Kathy Blake

REQUEST: Please state whether you have ever offered, or are currently offering, local services via resale as a CLEC in any state or other geographic area outside your ILEC serving territory. If so, please provide all of the following:

(a) all states, cities or other geographic area in which you have, or are, offering local services;
(b) a detailed description of the criteria you used to choose the geographic areas in which you would offer local services;
(c) a copy of all business cases, business analysis, cost studies, or other analyses or evaluations (whether created by you or on your behalf) regarding competitive entry into the geographic area outside your ILEC serving territory;
(d) the date on which you first began providing competitive local services using resale in each state, city or other geographic region outside your ILEC serving territory;
(e) the number of 1) residential and 2) business customers at the most granular level for which data has been retained (e.g., ILEC wire center, city, state, etc.) for your operations outside your ILEC serving territory for each month since such operations began;
(f) all categories and amounts of costs arising from providing competitive local services in each state, city or other geographic region outside your ILEC serving territory;
(g) the average total monthly revenues earned per customer for each customer type (e.g., residential, small business, enterprise) served in each state, city or other geographic region outside your ILEC serving territory, reported by CLLI, LATA, and MSA;
(h) the source of all revenues derived from each customer type identified in subpart (g) by service and/or feature type (i.e., local voice only, local voice plus vertical features, local long distance only, DSL only, bundles of any of the above, and/or other services or features).

RESPONSE: No.

RESPONSE PROVIDED BY: Kathy Blake

REQUEST: Please provide all documents addressing BellSouth currently offered bundles of the following: a) business local exchange and long distance services, b) residential local exchange and long distance services, c) business local exchange, long distance and broadband/DSL services, d) residential local exchange, long distance and broadband/DSL services; e) residential local exchange and DSL; and f) business local exchange and DSL.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that information concerning BellSouth's retail offerings is not reasonably calculated to lead to the discovery of admissible evidence and it is not relevant to the subject matter of this action. BellSouth also objects to the Interrogatory to the extent it seeks information that is in the public record or is otherwise publicly available.

REQUEST: Please provide all documents addressing BellSouth planned bundling of the following: a) business local exchange and long distance services, b) residential local exchange and long distance services, c) business local exchange, long distance and broadband/DSL services, d) residential local exchange, long distance and broadband/DSL services; e) residential local exchange and DSL; and f) business local exchange and DSL.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that information concerning BellSouth's retail offerings is not reasonably calculated to lead to the discovery of admissible evidence and it is not relevant to the subject matter of this action.

REQUEST: On a CLLI-code-specific basis in Tennessee, please provide all forecasts of BellSouth's expected, estimated or forecasted demand growth or decline for each of the next five years for circuit switched voice grade services, stated on all available bases (e.g., number of lines, minutes of use, processor utilization CCS, etc.).

RESPONSE: See BellSouth's response to MCI's 1st Request for Production, No. 1 for the Total Network Access Line ("TNAL") forecast, to the extent it is available, for each of the switches in BellSouth's Tennessee network.

RESPONSE PROVIDED BY: W. Keith Milner

REQUEST: On a CLLI-code-specific basis in Tennessee, please provide BellSouth's current capacity utilization for each Class 5 circuit switch for the major switch components (e.g, processor, line cards, trunk cards, etc.).

RESPONSE: See BellSouth's response to MCI's Request for Production, No. 1 for the utilization data for analog lines, TR-008 integrated digital loop carrier systems, GR-303 integrated digital loop carrier systems, BRI lines, PRIs and T1 trunk terminations. This is August 2003 data. Note that both the capacities and working quantities are provided in the spreadsheet along with the calculated utilization. These are the major switch components for which BellSouth maintains utilization data. BellSouth does not maintain utilization data for the switch processors.

RESPONSE PROVIDED BY: W. Keith Milner

REQUEST: On a CLLI-code-specific basis in Tennessee, please provide the BellSouth's demand growth or decline for circuit switched voice grade services for each of the last three years, stated on all available bases (e.g., number of lines, minutes of use, processor utilization CCS, etc.).

RESPONSE: See BellSouth's response to MCI's Request for Production, No. 1. This is proprietary information and is being provided subject to the terms of the non-disclosure agreement executed in this proceeding.

RESPONSE PROVIDED BY: W. Keith Milner

REQUEST: On a CLLI-code-specific basis in Tennessee, please provide the BellSouth's demand growth or decline for each of the last three years for each of the following BellSouth retail services: primary business voice lines, primary residential voice lines, additional business voice lines, additional residential voice lines, standalone DSL lines, BellSouth DSL service provisioned in the high frequency portion of a loop that also supports BellSouth narrowband analog voice service, CLEC DSL service provisioned in the high frequency portion of a loop that also supports BellSouth narrowband analog voice service, and CLEC DSL service provisioned in the high frequency portion of a loop that also supports CLEC narrowband analog voice service.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that information concerning BellSouth's retail offerings is not reasonably calculated to lead to the discovery of admissible evidence and it is not relevant to the subject matter of this action. Subject to this objection, and without waiving this objection, see BellSouth's response to MCI First Set of Interrogatories Item No. 120 for information responsive to Interrogatory 162(h).

REQUEST: On a CLLI-code-specific basis in Tennessee, please provide BellSouth's current in-service quantities for each of the following BellSouth retail services: primary business voice lines, primary residential voice lines, additional business voice lines, additional residential voice lines, standalone DSL lines, BellSouth DSL service provisioned in the high frequency portion of a loop that also supports BellSouth narrowband analog voice service, CLEC DSL service provisioned in the high frequency portion of a loop that also supports BellSouth narrowband analog voice service, and CLEC DSL service provisioned in the high frequency portion of a loop that also supports CLEC narrowband analog voice service.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that information concerning BellSouth's retail offerings is not reasonably calculated to lead to the discovery of admissible evidence and it is not relevant to the subject matter of this action. Subject to this objection, and without waiving this objection, see BellSouth's response to MCI First Set of Interrogatories Item No. 166 for information responsive to Interrogatory 163(h).

REQUEST: On a CLLI-code-specific basis in Tennessee, please provide BellSouth's expected, estimated or forecasted demand growth or decline for each of the next three years for each of the following BellSouth retail services: primary business voice lines, primary residential voice lines, additional business voice lines, additional residential voice lines, standalone DSL lines, BellSouth DSL service provisioned in the high frequency portion of a loop that also supports BellSouth narrowband analog voice service, CLEC DSL service provisioned in the high frequency portion of a loop that also supports BellSouth narrowband analog voice service, and CLEC DSL service provisioned in the high frequency portion of a loop that also supports CLEC narrowband analog voice service.

RESPONSE: BellSouth objects to this Interrogatory on grounds that information concerning BellSouth's retail services is not reasonably calculated to lead to the discovery of admissible evidence and it is not relevant to the subject matter of this action. Subject to this objection, and without waiving this objection, see BellSouth's response to MCI First Set of Interrogatories Item No. 167 for information responsive to Interrogatory 164(h).

REQUEST: On a CLLI-code-specific basis in Tennessee, please provide the BellSouth's demand growth or decline for each of the last three years for each of the following: a) UNE loops used for circuit switched voice service, b) UNE loops used for DSL service (including line split configurations), c) UNE-P residential local exchange service, d) UNE-P business local exchange service, e) resold ILEC business local exchange service and f) resold ILEC residential local exchange service.

RESPONSE: See BellSouth's response to MCI's Request for Production, No. 1 for the demand growth. This is proprietary information and is being provided subject to the terms of the non-disclosure agreement executed in this proceeding.

RESPONSE PROVIDED BY: Craig Williard

REQUEST: On a CLLI-code-specific basis in Tennessee, please provide the BellSouth's current in-service quantities for each of the following: a) UNE loops used for circuit switched voice service, b) UNE loops used for DSL service (including line split configurations), c) UNE-P residential local exchange service, d) UNE-P business local exchange service, e) resold ILEC business local exchange service and f) resold ILEC residential local exchange service.

RESPONSE: See BellSouth's response to MCI's Request for Production, No. 1 for the demand growth. This is proprietary information and is being provided subject to the terms of the non-disclosure agreement executed in this proceeding.

RESPONSE PROVIDED BY: Craig Williard

REQUEST: On a CLLI-code-specific basis in Tennessee, please provide the BellSouth's expected, estimated or forecasted demand growth or decline for each of the next three years for each of the following: a) UNE loops used for circuit switched voice service, b) UNE loops used for DSL service (including line split configurations), c) UNE-P residential local exchange service, d) UNE-P business local exchange service, e) resold ILEC business local exchange service and f) resold ILEC residential local exchange service.

RESPONSE: See Attachment 167-1. This information is proprietary and is being provided subject to the terms of the non-disclosure agreement in this proceeding.

REQUEST: Please provide all documents that address or assess the risk of stranded capacity on all or any portion of BellSouths' existing network in Tennessee.

RESPONSE: Section 3.4.4 of RL: 01-03-001BT, Loop Technology Deployment Directives ("LTDD"), March 28, 2001 (See Item No. 126) addresses the reuse of stranded loop facilities throughout the BellSouth network. BellSouth is not aware of any documents dealing with stranded transport capacity. RL 01-03-013BT, Terminating Universal versus Integrated DLC Systems In Offices With Surplus Analog Lines and RL 01-04-014BT, Surplus Analog Lines on Digital Switching Systems – Reuse surplus capacity in other wire centers deal with stranded switching capacity.

RESPONSE PROVIDED BY: W. Keith Milner

REQUEST: Please provide all calculations and/or estimates in BellSouth's custody or control of the market demand elasticity for local exchange service, stated separately for residential and business customers, if such separate calculations and/or estimates exist. Please provide all supporting documentation for such calculations and/or estimates.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that information requested it is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action.

REQUEST: Please provide all calculations and/or estimates in BellSouth's custody or control of the market demand elasticity for long distance service, stated separately for residential and business customers, if such separate calculations and/or estimates exist. Please provide all supporting documentation for such calculations and/or estimates.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that the information requested is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action.

REQUEST: Please provide all calculations and/or estimates in BellSouth's custody or control of the market demand elasticity for broadband service (i.e., DSL), stated separately for residential and business customers, if such separate calculations and/or estimates exist. Please provide all supporting documentation for such calculations and/or estimates.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that the information requested is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action.

REQUEST: Please provide all calculations and/or estimates in BellSouth's custody or control of the market demand elasticity for bundled local and long distance service, stated separately for residential and business customers, if such separate calculations and/or estimates exist. Please provide all supporting documentation for such calculations and/or estimates.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that the information requested is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action.

REQUEST: Please provide all calculations and/or estimates in BellSouth's custody or control of the market demand elasticity for bundled local, long distance, and broadband service (i.e., DSL), stated separately for residential and business customers, if such separate calculations and/or estimates exist. Please provide all supporting documentation for such calculations and/or estimates.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that the information requested is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action.

REQUEST: Please define the following terms, as BellSouth understands and uses them, and distinguish each defined term from all of the others on this list:
a) variable cost
b) sunk cost
c) marginal cost
d) incremental cost
e) TSLRIC
f) TELRIC.

RESPONSE:

a) Variable cost is a cost that changes as the level of activity of a firm changes, or that changes as the level of output of a product changes. In long run cost analyses, all costs are considered variable (i.e., there are no fixed costs in the long run).

b) Sunk cost is any historical cost resulting from past decisions.

c) Marginal cost is the additional cost of one more unit of output holding the production levels of all other goods and services produced by an enterprise constant.

d) Incremental cost is any increment to (change in) cost due to a specified action.

e) TSLRIC (Total Service Long Run Incremental Cost) studies address not only the volume sensitive costs of a service but also consider the directly attributable volume insensitive costs of the service. Such studies are used to ensure that the service under consideration is not being subsidized.

RESPONSE: (Continued)

f) TELRIC (Total Element Long Run Incremental Cost) - As recognized by the FCC, TELRIC methodology is very similar to TSLRIC methodology: "we are adopting a version of the methodology commonly referred to as TSLRIC as the basis for pricing interconnection and unbundled elements..." (Paragraph 678, First Report and Order). One point of distinction is that TSLRIC methodology is used to determine the cost of a service whereas the TELRIC methodology is used in determining the cost of a network element. Another difference is the inclusion of shared costs. These costs are excluded in a TSLRIC study. However, the FCC recognized that certain shared costs that would be excluded in a TSLRIC analysis are appropriate in a TELRIC study. A common cost allocation factor is also applied in a TELRIC analysis to yield economic cost.

RESPONSE PROVIDED BY:

Daonne Caldwell
Director
675 West Peachtree Street
Atlanta, Georgia 30375

REQUEST: Please provide BellSouth's calculation and/or estimate of its variable costs for providing local exchange service, stated separately for residential and business customers, if such separate calculations and/or estimates exist. Please provide all supporting documentation for such calculations and/or estimates.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that information concerning BellSouth's retail costs is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action.

REQUEST: Please provide BellSouth's calculation and/or estimate of its marginal costs for providing local exchange service, stated separately for residential and business customers, if such separate calculations and/or estimates exist. Please provide all supporting documentation for such calculations and/or estimates.

RESPONSE: BellSouth objects to this request for the reasons stated in General Objection No. 4 previously filed in this proceeding. Nevertheless and not withstanding this objection, BellSouth does not have a current filed local exchange service cost study for TN and such studies, if available, would not compute marginal costs.

RESPONSE PROVIDED BY:

Daonne Caldwell
Director
675 West Peachtree Street
Atlanta, Georgia 30375

REQUEST: Please provide BellSouth's calculation and/or estimate of its variable costs for providing long distance service, stated separately for residential and business customers, if such separate calculations and/or estimates exist. Please provide all supporting documentation for such calculations and/or estimates.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that the information requested is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action. BellSouth also objects to this Interrogatory to the extent it seeks to impose an obligation on BellSouth to respond on behalf of its affiliates on grounds that such discovery is overly broad, unduly burdensome, oppressive, and not permitted by applicable discovery rules.

REQUEST: Please provide BellSouth's calculation and/or estimate of its marginal costs for providing long distance service, stated separately for residential and business customers, if such separate calculations and/or estimates exist. Please provide all supporting documentation for such calculations and/or estimates.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that the information requested is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action. BellSouth also objects to this Interrogatory to the extent it seeks to impose an obligation on BellSouth to respond on behalf of its affiliates on grounds that such discovery is overly broad, unduly burdensome, oppressive, and not permitted by applicable discovery rules.

REQUEST: Please provide BellSouth's calculation and/or estimate of its variable costs for providing broadband service (i.e. DSL), stated separately for residential and business customers, if such separate calculations and/or estimates exist. Please provide all supporting documentation for such calculations and/or estimates.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that the information requested is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action.

REQUEST: Please provide BellSouth's calculation and/or estimate of its marginal costs for providing broadband service (i.e. DSL), stated separately for residential and business customers, if such separate calculations and/or estimates exist. Please provide all supporting documentation for such calculations and/or estimates.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that the information requested is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action.

REQUEST: Please provide BellSouth's calculation and/or estimate of its variable costs for providing bundled local exchange and long distance service, stated separately for residential and business customers, if such separate calculations and/or estimates exist. Please provide all supporting documentation for such calculations and/or estimates.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that the information requested is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action. BellSouth also objects to this Interrogatory to the extent it seeks to impose an obligation on BellSouth to respond on behalf of its affiliates on grounds that such discovery is overly broad, unduly burdensome, oppressive, and not permitted by applicable discovery rules.

REQUEST: Please provide BellSouth's calculation and/or estimate of its marginal costs for providing bundled local exchange and long distance service, stated separately for residential and business customers, if such separate calculations and/or estimates exist. Please provide all supporting documentation for such calculations and/or estimates.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that the information requested is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action. BellSouth also objects to this Interrogatory to the extent it seeks to impose an obligation on BellSouth to respond on behalf of its affiliates on grounds that such discovery is overly broad, unduly burdensome, oppressive, and not permitted by applicable discovery rules.

REQUEST: Please provide BellSouth's calculation and/or estimate of its variable costs for providing bundled local exchange, long distance and broadband service, stated separately for residential and business customers, if such separate calculations and/or estimates exist. Please provide all supporting documentation for such calculations and/or estimates.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that the information requested is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action. BellSouth also objects to this Interrogatory to the extent it seeks to impose an obligation on BellSouth to respond on behalf of its affiliates on grounds that such discovery is overly broad, unduly burdensome, oppressive, and not permitted by applicable discovery rules.

REQUEST: Please provide BellSouth's calculation and/or estimate of its marginal costs for providing bundled local exchange, long distance and broadband service, stated separately for residential and business customers, if such separate calculations and/or estimates exist. Please provide all supporting documentation for such calculations and/or estimates.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that the information requested is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action. BellSouth also objects to this Interrogatory to the extent it seeks to impose an obligation on BellSouth to respond on behalf of its affiliates on grounds that such discovery is overly broad, unduly burdensome, oppressive, and not permitted by applicable discovery rules.

REQUEST: Please state whether BellSouth has any affiliates or subsidiaries that provide local exchange voice services, long distance voice services and/or DSL services. If the response for any of these service is affirmative, please provide the full name of the affiliate or subsidiary and a list of the service(s) provided by the affiliate or subsidiary.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that the information requested is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action. BellSouth also objects to this Interrogatory to the extent it seeks to impose an obligation on BellSouth to respond on behalf of its affiliates on grounds that such discovery is overly broad, unduly burdensome, oppressive, and not permitted by applicable discovery rules.

REQUEST: Please provide a copy of each executed contract (including attachments and/or amendments) between BellSouth and a long distance carrier for inter-LATA services and/or facilities.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that the information requested is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action. BellSouth also objects to this Interrogatory to the extent it seeks information that is in the public record is otherwise publicly available.

REQUEST: With respect to each contract requested in 186, please provide the total minutes of use, and/or total transport capacity purchased, as well as the total dollar amount paid for such minutes of use and/or transport capacity, stated on a quarterly basis for the past three years.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that the information requested is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action.

REQUEST: Please provide all calculations or estimates in BellSouth's custody or control of BellSouth's current total and component (e.g., debt, preferred stock, equity, etc.) cost of capital, based on each of the following: a) market capital structure, b) book capital structure, and c) target capital structure. Please provide supporting documentation, including the documents relied upon to answer this question.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that the information requested is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action.

REQUEST: With respect to the cost of capital calculations or estimates requested in 0, please provide such calculations or estimates for BellSouth's major types of service, at the most granular level available, including the following: a) residential local exchange service, b) business local exchange service, c) long distance service, d) DSL service and e) unbundled network elements (UNEs). Please provide supporting documentation, including the documents relied upon to answer this question.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that the information requested is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action.

REQUEST: Please describe in detail any legal, regulatory or other constraints on BellSouth's ability to target price reductions to specific geographic areas for each of the following: a) business local exchange service, b) residential local exchange service, c) long distance service and d) DSL service.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that the information requested is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action. BellSouth also objects to this Interrogatory to the extent it seeks information that is in the public record is otherwise publicly available.

REQUEST: Please describe in detail any legal, regulatory or other constraints on BellSouth's ability to target price reductions to types of customers (including individual customers) for each of the following: a) business local exchange service, b) residential local exchange service, c) long distance service and d) DSL service.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that the information requested is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action. BellSouth also objects to this Interrogatory to the extent it seeks information that is in the public record is otherwise publicly available.

REQUEST: Please describe in detail any price floors imposed by any law, regulation, Tennessee Regulatory Authority orders or rulings that constrain BellSouth's ability to reduce prices for each of the following: a) business local exchange service, b) residential local exchange service, c) long distance service and d) DSL service. For each such price floor, provide the basis for the calculation for the price floor (e.g., price freeze, cost-based calculation, etc.).

RESPONSE: BellSouth objects to this Interrogatory on the grounds that the information requested is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action. BellSouth also objects to this Interrogatory to the extent it seeks information that is in the public record is otherwise publicly available.

REQUEST: Please provide average total revenue for each BellSouth wire center in Tennessee.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that the information requested is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action.

REQUEST: For each CLLI code in Tennessee, please provide the data specified in Table II and Table III of FCC ARMIS Report 43-08, for the most recent period available.

RESPONSE: See BellSouth's response to MCI's 1st Request for Production, No. 1. This information is proprietary and is being provided subject to the terms of the non-disclosure agreement in this proceeding.

RESPONSE PROVIDED BY: Paul Grace

REQUEST: For each CLLI code in Florida, please provide average revenues per line for

(1) residential voice-only customers;
(2) residential voice plus DSL customers;
(3) business DS-0/voice grade customers;
(4) business DS-1 customers; for local service, vertical features, and voice mail.

For customers in each of these four categories who also subscribe to BellSouth long distance service, provide the average long distance revenues per line.

RESPONSE: BellSouth objects to this Interrogatory on the grounds that the information requested is not reasonably calculated to lead to the discovery of admissible evidence and is not relevant to the subject matter of this action.

REQUEST: Produce all documents identified in response to each interrogatory in MCI's First Set of Interrogatories to BellSouth. In producing documents, plese identify and group documents by each individual interrogatory number.

RESPONSE: Documents responsive to this request are being provided.

BellSouth Telecommunications, Inc.

MCI/WorldCom's 1st Request for Production of Documents

Item No. 1

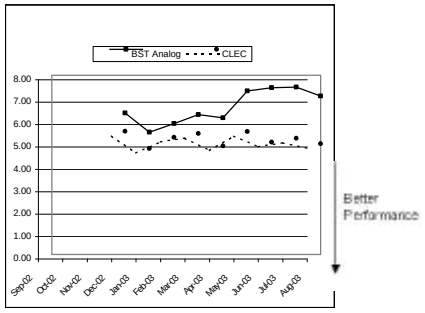
Attachment to Interrogatory Item No. 7

Tennessee III, September 2002 - August 2003
Unbundled Network Elements - Provisioning
Order Completion Interval
(Interval Between Order Issuance and Completion)
Numerator indicates total of order completion intervals for this disaggregation in the reporting period.
Volume indicates total number of service orders completed for this disaggregation in the reporting period.

B.2.1.7.1.1 2W Analog Loop Design/<10 circuits/Dispatch/TN (days)

	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	6.32	82,375	13,040	5.50	330	60	6.397	0.9872	YES
Jan-03	5.46	78,469	14,381	4.73	241	51	6.616	0.7876	YES
Feb-03	5.85	74,624	12,761	5.23	183	35	9.096	0.4022	YES
Mar-03	6.25	86,270	13,806	5.40	324	60	7.540	0.8700	YES
Apr-03	6.10	82,523	13,531	4.84	213	44	6.573	1.2674	YES
May-03	7.29	84,049	11,523	5.49	302	55	7.476	1.7844	YES
Jun-03	7.44	99,500	13,381	5.02	266	53	7.222	2.4316	YES
Jul-03	7.47	94,487	12,656	5.18	311	60	6.659	2.6488	YES
Aug-03	7.07	89,290	12,624	4.94	252	51	4.665	3.2573	YES

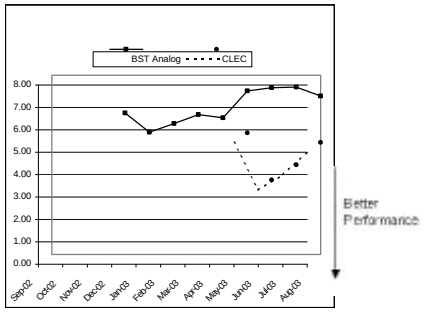
Note 1: Residence and Business - Dispatch data serves as the BST Analog for this report



B.2.1.7.1.2 2W Analog Loop Design/<10 circuits/Non-Dispatch/TN (days)

	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	6.32	82,375	13,040				6.397		
Jan-03	5.46	78,469	14,381				6.616		
Feb-03	5.85	74,624	12,761				9.096		
Mar-03	6.25	86,270	13,806				7.540		
Apr-03	6.10	82,523	13,531				6.573		
May-03	7.29	84,049	11,523	5.43	38	7	7.476	0.6600	YES
Jun-03	7.44	99,500	13,381	3.33	10	3	7.222	0.9838	YES
Jul-03	7.47	94,487	12,656	4.00	8	2	6.659	0.7360	YES
Aug-03	7.07	89,290	12,624	5.00	5	1	4.665	0.4444	YES

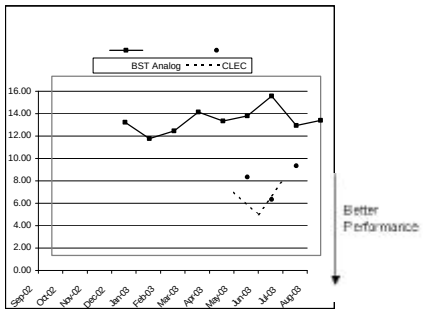
Note 1: Residence and Business - Dispatch data serves as the BST Analog for this report



B.2.1.7.2.1 2W Analog Loop Design/>=10 circuits/Dispatch/TN (days)

	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	11.89	690	58				11.763		
Jan-03	10.43	605	58				12.306		
Feb-03	11.12	845	76				16.951		
Mar-03	12.81	871	68				14.634		
Apr-03	11.99	827	69				12.127		
May-03	12.45	909	73	7.00	7	1	13.883	0.3897	YES
Jun-03	14.24	1,253	88	5.00	5	1	14.864	0.6183	YES
Jul-03	11.61	824	71	8.00	8	1	9.006	0.3976	YES
Aug-03	12.06	929	77				10.964		

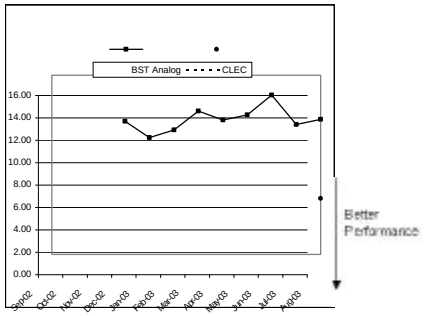
Note 1: Residence and Business - Dispatch data serves as the BST Analog for this report



B.2.1.7.2.2 2W Analog Loop Design/>=10 circuits/Non-Dispatch/TN (days)

	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	11.89	690	58				11.763		
Jan-03	10.43	605	58				12.306		
Feb-03	11.12	845	76				16.951		
Mar-03	12.81	871	68				14.634		
Apr-03	11.99	827	69				12.127		
May-03	12.45	909	73				13.883		
Jun-03	14.24	1,253	88				14.864		
Jul-03	11.61	824	71				9.006		
Aug-03	12.06	929	77	5.00	5	1	10.964	0.6402	YES

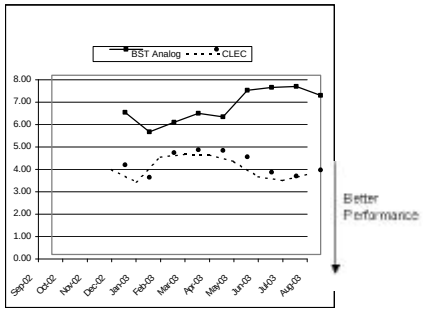
Note 1: Residence and Business - Dispatch data serves as the BST Analog for this report



Tennessee III, September 2002 - August 2003
Unbundled Network Elements - Provisioning
Order Completion Interval
(Interval Between Order Issuance and Completion)
Numerator indicates total of order completion intervals for this disaggregation in the reporting period.
Volume indicates total number of service orders completed for this disaggregation in the reporting period.

B.2.1.8.1.1 2W Analog Loop Non-Design/<10 circuits/Dispatch/TN (days)

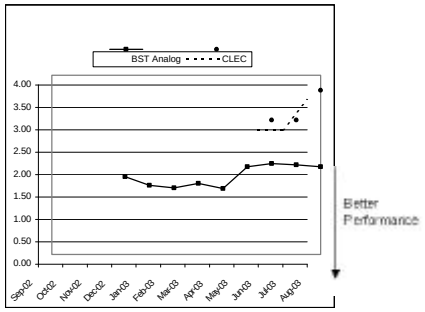
	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	6.34	81,366	12,837	4.00	20	5	6.291	0.8310	YES
Jan-03	5.47	77,093	14,090	3.44	31	9	6.570	0.9253	YES
Feb-03	5.90	73,446	12,444	4.55	50	11	9.172	0.4904	YES
Mar-03	6.30	84,724	13,450	4.67	70	15	7.559	0.8360	YES
Apr-03	6.14	81,227	13,232	4.64	51	11	6.596	0.7551	YES
May-03	7.33	83,254	11,359	4.36	48	11	7.507	1.3097	YES
Jun-03	7.45	98,615	13,233	3.67	22	6	7.228	1.2825	YES
Jul-03	7.50	93,721	12,496	3.50	42	12	6.684	2.0721	YES
Aug-03	7.10	88,447	12,466	3.77	49	13	4.652	2.5764	YES



Note 1: Retail Residence / Business (POTS) excluding Switch Based Orders data serves as the BST Analog for this report

B.2.1.8.1.4 2W Analog Loop Non-Design/<10 circuits/Dispatch In/TN (days)

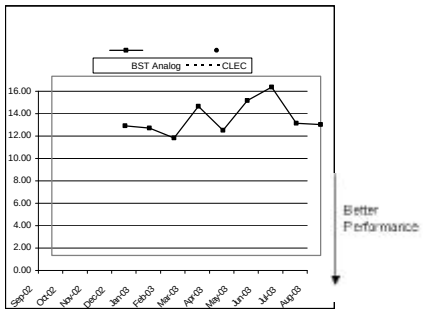
	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	1.73	213,041	122,872				2.115		
Jan-03	1.54	245,080	159,152				1.411		
Feb-03	1.49	182,689	122,934				1.819		
Mar-03	1.58	194,318	122,702				1.727		
Apr-03	1.47	207,980	141,491				1.651		
May-03	1.96	121,234	61,869				4.044		
Jun-03	2.03	123,634	60,986	3.00	6	2	3.891	-0.3536	YES
Jul-03	2.00	121,517	60,805	3.00	6	2	2.779	-0.5097	YES
Aug-03	1.96	125,572	64,111	3.67	33	9	2.753	-1.8609	NO



Note 1: Retail Residence / Business (POTS) excluding Switch Based Orders data serves as the BST Analog for this report

B.2.1.8.2.1 2W Analog Loop Non-Design/>=10 circuits/Dispatch/TN (days)

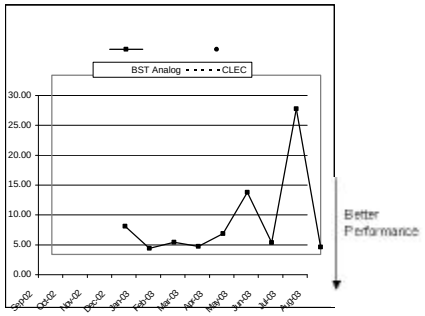
	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	11.58	544	47				12.074		
Jan-03	11.36	500	44				12.920		
Feb-03	10.49	693	66				17.297		
Mar-03	13.30	705	53				15.962		
Apr-03	11.18	615	55				11.751		
May-03	13.82	802	58				15.142		
Jun-03	15.03	1,097	73				16.082		
Jul-03	11.81	756	64				9.359		
Aug-03	11.68	829	71				10.465		



Note 1: Retail Residence / Business (POTS) excluding Switch Based Orders data serves as the BST Analog for this report

B.2.1.8.2.4 2W Analog Loop Non-Design/>=10 circuits/Dispatch In/TN (days)

	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	4.73	52	11				0.905		
Jan-03	1.00	1	1				0.000		
Feb-03	2.03	61	30				0.183		
Mar-03	1.33	4	3				0.577		
Apr-03	3.50	21	6				3.728		
May-03	10.40	52	5				14.519		
Jun-03	2.00	2	1				0.000		
Jul-03	24.40	122	5				52.324		
Aug-03	1.25	5	4				0.500		



Note 1: Retail Residence / Business (POTS) excluding Switch Based Orders data serves as the BST Analog for this report

Tennessee III, September 2002 - August 2003
Unbundled Network Elements - Provisioning
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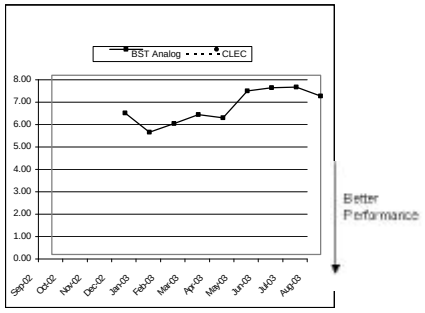
(Interval Between Order Issuance and Completion)
Numerator indicates total of order completion intervals for this disaggregation in the reporting period.
Volume indicates total number of service orders completed for this disaggregation in the reporting period.

B.2.1.9.1.1 2W Analog Loop w/INP Design/<10 circuits/Dispatch/TN (days)

	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	6.32	82,375	13,040				6.397		
Jan-03	5.46	78,469	14,381				6.616		
Feb-03	5.85	74,624	12,761				9.096		
Mar-03	6.25	86,270	13,806				7.540		
Apr-03	6.10	82,523	13,531				6.573		
May-03	7.29	84,049	11,523				7.476		
Jun-03	7.44	99,500	13,381				7.222		
Jul-03	7.47	94,487	12,656				6.659		
Aug-03	7.07	89,290	12,624				4.665		

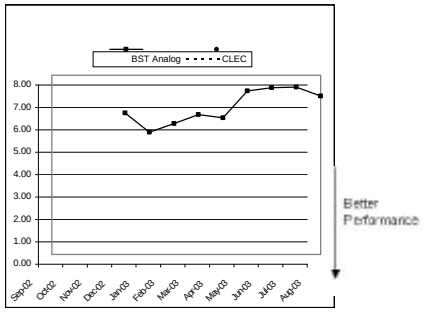
Note 1: Residence and Business - Dispatch data serves as the BST Analog for this report



B.2.1.9.1.2 2W Analog Loop w/INP Design/<10 circuits/Non-Dispatch/TN (days)

	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	6.32	82,375	13,040				6.397		
Jan-03	5.46	78,469	14,381				6.616		
Feb-03	5.85	74,624	12,761				9.096		
Mar-03	6.25	86,270	13,806				7.540		
Apr-03	6.10	82,523	13,531				6.573		
May-03	7.29	84,049	11,523				7.476		
Jun-03	7.44	99,500	13,381				7.222		
Jul-03	7.47	94,487	12,656				6.659		
Aug-03	7.07	89,290	12,624				4.665		

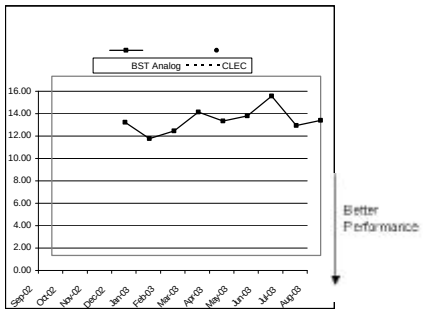
Note 1: Residence and Business - Dispatch data serves as the BST Analog for this report



B.2.1.9.2.1 2W Analog Loop w/INP Design/>=10 circuits/Dispatch/TN (days)

	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	11.89	690	58				11.763		
Jan-03	10.43	605	58				12.306		
Feb-03	11.12	845	76				16.951		
Mar-03	12.81	871	68				14.634		
Apr-03	11.99	827	69				12.127		
May-03	12.45	909	73				13.883		
Jun-03	14.24	1,253	88				14.864		
Jul-03	11.61	824	71				9.006		
Aug-03	12.06	929	77				10.964		

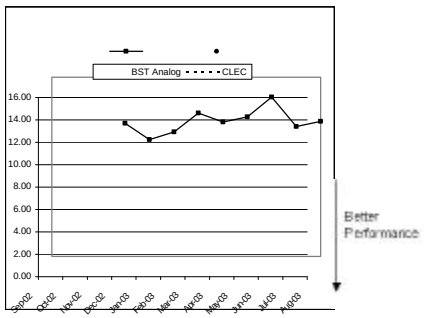
Note 1: Residence and Business - Dispatch data serves as the BST Analog for this report



B.2.1.9.2.2 2W Analog Loop w/INP Design/>=10 circuits/Non-Dispatch/TN (days)

	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	11.89	690	58				11.763		
Jan-03	10.43	605	58				12.306		
Feb-03	11.12	845	76				16.951		
Mar-03	12.81	871	68				14.634		
Apr-03	11.99	827	69				12.127		
May-03	12.45	909	73				13.883		
Jun-03	14.24	1,253	88				14.864		
Jul-03	11.61	824	71				9.006		
Aug-03	12.06	929	77				10.964		

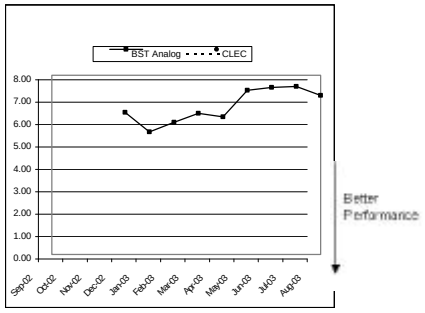
Note 1: Residence and Business - Dispatch data serves as the BST Analog for this report



Tennessee III, September 2002 - August 2003
Unbundled Network Elements - Provisioning
Order Completion Interval
(Interval Between Order Issuance and Completion)
Numerator indicates total of order completion intervals for this disaggregation in the reporting period.
Volume indicates total number of service orders completed for this disaggregation in the reporting period.

B.2.1.10.1.1 2W Analog Loop w/INP Non-Design/<10 circuits/Dispatch/TN (days)

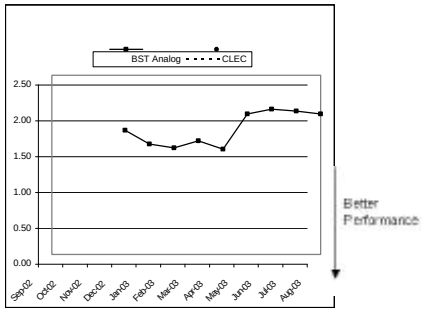
	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	6.34	81,366	12,837				6.291		
Jan-03	5.47	77,093	14,090				6.570		
Feb-03	5.90	73,446	12,444				9.172		
Mar-03	6.30	84,724	13,450				7.559		
Apr-03	6.14	81,227	13,232				6.596		
May-03	7.33	83,254	11,359				7.507		
Jun-03	7.45	98,615	13,233				7.228		
Jul-03	7.50	93,721	12,496				6.684		
Aug-03	7.10	88,447	12,466				4.652		



Note 1: Retail Residence / Business (POTS) excluding Switch Based Orders data serves as the BST Analog for this report

B.2.1.10.1.4 2W Analog Loop w/INP Non-Design/<10 circuits/Dispatch In/TN (days)

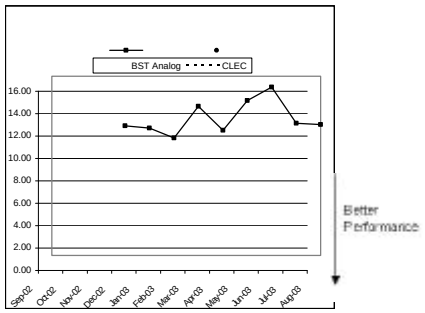
	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	1.73	213,041	122,872				2.115		
Jan-03	1.54	245,080	159,152				1.411		
Feb-03	1.49	182,689	122,934				1.819		
Mar-03	1.58	194,318	122,702				1.727		
Apr-03	1.47	207,980	141,491				1.651		
May-03	1.96	121,234	61,869				4.044		
Jun-03	2.03	123,634	60,986				3.891		
Jul-03	2.00	121,517	60,805				2.779		
Aug-03	1.96	125,572	64,111				2.753		



Note 1: Retail Residence / Business (POTS) excluding Switch Based Orders data serves as the BST Analog for this report

B.2.1.10.2.1 2W Analog Loop w/INP Non-Design/>=10 circuits/Dispatch/TN (days)

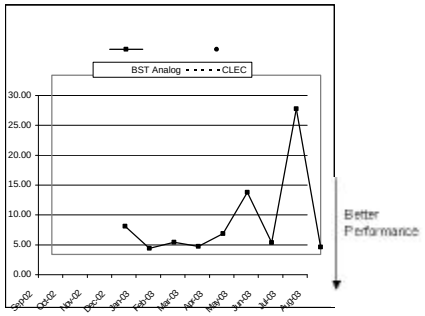
	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	11.58	544	47				12.074		
Jan-03	11.36	500	44				12.920		
Feb-03	10.49	693	66				17.297		
Mar-03	13.30	705	53				15.962		
Apr-03	11.18	615	55				11.751		
May-03	13.82	802	58				15.142		
Jun-03	15.03	1,097	73				16.082		
Jul-03	11.81	756	64				9.359		
Aug-03	11.68	829	71				10.465		



Note 1: Retail Residence / Business (POTS) excluding Switch Based Orders data serves as the BST Analog for this report

B.2.1.10.2.4 2W Analog Loop w/INP Non-Design/>=10 circuits/Dispatch In/TN (days)

	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	4.73	52	11				0.905		
Jan-03	1.00	1	1				0.000		
Feb-03	2.03	61	30				0.183		
Mar-03	1.33	4	3				0.577		
Apr-03	3.50	21	6				3.728		
May-03	10.40	52	5				14.519		
Jun-03	2.00	2	1				0.000		
Jul-03	24.40	122	5				52.324		
Aug-03	1.25	5	4				0.500		



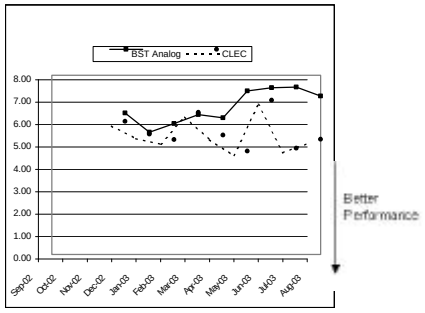
Note 1: Retail Residence / Business (POTS) excluding Switch Based Orders data serves as the BST Analog for this report

Tennessee III, September 2002 - August 2003
Unbundled Network Elements - Provisioning
Order Completion Interval
(Interval Between Order Issuance and Completion)
Numerator indicates total of order completion intervals for this disaggregation in the reporting period.
Volume indicates total number of service orders completed for this disaggregation in the reporting period.

B.2.1.11.1.1 2W Analog Loop w/LNP Design/<10 circuits/Dispatch/TN (days)

	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	6.32	82,375	13,040	5.95	113	19	6.397	0.2518	YES
Jan-03	5.46	78,469	14,381	5.38	129	24	6.616	0.0603	YES
Feb-03	5.85	74,624	12,761	5.13	41	8	9.096	0.2247	YES
Mar-03	6.25	86,270	13,806	6.35	165	26	7.540	-0.0658	YES
Apr-03	6.10	82,523	13,531	5.33	128	24	6.573	0.5700	YES
May-03	7.29	84,049	11,523	4.62	97	21	7.476	1.6382	YES
Jun-03	7.44	99,500	13,381	6.88	117	17	7.222	0.3158	YES
Jul-03	7.47	94,487	12,656	4.75	38	8	6.659	1.1532	YES
Aug-03	7.07	89,290	12,624	5.14	36	7	4.665	1.0945	YES

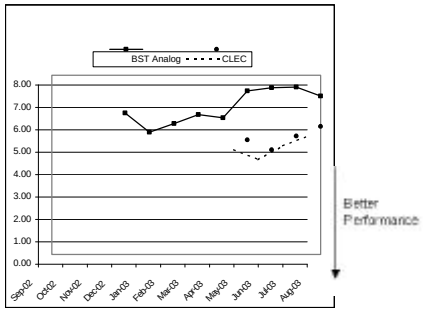
Note 1: Residence and Business - Dispatch data serves as the BST Analog for this report



B.2.1.11.1.2 2W Analog Loop w/LNP Design/<10 circuits/Non-Dispatch/TN (days)

	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	6.32	82,375	13,040				6.397		
Jan-03	5.46	78,469	14,381				6.616		
Feb-03	5.85	74,624	12,761				9.096		
Mar-03	6.25	86,270	13,806				7.540		
Apr-03	6.10	82,523	13,531				6.573		
May-03	7.29	84,049	11,523	5.12	87	17	7.476	1.1994	YES
Jun-03	7.44	99,500	13,381	4.67	28	6	7.222	0.9390	YES
Jul-03	7.47	94,487	12,656	5.29	37	7	6.659	0.8660	YES
Aug-03	7.07	89,290	12,624	5.71	40	7	4.665	0.7705	YES

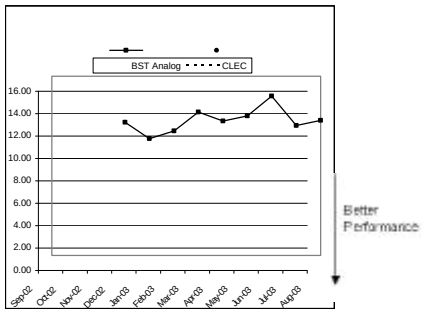
Note 1: Residence and Business - Dispatch data serves as the BST Analog for this report



B.2.1.11.2.1 2W Analog Loop w/LNP Design/>=10 circuits/Dispatch/TN (days)

	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	11.89	690	58				11.763		
Jan-03	10.43	605	58				12.306		
Feb-03	11.12	845	76				16.951		
Mar-03	12.81	871	68				14.634		
Apr-03	11.99	827	69				12.127		
May-03	12.45	909	73				13.883		
Jun-03	14.24	1,253	88				14.864		
Jul-03	11.61	824	71				9.006		
Aug-03	12.06	929	77				10.964		

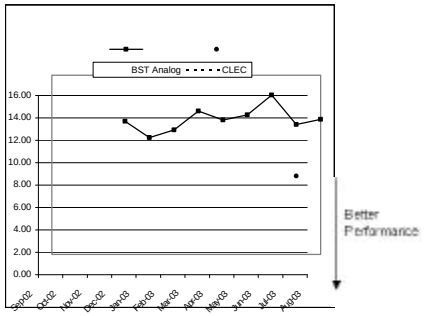
Note 1: Residence and Business - Dispatch data serves as the BST Analog for this report



B.2.1.11.2.2 2W Analog Loop w/LNP Design/>=10 circuits/Non-Dispatch/TN (days)

	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	11.89	690	58				11.763		
Jan-03	10.43	605	58				12.306		
Feb-03	11.12	845	76				16.951		
Mar-03	12.81	871	68				14.634		
Apr-03	11.99	827	69				12.127		
May-03	12.45	909	73				13.883		
Jun-03	14.24	1,253	88				14.864		
Jul-03	11.61	824	71	7.00	7	1	9.006	0.5079	YES
Aug-03	12.06	929	77				10.964		

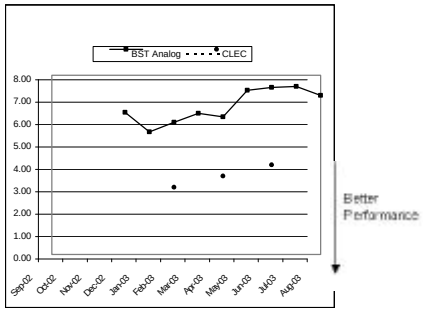
Note 1: Residence and Business - Dispatch data serves as the BST Analog for this report



Tennessee III, September 2002 - August 2003
Unbundled Network Elements - Provisioning
Order Completion Interval
(Interval Between Order Issuance and Completion)
Numerator indicates total of order completion intervals for this disaggregation in the reporting period.
Volume indicates total number of service orders completed for this disaggregation in the reporting period.

B.2.1.12.1.1 2W Analog Loop w/LNP Non-Design/<10 circuits/Dispatch/TN (days)

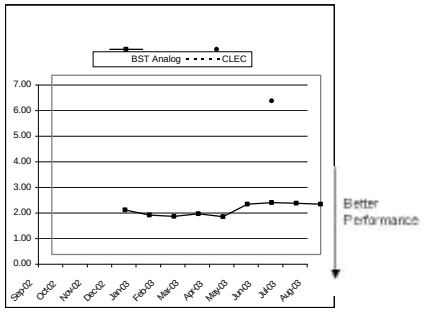
	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	6.34	81,366	12,837				6.291		
Jan-03	5.47	77,093	14,090				6.570		
Feb-03	5.90	73,446	12,444	3.00	6	2	9.172	0.4474	YES
Mar-03	6.30	84,724	13,450				7.559		
Apr-03	6.14	81,227	13,232	3.50	7	2	6.596	0.5657	YES
May-03	7.33	83,254	11,359				7.507		
Jun-03	7.45	98,615	13,233	4.00	4	1	7.228	0.4776	YES
Jul-03	7.50	93,721	12,496				6.684		
Aug-03	7.10	88,447	12,466				4.652		



Note 1: Retail Residence / Business (POTS) excluding Switch Based Orders data serves as the BST Analog for this report

B.2.1.12.1.4 2W Analog Loop w/LNP Non-Design/<10 circuits/Dispatch In/TN (days)

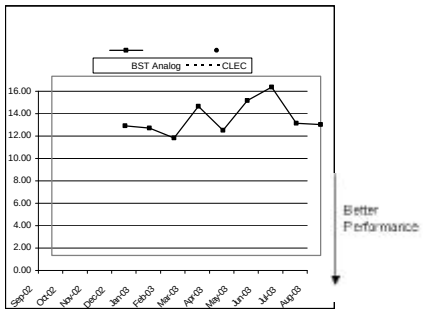
	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	1.73	213,041	122,872				2.115		
Jan-03	1.54	245,080	159,152				1.411		
Feb-03	1.49	182,689	122,934				1.819		
Mar-03	1.58	194,318	122,702				1.727		
Apr-03	1.47	207,980	141,491				1.651		
May-03	1.96	121,234	61,869				4.044		
Jun-03	2.03	123,634	60,986	6.00	6	1	3.891	-1.0211	YES
Jul-03	2.00	121,517	60,805				2.779		
Aug-03	1.96	125,572	64,111				2.753		



Note 1: Retail Residence / Business (POTS) excluding Switch Based Orders data serves as the BST Analog for this report

B.2.1.12.2.1 2W Analog Loop w/LNP Non-Design/>=10 circuits/Dispatch/TN (days)

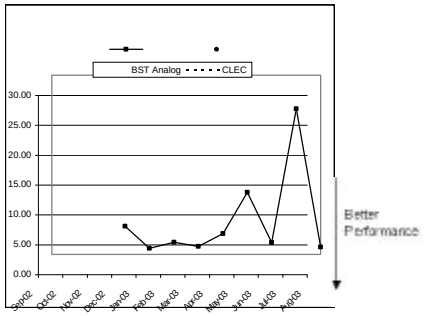
	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	11.58	544	47				12.074		
Jan-03	11.36	500	44				12.920		
Feb-03	10.49	693	66				17.297		
Mar-03	13.30	705	53				15.962		
Apr-03	11.18	615	55				11.751		
May-03	13.82	802	58				15.142		
Jun-03	15.03	1,097	73				16.082		
Jul-03	11.81	756	64				9.359		
Aug-03	11.68	829	71				10.465		



Note 1: Retail Residence / Business (POTS) excluding Switch Based Orders data serves as the BST Analog for this report

B.2.1.12.2.4 2W Analog Loop w/LNP Non-Design/>=10 circuits/Dispatch In/TN (days)

	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	4.73	52	11				0.905		
Jan-03	1.00	1	1				0.000		
Feb-03	2.03	61	30				0.183		
Mar-03	1.33	4	3				0.577		
Apr-03	3.50	21	6				3.728		
May-03	10.40	52	5				14.519		
Jun-03	2.00	2	1				0.000		
Jul-03	24.40	122	5				52.324		
Aug-03	1.25	5	4				0.500		



Note 1: Retail Residence / Business (POTS) excluding Switch Based Orders data serves as the BST Analog for this report

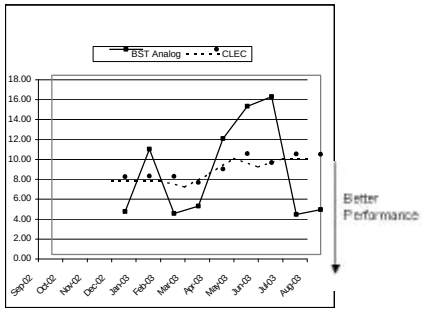
Tennessee III, September 2002 - August 2003
Unbundled Network Elements - Provisioning
Order Completion Interval

(Interval Between Order Issuance and Completion)

Numerator indicates total of order completion intervals for this disaggregation in the reporting period.
Volume indicates total number of service orders completed for this disaggregation in the reporting period.

B.2.1.17.1.1 Digital Loop < DS1/<10 circuits/Dispatch/TN (days)

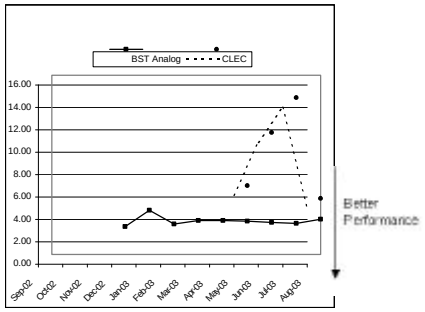
	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	4.32	9,386	2,172	7.80	640	82	10.862	-2.8506	NO
Jan-03	10.59	23,938	2,261	7.86	739	94	44.009	0.5884	YES
Feb-03	4.10	7,976	1,946	7.84	572	73	4.967	-6.3118	NO
Mar-03	4.84	10,246	2,117	7.22	643	89	5.714	-3.8568	NO
Apr-03	11.64	5,507	473	8.59	498	58	9.677	2.2698	YES
May-03	14.88	3,332	224	10.13	405	40	12.866	2.1515	YES
Jun-03	15.86	3,266	206	9.23	443	48	19.108	2.1639	YES
Jul-03	4.01	9,491	2,365	10.10	495	49	5.883	-7.1718	NO
Aug-03	4.51	15,397	3,413	10.07	423	42	4.965	-7.2130	NO



Note 1: Retail Digital Loop < DS1 data serves as the BST Analog for this report
Note 2: Effective July 2002: Based on system modifications there will be an expected increase in >=DS1 and expected decrease in < DS1

B.2.1.17.1.2 Digital Loop < DS1/<10 circuits/Non-Dispatch/TN (days)

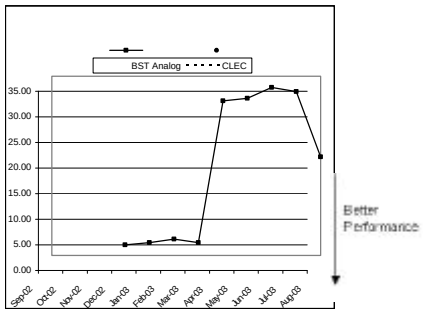
	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	2.48	8,823	3,559				2.449		
Jan-03	3.95	14,815	3,748				18.913		
Feb-03	2.73	9,056	3,321				2.979		
Mar-03	3.02	10,046	3,324				3.487		
Apr-03	3.03	2,294	758				5.658		
May-03	2.97	1,642	553	6.14	43	7	6.072	-1.3740	YES
Jun-03	2.85	1,649	579	10.88	87	8	6.609	-3.4117	NO
Jul-03	2.78	9,070	3,266	14.00	14	1	2.914	-3.8501	NO
Aug-03	3.16	13,977	4,429	5.00	5	1	2.970	-0.6208	YES



Note 1: Retail Digital Loop < DS1 data serves as the BST Analog for this report
Note 2: Effective July 2002: Based on system modifications there will be an expected increase in >=DS1 and expected decrease in < DS1

B.2.1.17.2.1 Digital Loop < DS1/>=10 circuits/Dispatch/TN (days)

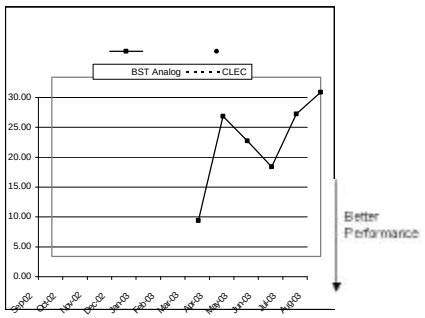
	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	2.08	8	4				1.258		
Jan-03	2.50	5	2				0.707		
Feb-03	3.17	19	6				1.941		
Mar-03	2.50	5	2				0.707		
Apr-03	30.20	1,631	54				14.931		
May-03	30.67	705	23				25.299		
Jun-03	32.83	1,182	36				25.116		
Jul-03	31.98	2,047	64				31.946		
Aug-03	19.22	346	18				7.945		



Note 1: Retail Digital Loop < DS1 data serves as the BST Analog for this report
Note 2: Effective July 2002: Based on system modifications there will be an expected increase in >=DS1 and expected decrease in < DS1

B.2.1.17.2.2 Digital Loop < DS1/>=10 circuits/Non-Dispatch/TN (days)

	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02									
Jan-03									
Feb-03									
Mar-03	6.00	6	1				0.000		
Apr-03	23.48	211	9				15.948		
May-03	19.33	116	6				12.291		
Jun-03	15.00	210	14				9.027		
Jul-03	23.81	214	9				12.459		
Aug-03	27.50	110	4				22.576		



Note 1: Retail Digital Loop < DS1 data serves as the BST Analog for this report
Note 2: Effective July 2002: Based on system modifications there will be an expected increase in >=DS1 and expected decrease in < DS1

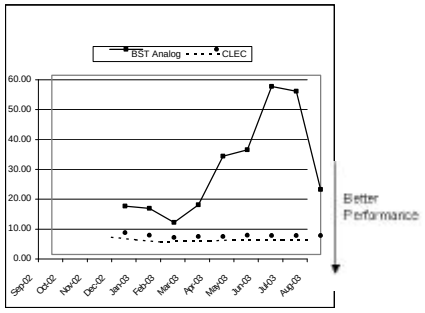
Tennessee III, September 2002 - August 2003
Unbundled Network Elements - Provisioning
Order Completion Interval

(Interval Between Order Issuance and Completion)

Numerator indicates total of order completion intervals for this disaggregation in the reporting period.
Volume indicates total number of service orders completed for this disaggregation in the reporting period.

B.2.1.18.1.1 Digital Loop >= DS1/<10 circuits/Dispatch/TN (days)

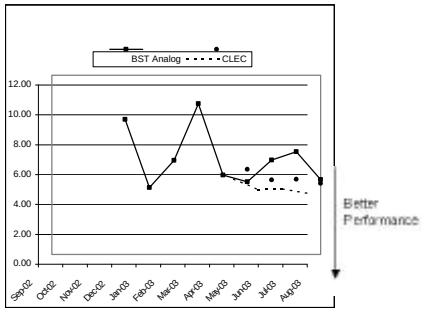
	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	16.14	6,731	417	7.27	858	118	29.144	2.9192	YES
Jan-03	15.40	5,451	354	6.38	976	153	25.051	3.7212	YES
Feb-03	10.73	3,531	329	5.72	1,052	184	16.887	3.2262	YES
Mar-03	16.56	4,306	260	6.05	847	140	38.974	2.5729	YES
Apr-03	32.88	9,404	286	5.95	738	124	63.080	3.9706	YES
May-03	35.06	7,223	206	6.44	689	107	53.680	4.4745	YES
Jun-03	56.28	16,997	302	6.30	668	106	67.425	6.5658	YES
Jul-03	54.66	16,725	306	6.35	718	113	56.669	7.7433	YES
Aug-03	21.76	2,611	120	6.36	782	123	23.872	5.0280	YES



Note 1: Retail Digital Loop >= DS1 data serves as the BST Analog for this report
Note 2: Effective July 2002: Based on system modifications there will be an expected increase in >=DS1 and expected decrease in < DS1

B.2.1.18.1.2 Digital Loop >= DS1/<10 circuits/Non-Dispatch/TN (days)

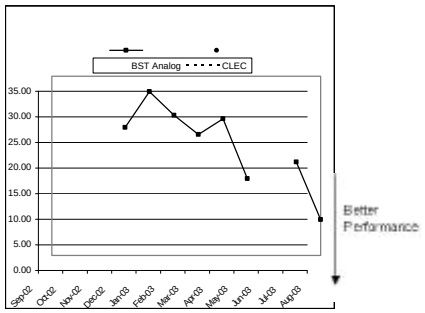
	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	9.03	1,210	134				14.493		
Jan-03	4.48	1,246	278				10.724		
Feb-03	6.31	1,551	246				11.610		
Mar-03	10.10	2,839	281				14.103		
Apr-03	5.31	1,843	347				6.803		
May-03	4.86	1,963	404	5.70	57	10	12.582	-0.2090	YES
Jun-03	6.31	1,913	303	5.00	10	2	20.758	0.0893	YES
Jul-03	6.88	3,165	460	5.03	55	11	11.235	0.5398	YES
Aug-03	5.01	2,018	403	4.76	33	7	5.469	0.1178	YES



Note 1: Retail Digital Loop >= DS1 data serves as the BST Analog for this report
Note 2: Effective July 2002: Based on system modifications there will be an expected increase in >=DS1 and expected decrease in < DS1

B.2.1.18.2.1 Digital Loop >= DS1/>=10 circuits/Dispatch/TN (days)

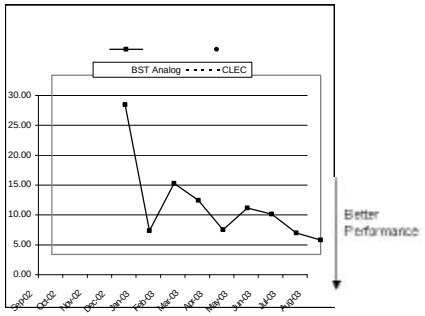
	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	25.00	750	30				25.449		
Jan-03	32.01	1,600	50				16.550		
Feb-03	27.40	1,260	46				14.395		
Mar-03	23.60	1,298	55				11.125		
Apr-03	26.67	53	2				37.241		
May-03	15.00	30	2				4.243		
Jun-03									
Jul-03	18.25	73	4				2.062		
Aug-03	7.00	7	1				0.000		



Note 1: Retail Digital Loop >= DS1 data serves as the BST Analog for this report
Note 2: Effective July 2002: Based on system modifications there will be an expected increase in >=DS1 and expected decrease in < DS1

B.2.1.18.2.2 Digital Loop >= DS1/>=10 circuits/Non-Dispatch/TN (days)

	BST Analog	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02									
Oct-02									
Nov-02									
Dec-02	25.07	376	15				47.087		
Jan-03	3.95	79	20				4.755		
Feb-03	11.89	333	28				17.294		
Mar-03	9.04	325	36				11.401		
Apr-03	4.13	120	29				3.720		
May-03	7.74	170	22				11.403		
Jun-03	6.75	216	32				9.064		
Jul-03	3.57	100	28				5.838		
Aug-03	2.39	91	38				3.087		



Note 1: Retail Digital Loop >= DS1 data serves as the BST Analog for this report
Note 2: Effective July 2002: Based on system modifications there will be an expected increase in >=DS1 and expected decrease in < DS1

BellSouth Telecommunications, Inc.

MCI/WorldCom's 1st Request for Production of Documents

Item No. 1

Attachment to Interrogatory Item No. 8

	Period	Sep-03	Aug-03	Jul-03	Jun-03	May-03	Apr-03	Mar-03	Feb-03	Jan-03	Dec-02	Nov-02	Oct-02	Sep-02	Aug-02	Jul-02	Jun-02	May-02	Apr-02	Mar-02	Feb-02	Jan-02	Dec-01	Nov-01	Oct-01	Sep-01	Aug-01	Jul-01
State	Clli	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov
TN	ACHLTNMT	15	75	28	63	22	21	10	21	9	10	16	9	10	34	19	7	4	1		3		0	0	0	0	13	0
TN	ARTNTNMT	29	41	33	31	40	38	15	16	26	26	33	29	34	46	24	8	12	12	22	15	8	15	23	7	18	25	16
TN	ASCYTNMA	43	34	78	68	59	69	43	50	38	45	14	16	22	42	15	10	18	12	19	20	42	20	12	8	6	12	14
TN	ATHNTNMA	139	80	142	85	80	75	45	153	85	79	57	91	72	162	86	19	44	41	98	42	5	3	12	25	21	43	25
TN	BGSNTNMA	15	21	20	7	4	4	8	2	2		2	2	10	7								0	0	0	0	0	0
TN	BLGPTNMA	39	33	54	39	28	35	38	52	26	30	41	32	43	63	17	6	27	4	2	1	1	3	1	1	1	0	2
TN	BLLSTNMA	13	10	16	6	10	1	2	1	2	5	2	1	5				2	7	1	6	5	1	4	1	0	0	0
TN	BLNCTNMT	5	7	3	3	5	3	3	5	1	3	2		2					2	1		1	0	1	2	2	0	0
TN	BLVRTNMA	29	44	59	30	44	29	40	45	16	37	34	7	17	10	13	4	11	9	15	75	28	20	16	35	13	41	28
TN	BNTNTNMT	36	35	42	66	40	38	30	52	33	47	41	42	32	83	27	20	17	14	30	26	2	1	2	2	7	5	1
TN	BTSPTNMA	17	13	15	3	12	19	9	2	2	4	1	2				3						0	1	0	0	0	0
TN	BWVLTNMA	104	71	99	29	19	74	14	21	26	22	14	70	125	16	2	6	8	1	11	11	5	0	0	11	23	11	23
TN	CHRLTNMT	11	16	29	29	29	19	12	28	24	33	10	5	4	16	3	9	2	8	2	1		6	5	3	34	2	0
TN	CHTGTN78								3	5	3		5										0	0	2			
TN	CHTGTNBR	350	371	451	355	281	314	346	276	270	322	334	331	278	481	329	262	251	252	233	231	277	272	253	222	230	292	240
TN	CHTGTNDT	286	230	300	281	227	263	252	219	233	238	218	288	220	388	187	149	162	103	125	143	119	137	88	161	116	218	170
TN	CHTGTNHT	58	50	58	63	64	70	46	62	37	42	51	40	38	82	30	11	32	8	14	11	2	9	4	1	7	14	7
TN	CHTGTNMV	104	87	100	128	86	119	56	94	45	91	89	69	62	143	66	24	58	32	30	20	39	34	34	37	46	43	27
TN	CHTGTNNS	121	144	169	160	138	121	134	111	139	163	133	163	157	195	213	129	120	109	132	115	123	114	104	147	122	223	98
TN	CHTGTNRB	180	178	195	200	139	224	135	133	133	144	124	144	95	243	131	73	163	108	129	93	103	56	87	84	189	141	101
TN	CHTGTNRO	149	162	135	133	122	59	65	48	73	46	62	53	49	124	113	57	65	92	52	65	41	75	53	48	61	126	69
TN	CHTGTNSE	66	83	105	101	53	77	45	69	50	41	68	44	47	105	42	33	24	14	16	43	15	25	21	27	28	30	21
TN	CHTGTNSM	50	40	39	48	49	63	34	51	40	35	47	39	37	55	31	12	31	22	15	7	22	15	7	10	15	23	4
TN	CHTNTNMT	22	36	47	49	41	32	25	37	28	36	28	32	30	40	17	23	2	3	30	6	2	21	1	5	1	4	2
TN	CLDGTNMA	69	22	47	12	18	58	20	12	14	9	12	11	21	6	11			2	9			0	0	0	0	0	0
TN	CLEVTNMA	452	389	529	437	425	373	395	375	294	417	347	426	291	545	285	231	234	154	237	244	231	120	133	199	161	179	82
TN	CLMATNMA	181	168	177	108	63	69	79	78	32	85	110	41	90	101	50	33	42	73	69	76	46	23	18	40	38	70	66
TN	CLTNTNMA	96	53	121	108	86	122	106	92	57	109	39	39	31	77	51	51	54	24	43	54	39	44	47	25	30	50	4
TN	CLVLTNMA	608	539	617	602	521	594	555	521	462	487	563	520	476	649	280	172	318	171	127	79	52	61	55	64	112	61	59
TN	CMCYTNMT	2	4	3	3			4	1		1	1			2					3	1	2	0	0	0	0	0	0
TN	CMDNTNMA	39	44	91	35	23	41	44	23	43	18	64	15	52	22	21	8	10	16	3	4		2	4	2	0	0	3
TN	CNHMTNMA	4	23	17	22	12	22	20	19	19	14	17	12	19	46	5	6	5	1			1	0	0	0	0	0	1
TN	CNVLTNMA	46	37	31	27	21	34	14	30	14	20	11	22	24	41	5	12	11	4	5	5	5	0	0	2	2	1	6
TN	CRHLTNCB	17	16	13	9	6	11	9	7	4	19	3	6	48	16	4	1	3	10	11	15	3	10	2	1	0	7	0
TN	CRPLTNMA	20	10	24	41	26	28	20	24	16	14	35	17	30	38	8	4	7	1	1	1		0	0	3	0	3	2
TN	CRTHTNMA	28	13	19	12	9	28	24	8	18	19	5	8	1		1				3			2	0	1	0	1	5
TN	CRVLTNMA	220	177	165	201	159	189	143	154	117	113	155	152	129	199	78	62	92	23	32	42	28	40	40	61	55	101	83
TN	CULKTNMA	3	1	6	3	4	2	1	5	1	1				1	1				1			0	0	0	0	0	0
TN	CVTNTNMT	133	107	120	134	70	121	92	101	70	116	91	95	92	176	75	19	71	60	88	28	17	41	24	50	9	18	7
TN	DCTRTNMT	34	40	61	49	37	53	50	40	46	38	33	69	90	106	42	2	12	12	7	10	34	4	3	2	0	3	7
TN	DKSNTNMT	103	117	136	113	118	114	107	99	101	93	89	131	76	174	91	58	32	23	21	29	48	26	38	51	62	13	31
TN	DNRGTNMA	60	64	88	107	75	63	94	100	79	77	15	52	27	38	11	16	35	4	13	15	3	8	10	9	10	5	3
TN	DOVRTNMT	42	63	38	24	8	16	14	19	14	12	11	3	19	5	1	13	7		2	6	16	0	3	0	0	0	0
TN	DYBGTNMA	174	175	172	89	72	55	40	68	104	181	83	135	101	48	50	32	90	60	72	21	20	8	17	25	23	7	7
TN	DYERTNMT	18	10	21	14	12	4	6	3	5	6	2	2	12	5	1			4	4	4	1	3	0	0	13	11	0
TN	DYTNTNMA	62	68	140	99	96	94	89	96	80	122	64	55	34	80	43	19	14	63	30	34	22	44	26	36	3	34	14
TN	EAVLTNMA	9	6	14	15	15	17	8	6	14	12	10	10	12	25	4	1	5		1	1		0	0	0	5	2	0
TN	ETWHTNMT	45	22	49	35	39	35	33	17	15	17	11	13	6	10	13	14		4	9	20	5	3	6	0	2	5	0
TN	FIVLTNMA	19	14	17	21	21	25	8	28	7	9	18	158	21	24	16	6	8	3	3	1		5	6	10	8	3	8
TN	FKLNTNCC	64	30	64	37	37	46	69	59	25	31	31	20	34	45	49	24	32	28	12	54	35	20	22	48	65	20	11
TN	FKLNTNMA	285	251	303	311	250	383	254	240	207	242	302	258	214	370	136	139	167	206	96	104	79	54	53	59	52	79	25
TN	FLVLTNMA	5	8	16	6	6	1	5	7	4	8	6	1			3		1		5		1	3	0	0	0	0	0
TN	FRDNTNMA	16	15	25	21	19	19	19	15	14	14	19	17	19	22	10	4	10	2	3	2	3	0	1	0	0	0	0
TN	FRVWTNMT	25	23	31	27	17	46	40	41	32	29	33	36	31	49	16	11	27	13	19	19	5	10	1	12	6	7	8
TN	FYVLTNMA	138	72	113	44	39	40	22	17	37	42	20	50	29	30	40	20	34	41	140	42	161	52	1	1	6	4	7
TN	GALLTNMA	143	159	193	182	141	175	144	142	135	131	129	161	101	180	83	40	81	74	51	53	52	13	30	35	53	36	32
TN	GBSNTNMT	3	4	5	7	7	5	9	3	2	1	5							2			4		0	0	1	0	0
TN	GDJTTNMA	20	8	11	8	1	7	8	8	2	4	2	2	2	3	4				1	2	18	10	0	0	0	2	0
TN	GDVLTNMA	114	116	126	131	96	129	99	80	81	93	121	116	99	108	86	72	70	51	32	45	57	45	51	45	50	96	57
TN	GLSNTNMA	17	17	18	2	5	8	5	10	3	2	10		4		3	4	1	1			1	4	2	0	0	1	0
TN	GNBRTNMA	35	33	35	34	21	35	35	24	30	20	43	28	42	55	15	10	17	14	6	17		7	2	2	7	30	1
TN	GNFDTNMT	8	15	18	6	12	9	10	17	7	8	1	2	12	12			1	6				4	0	0	0	8	0
TN	GRNBTNMA	11	40	37	41	36	37	12	36	31	18	36	37	30	39	23	8	20	2	8	11	8	1	8	2	8	0	1
TN	GTBGTNMT	64	36	54	49	79	83	108	64	51	35	34	57	51	64	66	39	19	93	43	62	41	68	49	43	33	42	38
TN	GTWSTNSW	4	11	10	10	7	8	5	6	1	9	7	9	8	13	4	1	3	1		1		0	0	0	0	0	0
TN	HDVLTNMA	187	170	233	180	208	260	162	140	141	125	202	155	123	262	77	86	128	46	61	71	74	48	56	96	92	59	58
TN	HHNWTNMA	47	47	73	29	32	35	27	21	18	14	10	7	4	57	30	33	22	5	13	11		0	0	0	2	1	2
TN	HIMNTNMA	47	44	101	85	84	66	101	89	66	58	26	49	18	59	70	45	36	40	58	21	22	19	32	26	25	18	19
TN	HLLSTNMT	21	36	29	5	6	6	3	3	8	2	2	13	40	75	27	3	5	3				0	5	0	0	1	0
TN	HMBLTNMA	91	50	103	22	39	57	31	29	36	20	31	23	16	2	13	12	14	26	24	2	25	9	0	6	1	0	4
TN	HMPSTNMA	8	1	8	1	1	1	1			1	1		2											0	0	0	0
TN	HNLDTNMA	2	6	7	2	1	3	4	1	5		8		7						2								

	Period	Sep-03	Aug-03	Jul-03	Jun-03	May-03	Apr-03	Mar-03	Feb-03	Jan-03	Dec-02	Nov-02	Oct-02	Sep-02	Aug-02	Jul-02	Jun-02	May-02	Apr-02	Mar-02	Feb-02	Jan-02	Dec-01	Nov-01	Oct-01	Sep-01	Aug-01	Jul-01
State	Clli	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov
TN	HNNGTNMA	14	17	20	5	1	7		1	2	2	8	3	2		1		3					1	0	0	0	0	0
TN	HNSNTNMT	113	38	44	36	31	45	46	66	61	42	29	24	21	10	7	4	3	14	2	3	6	4	1	5	1	0	1
TN	HNTGTNMA	35	41	78	27	36	26	52	52	32	29	4	24	9	23	10		9	13		7		1	2	8	0	7	0
TN	HRFRTNMA	15	27	19	3	2	6	8	3	1	2	2	1	2	6	3	9	11		1	2	3	0	0	0	0	0	5
TN	HRNBTNMT	16	16	13	14	3	5	3	1	4	3	10	2	2		1	2	2	1				1	0	0	0	0	5
TN	HTVLTNMA	16	17	23	15	8	17	15	10	18	8	2	6	9	1	1	3			9	1			0	0	0	1	1
TN	JCSNTNMA	316	320	389	514	293	354	313	254	182	286	281	256	310	396	143	74	184	132	60	109	90	52	51	99	120	116	77
TN	JCSNTNNS	225	222	267	284	202	234	211	156	147	189	184	171	187	317	118	78	132	139	57	69	95	143	65	116	79	171	156
TN	JFCYTNMA	75	84	106	98	108	98	76	84	41	66	72	85	48	124	43	30	41	20	21	20	8	2	16	1	43	37	25
TN	JLLCTNMA	39	57	67	75	46	73	74	44	43	40	23	39	30	77	24	8	13	6		9		0	5	4	1	0	2
TN	JSPRTNMT	22	22	49	44	27	51	54	38	39	27	23	13	9	21	23	11	13	17	5	22	12	36	12	26	16	13	8
TN	KGTNTNMT	69	82	77	72	65	73	95	89	67	85	76	89	58	157	72	78	37	26	36	31	35	6	33	13	12	19	9
TN	KNTNTNMA	5	3	13	9	3	2	5	1	1	2	2	3	6					2	3	3	4	4	7	0	0	0	0
TN	KNVLTNBE	154	112	154	115	102	171	112	129	82	92	128	146	105	110	126	179	123	97	71	126	72	78	118	119	103	139	50
TN	KNVLTNFC	263	234	180	239	168	240	184	179	159	170	201	245	162	276	144	91	140	78	74	133	59	44	39	48	112	127	61
TN	KNVLTNII	9														1		12		2	8	2	1	1		0		
TN	KNVLTNMA	456	437	489	389	334	414	395	330	266	348	306	399	294	503	277	129	163	139	170	187	155	175	162	225	205	189	79
TN	KNVLTNWH	320	309	334	339	283	442	294	251	226	296	303	286	250	416	274	227	243	165	120	167	114	129	129	184	147	191	78
TN	KNVLTNYH	212	170	226	187	182	219	209	159	117	160	146	193	131	184	82	68	76	63	57	59	66	42	86	90	113	64	20
TN	LBNNTNMA	195	161	225	239	159	248	165	168	140	141	224	156	126	227	135	79	93	119	71	80	69	27	55	118	83	100	59
TN	LFLTTNMA	226	176	198	255	144	207	81	102	68	73	52	44	51	85	67	51	37	22	29	14	21	0	1	11	14	8	10
TN	LKCYTNMA	35	41	44	49	48	44	31	32	27	33	13	24	17	29	9	2	2	2	6	22	7	10	2	0	0	4	6
TN	LNCYTNMA	91	89	91	122	103	110	91	121	79	74	92	86	80	158	40	64	56	27	50	58	20	19	41	29	49	34	35
TN	LODNTNMA	93	75	67	98	61	71	85	84	61	37	66	52	59	112	70	51	39	43	30	47	10	10	29	34	33	31	29
TN	LRBGTNMA	93	98	74	46	23	25	18	19	15	54	16	20	44	33	22	20	20	117	127	105	55	18	10	17	25	23	24
TN	LWBGTNMA	97	36	61	43	26	32	22	19	16	31	59	15	14	36	53	28	36	65	35	25	12	80	8	0	11	8	14
TN	LXTNTNMA	114	102	186	49	80	70	81	63	40	15	30	73	46	38	51	35	10	18	7	5	1	3	1	16	15	6	0
TN	LYBGTNMT	16	8	7	4	1	4	4	5	2	5	4	3		2	11	1	3		5	5		0	0	0	0	0	0
TN	LYLSTNMA	41	48	61	31	17	13	8	15	7	17	15	5	2	3	4	15	3	2	2	3	1	4	0	2	0	0	0
TN	LYVLTNMA	7	5	11	1			1	6	1	1	2		2			3			1		5	0	3	0	2	2	0
TN	MAVLTNMA	433	355	421	414	303	380	341	344	274	342	368	347	332	480	246	147	155	107	141	196	121	97	130	143	181	144	74
TN	MCKNTNMA	32	49	60	32	25	37	26	38	36	20	10	17	29	8	7	4	1	5	1	11	7	5	6	0	7	11	0
TN	MCWNTNMT	8	14	30	7	2	6	2	8	3	7	4	1	8			2		4		1		0	0	0	2	0	0
TN	MDTNTNMA	12	13	12	9	9	7	3	6	6	1	3	2	12	1	6	6	2		1	3		15	0	8	8	2	1
TN	MDVITNMT	64	30	28	19	7	12	42	9	6	26	10	7	33	35	37	35	32	41	165	19	6	1	0	6	1	2	4
TN	MEDNTNMA	5	5	13	8	5	4	14	6	4	12	5		3	1	1	9	1		7	3		5	1	0	0	0	0
TN	MILNTNMA	67	49	89	48	48	54	58	41	27	39	15	13	23	8	4	23	9	10		1	14	16	1	0	11	3	41
TN	MMPHTNBA	707	602	632	623	546	657	566	537	465	571	513	533	434	699	310	176	226	213	131	90	95	77	126	165	205	243	99
TN	MMPHTNCK	178	144	140	160	150	150	133	112	115	148	109	111	99	167	56	35	47	18	18	15	9	3	5	13	40	18	8
TN	MMPHTNCT	398	327	388	374	302	302	284	282	278	308	307	239	264	422	142	91	104	124	68	81	32	11	59	62	46	44	54
TN	MMPHTNEL	328	202	199	252	222	272	180	175	175	188	277	210	196	340	148	85	120	80	60	64	27	20	59	99	56	67	46
TN	MMPHTNFR	248	308	348	275	238	301	215	192	210	243	199	174	145	291	118	76	103	29	29	22	15	3	11	37	11	30	23
TN	MMPHTNGT	526	443	467	493	424	544	419	403	316	387	379	390	298	592	411	175	192	106	97	105	63	57	103	88	65	101	58
TN	MMPHTNHP	6	9	9	3	5	9	9	8	3	1	1	4	3	5	1	4	5		2			0	5		0	0	0
TN	MMPHTNMA	141	158	183	153	170	230	136	131	141	208	124	153	109	173	114	47	68	48	29	44	10	16	110	16	74	82	33
TN	MMPHTNMT	236	208	236	198	182	225	218	192	178	215	195	202	131	301	125	63	100	46	34	29	21	18	43	16	39	56	20
TN	MMPHTNOA	650	528	580	546	491	528	490	474	440	552	483	482	389	474	272	278	223	152	134	125	141	85	209	180	202	197	85
TN	MMPHTNSL	403	387	339	333	280	430	312	387	280	348	248	296	226	344	178	137	144	113	119	113	114	89	108	85	110	83	104
TN	MMPHTNST	250	194	225	199	173	200	186	124	181	239	164	214	139	310	100	65	52	38	28	51	29	30	51	36	38	26	37
TN	MMPHTNWW	189	152	160	158	121	176	135	124	123	132	123	97	118	168	60	40	44	16	9	16	2	8	23	0	4	5	10
TN	MMPJTNAG	22	3		8	3	4	10	16	6	2		5		3	3	3	4	15	1			5	6	0	2	0	0
TN	MMPJTNJU	7													3	1			10				0	0	4			
TN	MNCHTNMA	44	105	86	35	24	27	22	28	58	64	55	24	114	70	71	51	19	40	15	15	5	1	2	3	5	4	5
TN	MNPLTNMA	28	29	33	18	16	15	20	9	3	15	10	5	1	8	47	4	5	7	14	24	1	3	0	0	7	1	0
TN	MRBOTNMA	494	454	504	554	429	609	758	515	322	414	443	441	340	668	252	149	223	113	110	80	89	65	84	95	78	92	94
TN	MRTWTNMA	290	162	343	165	87	70	92	68	92	123	59	67	53	124	100	80	95	78	53	65	9	10	35	55	86	60	40
TN	MSCTTNMT	117	123	97	126	103	148	129	74	65	64	79	103	63	130	54	38	35	6	14	15	12	3	2	22	19	19	24
TN	MSCWTNMA	2	7	18	8	9	9	10	12	11	8	18	14	11	17	9	1	4	4	1	1	1	0	0	0	27	2	5
TN	MYVLTNMA	53	68	56	63	70	78	73	91	44	65	83	68	91	90	47	70	29	18	17	12	1	2	5	6	15	5	9
TN	NRRSTNMA	29	32	40	28	22	36	29	18	16	24	35	23	34	47	8	18	13	7		12	7	2	8	0	1	0	6
TN	NSVLTN90		8	2			4		13			5							5		6		17	0	3	6	0	7
TN	NSVLTNAA	1	3	1	13	3							3							32			5	0	0	0	6	0
TN	NSVLTNAP	244	198	225	242	178	228	178	160	161	209	179	193	158	211	111	50	119	36	57	45	60	60	31	68	47	45	15
TN	NSVLTNBH	8	16	20	16	9	17	14	12	13	5	15	9	14	31	6		9				1	1	4	0	1	0	1
TN	NSVLTNBV	111	121	97	106	93	165	94	79	74	97	99	91	86	172	50	38	42	23	15	17	25	17	37	23	22	21	12
TN	NSVLTNBW	175	160	179	166	146	194	142	116	89	123	111	112	104	178	89	94	90	61	38	53	37	71	49	28	56	47	18
TN	NSVLTNCD	10		4	1		3	1	6	7		3	6	10	2		3	1	13	5		7	0	3	0	0	12	0
TN	NSVLTNCH	369	306	369	404	319	441	334	289	262	235	285	331	252	424	150	74	107	55	60	54	68	41	58	48	87	71	52
TN	NSVLTNDO	301	258	233	238	205	309	189	204	169	192	202	208	138	277	149	91	140	70	54	52	86	60	60	138	129	115	64
TN	NSVLTNHH	53	60	67	85	63	75	44	38	50	55	47	69	44	84	32	30	38	16	13	27	4	9	15	32	31	7	23
TN	NSVLTNIN	304	235	279	275	234	283	216	186	172	199	206	183	174	269	109	61	102	18	48	36	62	41	27	49	35	65	27
TN	NSVLTNMC	180	184	184	163	159	228	152	121	107	99	145	173	168	207	83	39	81	38	51	50	61	33	50	38	68	81	27

	Period	Sep-03	Aug-03	Jul-03	Jun-03	May-03	Apr-03	Mar-03	Feb-03	Jan-03	Dec-02	Nov-02	Oct-02	Sep-02	Aug-02	Jul-02	Jun-02	May-02	Apr-02	Mar-02	Feb-02	Jan-02	Dec-01	Nov-01	Oct-01	Sep-01	Aug-01	Jul-01
State	Clli	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov	Prov
TN	NSVLTNMT	271	254	224	240	190	255	187	200	178	206	193	213	135	253	136	95	132	98	91	115	171	103	125	116	109	175	46
TN	NSVLTNST	233	233	211	255	205	288	186	173	153	203	227	193	159	377	121	79	119	47	87	68	58	89	39	93	65	98	47
TN	NSVLTNUN	124	96	89	74	68	77	83	76	81	100	69	63	59	104	49	49	50	65	66	95	31	49	34	57	72	87	56
TN	NSVLTNWC	70	51	68	75	66	83	50	48	29	55	64	75	41	105	30	14	12	28	12	21	3	11	8	12	5	22	9
TN	NSVLTNWM	153	114	123	141	115	140	99	101	87	106	114	113	85	172	73	69	60	15	16	42	15	45	44	39	46	60	36
TN	NWBRTNMA	16	17	26	5	11	2	6	5	20	15	13		9	3	4	9	22	13	1	1	4	0					0
TN	NWPTTNMT	172	87	97	72	45	43	47	48	42	37	7	7	9	45	32	14	38	103	18	3	16	0	4	0	6	0	0
TN	OKRGTNMT	150	122	170	133	105	175	128	102	108	151	109	140	106	147	104	74	89	100	91	149	99	0	0	1	16	5	2
TN	OLHCTNMA	37	27	31	57	34	51	37	33	32	37	61	41	33	62	24	9	16	16	22	7	18	51	98	90	49	38	19
TN	OLSPTNMA	66	34	59	53	43	47	36	55	38	30	46	37	32	74	40	12	25	14	11	12	1	7	17	33	18	6	8
TN	PARSTNMA	165	143	145	53	49	42	50	42	30	35	66	123	54	59	57	95	24	26	21	37		29	7	2	14	4	10
TN	PLMYTNMA	1	3	6	12	3	6	1	3	4	4	7	9	2	9		1	4	1				3	30	10	10	1	11
TN	PLSKTNMA	71	65	86	48	43	59	39	32	10	34	61	13	4	13	32	43	48	110	66	49	15	1	13		0	0	1
TN	PSVWTNMT	26	17	50	49	37	38	24	30	28	22	38	41	42	72	25	6	16	8	3	4	8	7	14	27	13	15	40
TN	PTBGTNMA	4	9	8	1	2	4	4	4	1	6	4		1					9	5	1		4	3	28	2	3	6
TN	PTLDTNMA	75	79	86	83	78	94	59	60	52	59	82	84	80	100	23	13	37	22	47	6	7	1	0	0	0	0	0
TN	RDGLTNMA	18	20	13	7	10	3	5			1		8	2		1	2		8		1		1	1	17	40	29	11
TN	RKWDTNMA	43	55	53	59	42	60	64	46	54	43	39	28	29	48	56	14	11	36	34	23	10	0	0	0	0	0	0
TN	RPLYTNMA	117	101	123	41	28	28	9	25	9	14	29	41	39	41	34	35	25	3	11	10	4	9	17	15	1	9	2
TN	RRVLTNMA	38	39	56	17	29	18	26	13	19	30	15	3	10	20	12	23	2	12	10	2	10	2	3	4	18	1	2
TN	SANGTNMT	30	34	37	34	50	60	26	20	33	54	41	31	32	64	12	15	17	7	2		4	3	2	47	18	1	1
TN	SDDSTNMA	57	56	41	73	56	77	46	49	37	57	43	39	54	107	38	28	34	8	18	11	16	4	13	6	4	11	4
TN	SEWNTNMW	1	2	4	2		1	1	2			1				1		1		3			28	8	26	10	6	10
TN	SHVLTNMA	91	122	120	47	75	66	41	44	22	44	38	41	34	17	8	21	30	41	10	13	10	3	2	8	4	12	67
TN	SLMRTNMT	34	31	43	10	60	48	28	36	35	94	9	9	32	7	3	12	9	11	4	4		0	0	18	4	7	0
TN	SMTWTNMA	11	14	8	1	3	8	6	1			5	2	1	1	7	1		1	2	6		1	0	0	0	0	1
TN	SMYRTNMA	145	158	161	194	132	167	126	142	102	124	145	125	141	210	77	46	73	30	32	24	25	37	7	27	14	41	34
TN	SNTFTNMA	3	4	5	1		2	1		2				1	1							1	0	0	0	0	0	0
TN	SNVLTNMA	18	15	8	5	5	3	8	3	4	3	1	1		33				7	8	2		1	0	0	0	0	0
TN	SOHNMSDC	23	25	44	27	28	27	10	35	46	21	32	80	4	56	25	8	18	33	19	11	19	6	14	27	50	22	16
TN	SOVLTNMT	83	60	70	85	88	86	79	80	58	62	81	91	111	95	52	41	57	22	13	20	23	8	21	11	15	30	43
TN	SPBGTNMA	32	35	44	43	31	51	63	32	36	34	32	29	23	30	14	7	11	7	4	11	8	24	27	22	11	22	6
TN	SPCYTNMT	33	36	36	46	38	32	29	56	42	48	39	36	40	55	23	16	13	20	6	9	2	2	4	4	2	0	3
TN	SPFDTNMA	119	99	133	111	88	129	75	74	71	160	101	123	105	151	48	32	39	20	27	51	16	18	15	37	14	46	41
TN	SPHLTNMT	41	41	49	17	26	13	12	15	7	14	26	4	1	11	5	16	3		11	2	2	21	9	0	1	1	3
TN	SRVLTNMA	5	10	8	7	2	6		4		3	1			5	1	4			3	4	1	0		0	0	0	0
TN	SVNHTNMT	78	61	55	38	24	68	111	64	45	36	26	38	21	44	34	34	23	45	45	1		0	9	14	4	0	0
TN	SVVLTNMT	307	273	347	364	293	322	321	314	255	219	249	216	233	251	176	87	143	130	183	273	172	103	168	95	152	148	76
TN	SWTWTNMT	70	75	99	37	27	26	38	30	18	45	19	77	17	20	41	11	24	17	63	55	8	3	6	6	2	8	1
TN	TLLHTNMA	78	80	131	45	62	58	37	50	59	61	46	23	18	52	9	7	21	34	26	4	5	0	3	12	11	14	15
TN	TPVLTNMA	43	28	29	5	10	16	4	4	6	7	2			1	4	4	22	32				0	0	0	1	0	1
TN	TRINTNMA	7	4	8	5	7	12	4	6	5	7	5	10	10	7	2	2	6	5	2		1	0	0	0	0	1	3
TN	TROYTNMT	35	25	12	14	11	13	32	3	11	10	5		14	3	7	17	13	18	11	6		0	3	0	0	0	2
TN	TRTNTNMA	39	40	49	55	50	65	23	40	32	17	28	6	21	11	8	4	6	6	3	4	3	1	17	0	7	9	11
TN	TWNSTNMA	12	9	24	45	18	23	2	17	6	10	10	24	5	15	21	8		2	5	9		12	4	0	2	1	0
TN	UNCYTNMA	186	131	139	90	85	69	87	54	80	88	25	36	69	33	53	32	109	96	137	66	5	16	7	1	2	1	16
TN	VNLRTNMA	7	12	5	14	14	6	6	11	8	11	13	11	9	20	8		9	1	2			2	0	0	0	0	0
TN	WHBLTNMT	19	23	31	44	46	36	30	36	41	46	13	20	14	25	18	4	24	22	5	11	7	3	15	8	2	2	7
TN	WHHSTNMA	57	49	50	53	35	56	55	42	29	35	48	66	65	79	26	19	31	13	13	44	11	5	14	20	10	21	10
TN	WHPITNMA	18	55	46	31	39	41	27	34	43	40	17	28	6	17	42	5	11	1	5	5	2	4	0	0	45	0	5
TN	WHVLTNMT	30	23	23	15	9	4	8	4	5	6	2	2		2	10			2	1		4	1	3	0	12	5	0
TN	WHWLTNMA	16	23	26	30	30	43	18	28	33	37	29	35	19	50	8	5	11	14	15	9	12	6	6	3	1	4	2
TN	WLPTTNMA	13	4	4		1	5	4	3		1	2	1	1		1							0	0	0	0	0	0
TN	WNCHTNMA	71	88	72	48	30	35	22	24	25	28	45	50	47	28	22	12	15	8	27	5	5	4	0	2	12	11	6
TN	WRTRTNMT	5	13	11	29	3	7	5	3		4	7	2		1	1			2	1	3		1	3	0	0	0	0
TN	WTTWTNMA	11	15	20	16	8	24	2	5	9	9	10	13	14	17	5	7	6	3	1	19	12	1	1	9	15	7	0
TN	WVRLTNMT	14	27	17	11	21	34	55	17	9	51	12	20	31	4	3	2	7	3	1		2	6	0	0	1	0	0
TN	Total	20,517	18,357	21,248	19,124	15,811	19,414	16,146	15,136	13,020	15,400	14,730	15,151	13,023	20,619	10,452	7,071	8,595	6,725	6,387	6,342	5,009	4,266	4,715	5,473	5,790	6,285	4,069

BellSouth Telecommunications, Inc.

MCI/WorldCom's 1st Request for Production of Documents

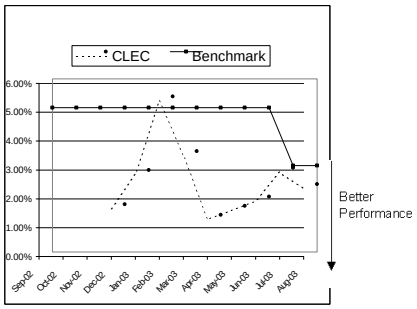
Item No. 1

Attachment to Interrogatory Item No. 9

Tennessee III, September 2002 - August 2003
Unbundled Network Elements - Provisioning
% Provisioning Troubles within 7 Days - Hot Cuts
(% of Trouble Reports Received within 7 Days of Hot Cut Service Order Completion)
Numerator indicates total number of hot cut circuits with a trouble report within 7 days following service order completion.
Volume indicates total number of cut counts for this disaggregation in the previous reporting period.

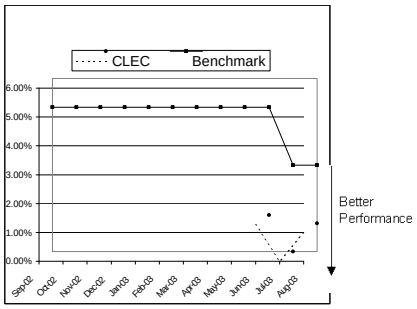
B.2.23.1.1 UNE Loop Design/Dispatch/TN (%)

	Benchmark	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02	5.00%								
Oct-02	5.00%								
Nov-02	5.00%								
Dec-02	5.00%			1.65%	2	121			YES
Jan-03	5.00%			2.84%	6	211			YES
Feb-03	5.00%			5.39%	11	204			NO
Mar-03	5.00%			3.50%	5	143			YES
Apr-03	5.00%			1.29%	3	233			YES
May-03	5.00%			1.59%	5	314			YES
Jun-03	5.00%			1.92%	3	156			YES
Jul-03	3.00%			2.92%	4	137			YES
Aug-03	3.00%			2.35%	2	85			YES



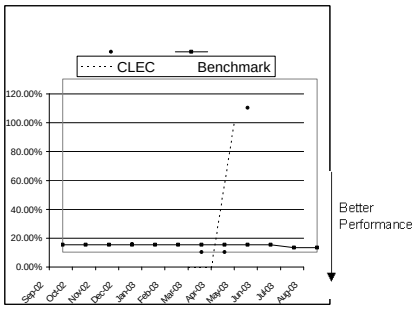
B.2.23.1.2 UNE Loop Design/Non-Dispatch/TN (%)

	Benchmark	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02	5.00%								
Oct-02	5.00%								
Nov-02	5.00%								
Dec-02	5.00%								
Jan-03	5.00%								
Feb-03	5.00%								
Mar-03	5.00%								
Apr-03	5.00%								
May-03	5.00%								
Jun-03	5.00%			1.27%	2	158			YES
Jul-03	3.00%			0.00%	0	63			YES
Aug-03	3.00%			0.98%	1	102			YES



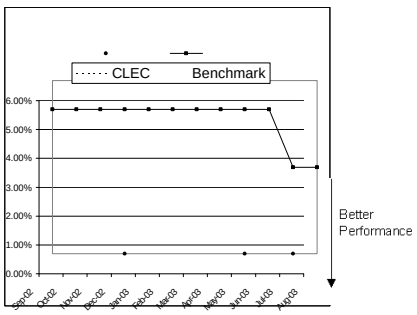
B.2.23.2.1 UNE Loop Non-Design/Dispatch/TN (%)

	Benchmark	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02	5.00%								
Oct-02	5.00%								
Nov-02	5.00%								
Dec-02	5.00%			5.56%	1	18			NO
Jan-03	5.00%								
Feb-03	5.00%								
Mar-03	5.00%			0.00%	0	1			YES
Apr-03	5.00%			0.00%	0	1			YES
May-03	5.00%			100.00%	1	1			NO
Jun-03	5.00%								
Jul-03	3.00%								
Aug-03	3.00%								



B.2.23.2.2 UNE Loop Non-Design/Non-Dispatch/TN (%)

	Benchmark	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02	5.00%								
Oct-02	5.00%								
Nov-02	5.00%								
Dec-02	5.00%			0.00%	0	1			YES
Jan-03	5.00%								
Feb-03	5.00%								
Mar-03	5.00%								
Apr-03	5.00%								
May-03	5.00%			0.00%	0	1			YES
Jun-03	5.00%								
Jul-03	3.00%			0.00%	0	1			YES
Aug-03	3.00%								



BellSouth Telecommunications, Inc.

MCI/WorldCom's 1st Request for Production of Documents

Item No. 1

Attachment to Interrogatory Item No. 10

Tennessee III, September 2002 - August 2003
Unbundled Network Elements - Provisioning
Coordinated Customers Conversions

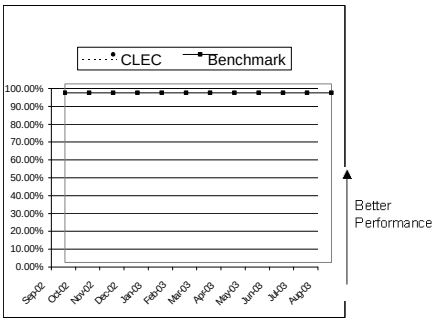
(% of Coordinated Time Intervals Worked to Cutover Loops (BST-CLEC) within 15 min)

Numerator indicates total number of coordinated loop cutovers performed within 15 min for this disaggregation in the reporting period.

Volume indicates the number of items cut for this disaggregation in the reporting period.

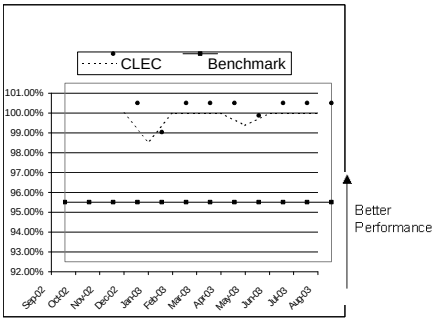
B.2.15.1 Loops with INP/TN (%)

	Benchmark	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02	95.00%								
Oct-02	95.00%								
Nov-02	95.00%								
Dec-02	95.00%								
Jan-03	95.00%								
Feb-03	95.00%								
Mar-03	95.00%								
Apr-03	95.00%								
May-03	95.00%								
Jun-03	95.00%								
Jul-03	95.00%								
Aug-03	95.00%								



B.2.15.2 Loops with LNP/TN (%)

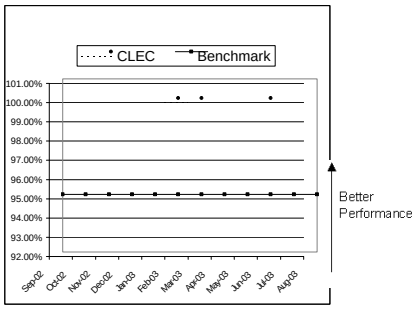
	Benchmark	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02	95.00%								
Oct-02	95.00%								
Nov-02	95.00%								
Dec-02	95.00%			100.00%	211	211			YES
Jan-03	95.00%			98.53%	201	204			YES
Feb-03	95.00%			100.00%	144	144			YES
Mar-03	95.00%			100.00%	234	234			YES
Apr-03	95.00%			100.00%	314	314			YES
May-03	95.00%			99.36%	312	314			YES
Jun-03	95.00%			100.00%	201	201			YES
Jul-03	95.00%			100.00%	187	187			YES
Aug-03	95.00%			100.00%	195	195			YES



Tennessee III, September 2002 - August 2003
Unbundled Network Elements - Provisioning
Hot Cut Timeliness
(% of Hot Cuts Performed within 15 Minutes of Scheduled Cut)
Numerator indicates total number of hot cuts performed within 15 minutes of scheduled cut in the reporting period.
Volume indicates total number of hot cut service orders completed for this disaggregation in the reporting period.

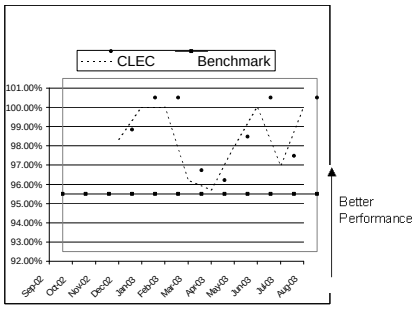
B.2.17.1 Time-Specific SL1/TN (%)

	Benchmark	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02	95.00%								
Oct-02	95.00%								
Nov-02	95.00%								
Dec-02	95.00%								
Jan-03	95.00%								
Feb-03	95.00%			100.00%	1	1			YES
Mar-03	95.00%			100.00%	1	1			YES
Apr-03	95.00%								
May-03	95.00%								
Jun-03	95.00%			100.00%	1	1			YES
Jul-03	95.00%								
Aug-03	95.00%								



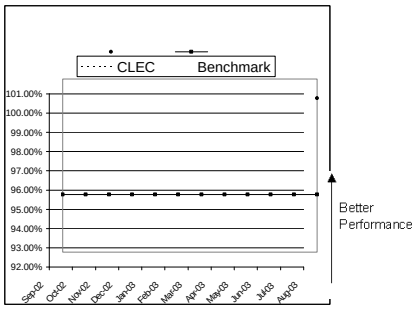
B.2.17.2 Time-Specific SL2/TN (%)

	Benchmark	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02	95.00%								
Oct-02	95.00%								
Nov-02	95.00%								
Dec-02	95.00%			98.33%	59	60			YES
Jan-03	95.00%			100.00%	56	56			YES
Feb-03	95.00%			100.00%	36	36			YES
Mar-03	95.00%			96.23%	51	53			YES
Apr-03	95.00%			95.71%	67	70			YES
May-03	95.00%			97.98%	97	99			YES
Jun-03	95.00%			100.00%	45	45			YES
Jul-03	95.00%			96.97%	32	33			YES
Aug-03	95.00%			100.00%	54	54			YES



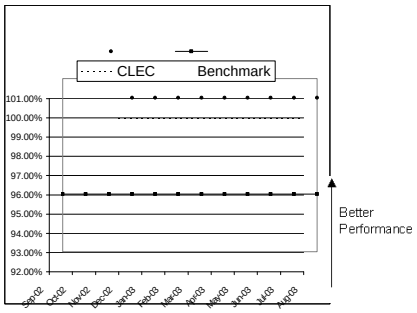
B.2.17.3 Non-Time Specific SL1/TN (%)

	Benchmark	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02	95.00%								
Oct-02	95.00%								
Nov-02	95.00%								
Dec-02	95.00%								
Jan-03	95.00%								
Feb-03	95.00%								
Mar-03	95.00%								
Apr-03	95.00%								
May-03	95.00%								
Jun-03	95.00%								
Jul-03	95.00%								
Aug-03	95.00%			100.00%	1	1			YES



B.2.17.4 Non-Time Specific SL2/TN (%)

	Benchmark	Numerator	Volume	CLEC	Numerator	Volume	StDev	ZScore	Equity
Sep-02	95.00%								
Oct-02	95.00%								
Nov-02	95.00%								
Dec-02	95.00%			100.00%	13	13			YES
Jan-03	95.00%			100.00%	14	14			YES
Feb-03	95.00%			100.00%	6	6			YES
Mar-03	95.00%			100.00%	16	16			YES
Apr-03	95.00%			100.00%	25	25			YES
May-03	95.00%			100.00%	20	20			YES
Jun-03	95.00%			100.00%	9	9			YES
Jul-03	95.00%			100.00%	16	16			YES
Aug-03	95.00%			100.00%	20	20			YES



BellSouth Telecommunications, Inc.

MCI/WorldCom's 1st Request for Production of Documents

Item No. 1

Attachment to Interrogatory Item No. 16

Percent Hot Cuts Completed with Service Disruptions <= 5 Minutes

State	Wire Center	Portability Identity	Apr-02 0 - 5 Minutes	May-02 0 - 5 Minutes	Jun-02 0 - 5 Minutes	Jul-02 0 - 5 Minutes	Aug-02 0 - 5 Minutes	Sep-02 0 - 5 Minutes	Oct-02 0 - 5 Minutes	Nov-02 0 - 5 Minutes	Dec-02 0 - 5 Minutes
AL	All	Local Number Portability (LNP) - Loop	98.39%	100.00%	81.48%	100.00%	100.00%	60.00%		100.00%	100.00%
AL	BRHMALCH	Local Number Portability (LNP) - Loop					100.00%				
AL	BRHMALMT	Local Number Portability (LNP) - Loop	100.00%								100.00%
AL	BRHMALOX	Local Number Portability (LNP) - Loop	100.00%								
AL	BRHMALRC	Local Number Portability (LNP) - Loop	100.00%								
AL	DCTRALMT	Local Number Portability (LNP) - Loop				100.00%					
AL	HNVIALPW	Local Number Portability (LNP) - Loop									
AL	HNVIALUN	Local Number Portability (LNP) - Loop								100.00%	
AL	MTGMALDA	Local Number Portability (LNP) - Loop	87.50%		100.00%						
AL	MTGMALMT	Local Number Portability (LNP) - Loop	100.00%		100.00%						
AL	MTGMALNO	Local Number Portability (LNP) - Loop			73.68%						
FL	All	Local Number Portability (LNP) - Loop	91.52%	92.25%	91.79%	93.35%	89.38%	92.67%	89.59%	92.66%	89.57%
FL	BCRTFLBT	Local Number Portability (LNP) - Loop	98.96%	100.00%	81.58%	100.00%	93.48%	100.00%	93.59%	100.00%	81.82%
FL	BCRTFLMA	Local Number Portability (LNP) - Loop	93.05%	96.84%	68.18%	91.57%	89.55%	93.68%	93.62%	94.62%	83.61%
FL	BCRTFLSA	Local Number Portability (LNP) - Loop	96.77%	87.67%	92.86%	82.76%	92.31%	95.83%	100.00%	81.82%	96.55%
FL	BYBHFLMA	Local Number Portability (LNP) - Loop	99.32%	93.90%	100.00%	100.00%	100.00%	71.43%	96.67%	97.44%	91.07%
FL	CCBHFLMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	95.83%	100.00%	100.00%		100.00%	84.62%	100.00%
FL	COCOFLMA	Local Number Portability (LNP) - Loop	96.43%	100.00%	100.00%	100.00%		100.00%	100.00%	100.00%	100.00%
FL	COCOFLME	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
FL	DELDFLMA	Local Number Portability (LNP) - Loop	78.57%	95.24%	87.88%	100.00%	100.00%			100.00%	100.00%
FL	DLBHFLKP	Local Number Portability (LNP) - Loop	70.00%	87.50%	100.00%	80.00%	31.43%	91.43%	57.89%	96.15%	66.67%
FL	DLBHFLMA	Local Number Portability (LNP) - Loop	75.00%	95.77%	95.45%	100.00%	96.97%	100.00%	96.77%	90.91%	66.67%
FL	DRBHFLMA	Local Number Portability (LNP) - Loop	73.21%	71.43%	57.89%	96.67%	93.33%	76.47%	84.44%	90.00%	77.78%
FL	DYBHFLMA	Local Number Portability (LNP) - Loop	93.15%	100.00%	85.71%	100.00%	100.00%		25.00%	100.00%	100.00%
FL	DYBHFLOB	Local Number Portability (LNP) - Loop	92.86%	100.00%	100.00%				100.00%	100.00%	100.00%
FL	DYBHFLPO	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%		100.00%		100.00%
FL	EGLLFLBG	Local Number Portability (LNP) - Loop	100.00%		100.00%			100.00%		100.00%	
FL	FTLDFLCR	Local Number Portability (LNP) - Loop	87.69%	90.57%	100.00%	100.00%	100.00%	75.00%	100.00%	94.44%	100.00%
FL	FTLDFLCY	Local Number Portability (LNP) - Loop	100.00%	90.29%	100.00%	87.23%	76.09%	100.00%	97.56%	88.89%	100.00%
FL	FTLDFLJA	Local Number Portability (LNP) - Loop	72.09%	87.67%	94.44%	97.44%	78.05%	71.43%	92.16%	93.33%	72.73%
FL	FTLDFLMR	Local Number Portability (LNP) - Loop	87.88%	89.38%	98.47%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
FL	FTLDFLOA	Local Number Portability (LNP) - Loop	77.36%	94.83%	100.00%	50.00%	100.00%	55.26%	86.89%	98.70%	95.00%
FL	FTLDFLPL	Local Number Portability (LNP) - Loop	88.64%	90.59%	100.00%	98.28%	69.23%	96.30%	100.00%	100.00%	93.55%
FL	FTLDFLSU	Local Number Portability (LNP) - Loop	80.81%	92.31%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
FL	FTLDFLWN	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	75.00%	100.00%	100.00%	100.00%	95.65%	66.67%
FL	FTPRFLMA	Local Number Portability (LNP) - Loop	92.31%	100.00%	50.00%	100.00%	100.00%	100.00%	100.00%	100.00%	95.00%
FL	HLWDFLHA	Local Number Portability (LNP) - Loop	100.00%	93.75%	100.00%	100.00%	100.00%	100.00%	95.24%	100.00%	76.92%
FL	HLWDFLMA	Local Number Portability (LNP) - Loop	99.11%	89.41%	96.67%	100.00%	100.00%	95.24%	100.00%	95.92%	89.36%
FL	HLWDFLPE	Local Number Portability (LNP) - Loop	94.00%	87.30%	81.25%	100.00%	91.18%	95.83%	77.50%	94.92%	96.43%
FL	HLWDFLWH	Local Number Portability (LNP) - Loop	88.80%	88.82%	86.52%	95.77%	77.78%	100.00%	92.73%	92.96%	94.00%
FL	HMSTFLHM	Local Number Portability (LNP) - Loop	100.00%	89.47%	100.00%	100.00%					
FL	JCBHFLMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	93.33%	100.00%		88.89%		
FL	JCVLFLAR	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%		100.00%	100.00%	100.00%	100.00%
FL	JCVLFLBW	Local Number Portability (LNP) - Loop	95.92%	97.22%	100.00%	100.00%	77.78%	100.00%	78.57%	100.00%	91.67%
FL	JCVLFLCL	Local Number Portability (LNP) - Loop	93.14%	96.74%	83.82%	100.00%	96.30%	100.00%	92.11%	100.00%	100.00%
FL	JCVLFLFC	Local Number Portability (LNP) - Loop	100.00%	66.67%	75.00%	100.00%	100.00%		100.00%	100.00%	100.00%
FL	JCVLFLJT	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%		100.00%	100.00%	100.00%	85.71%	100.00%
FL	JCVLFLLF	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%			60.00%	94.44%	94.12%
FL	JCVLFLNO	Local Number Portability (LNP) - Loop	81.25%	96.36%	100.00%	100.00%	92.86%	100.00%	100.00%	100.00%	100.00%

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Percent Hot Cuts Completed with Service Disruptions <= 5 Minutes

State	Wire Center	Portability Identity	Jan-03 0 - 5 Minutes	Feb-03 0 - 5 Minutes	Mar-03 0 - 5 Minutes	Apr-03 0 - 5 Minutes	May-03 0 - 5 Minutes	Jun-03 0 - 5 Minutes	Jul-03 0 - 5 Minutes	Aug-03 0 - 5 Minutes	Sep-03 0 - 5 Minutes
AL	All	Local Number Portability (LNP) - Loop	78.95%	100.00%		100.00%	100.00%	100.00%	88.89%		
AL	BRHMALCH	Local Number Portability (LNP) - Loop				100.00%					
AL	BRHMALMT	Local Number Portability (LNP) - Loop									
AL	BRHMALOX	Local Number Portability (LNP) - Loop				100.00%					
AL	BRHMALRC	Local Number Portability (LNP) - Loop	100.00%						88.89%		
AL	DCTRALMT	Local Number Portability (LNP) - Loop									
AL	HNVIALPW	Local Number Portability (LNP) - Loop	100.00%								
AL	HNVIALUN	Local Number Portability (LNP) - Loop		100.00%		100.00%					
AL	MTGMALDA	Local Number Portability (LNP) - Loop	100.00%					100.00%			
AL	MTGMALMT	Local Number Portability (LNP) - Loop									
AL	MTGMALNO	Local Number Portability (LNP) - Loop	100.00%				100.00%				
FL	All	Local Number Portability (LNP) - Loop	93.60%	90.72%	91.45%	91.93%	89.30%	91.55%	91.96%	92.42%	89.31%
FL	BCRTFLBT	Local Number Portability (LNP) - Loop	88.24%	75.00%	100.00%	100.00%	100.00%	61.54%	100.00%	90.48%	100.00%
FL	BCRTFLMA	Local Number Portability (LNP) - Loop	91.43%	69.39%	96.61%	90.63%	90.48%	91.49%	89.47%	85.71%	67.27%
FL	BCRTFLSA	Local Number Portability (LNP) - Loop	92.86%	100.00%	100.00%	92.31%	100.00%	100.00%	58.33%	100.00%	92.86%
FL	BYBHFLMA	Local Number Portability (LNP) - Loop	97.44%	84.62%	96.55%	96.00%	90.00%	93.02%	97.22%	94.44%	97.78%
FL	CCBHFLMA	Local Number Portability (LNP) - Loop			100.00%		100.00%		100.00%		100.00%
FL	COCOFLMA	Local Number Portability (LNP) - Loop		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	42.86%
FL	COCOFLME	Local Number Portability (LNP) - Loop		100.00%	100.00%		100.00%	100.00%	100.00%	100.00%	100.00%
FL	DELDFLMA	Local Number Portability (LNP) - Loop	63.64%	87.50%	100.00%	100.00%	100.00%	100.00%	90.91%	100.00%	100.00%
FL	DLBHFLKP	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	75.41%	97.37%	100.00%	100.00%	75.00%
FL	DLBHFLMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	90.91%	94.29%	92.00%	100.00%	92.31%	92.31%	81.25%
FL	DRBHFLMA	Local Number Portability (LNP) - Loop	68.75%	80.00%	72.22%	84.62%	83.87%	92.00%	91.49%	90.00%	95.00%
FL	DYBHFLMA	Local Number Portability (LNP) - Loop	100.00%		100.00%		50.00%	100.00%	100.00%	100.00%	80.00%
FL	DYBHFLOB	Local Number Portability (LNP) - Loop	100.00%		50.00%		100.00%	100.00%			100.00%
FL	DYBHFLPO	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%		100.00%	100.00%	100.00%	100.00%	
FL	EGLLFLBG	Local Number Portability (LNP) - Loop									
FL	FTLDFLCR	Local Number Portability (LNP) - Loop	87.50%	89.29%	85.29%	100.00%	89.29%	100.00%	88.89%	71.43%	94.12%
FL	FTLDFLCY	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	50.00%	100.00%	95.83%	97.50%
FL	FTLDFLJA	Local Number Portability (LNP) - Loop	95.65%	100.00%	83.93%	97.50%	95.65%	100.00%	100.00%	100.00%	100.00%
FL	FTLDFLMR	Local Number Portability (LNP) - Loop	90.91%	86.67%	100.00%	84.62%	100.00%	89.29%	90.00%	84.38%	97.22%
FL	FTLDFLOA	Local Number Portability (LNP) - Loop	100.00%	94.74%	75.00%	86.96%	83.33%	100.00%	100.00%	100.00%	95.24%
FL	FTLDFLPL	Local Number Portability (LNP) - Loop	100.00%	88.24%	100.00%	92.86%	96.15%	92.86%	100.00%	100.00%	95.45%
FL	FTLDFLSU	Local Number Portability (LNP) - Loop	94.44%	83.33%	91.67%	100.00%	95.24%	100.00%	95.00%	80.00%	100.00%
FL	FTLDFLWN	Local Number Portability (LNP) - Loop	86.21%	100.00%	100.00%	100.00%	72.00%	100.00%	83.33%	81.82%	100.00%
FL	FTPRFLMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	86.05%	100.00%		100.00%	100.00%	100.00%	100.00%
FL	HLWDFLHA	Local Number Portability (LNP) - Loop	81.82%	76.92%	88.89%	81.82%	66.67%	78.26%	100.00%	85.71%	66.67%
FL	HLWDFLMA	Local Number Portability (LNP) - Loop	100.00%	96.77%	100.00%	100.00%	93.33%	100.00%	100.00%	100.00%	80.00%
FL	HLWDFLPE	Local Number Portability (LNP) - Loop	90.91%	100.00%	92.11%	70.73%	82.76%	100.00%	95.24%	87.93%	89.19%
FL	HLWDFLWH	Local Number Portability (LNP) - Loop	89.47%	91.43%	83.33%	92.31%	90.00%	54.29%	88.89%	92.50%	90.00%
FL	HMSTFLHM	Local Number Portability (LNP) - Loop									
FL	JCBHFLMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	93.33%	100.00%	100.00%	100.00%	100.00%
FL	JCVLFLAR	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	92.86%
FL	JCVLFLBW	Local Number Portability (LNP) - Loop	95.83%	91.67%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
FL	JCVLFLCL	Local Number Portability (LNP) - Loop	100.00%	87.50%	77.78%	100.00%	100.00%	100.00%	89.29%	100.00%	95.00%
FL	JCVLFLFC	Local Number Portability (LNP) - Loop		85.71%	100.00%		100.00%	100.00%		66.67%	100.00%
FL	JCVLFLJT	Local Number Portability (LNP) - Loop	100.00%							100.00%	
FL	JCVLFLLF	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%				100.00%	100.00%
FL	JCVLFLNO	Local Number Portability (LNP) - Loop	100.00%		100.00%		100.00%	100.00%	70.00%	100.00%	100.00%

Percent Hot Cuts Completed with Service Disruptions <= 5 Minutes

State	Wire Center	Portability Identity	Apr-02 0 - 5 Minutes	May-02 0 - 5 Minutes	Jun-02 0 - 5 Minutes	Jul-02 0 - 5 Minutes	Aug-02 0 - 5 Minutes	Sep-02 0 - 5 Minutes	Oct-02 0 - 5 Minutes	Nov-02 0 - 5 Minutes	Dec-02 0 - 5 Minutes
FL	JCVLFLOW	Local Number Portability (LNP) - Loop		100.00%	100.00%	100.00%			100.00%	96.77%	100.00%
FL	JCVLFLRV	Local Number Portability (LNP) - Loop	80.22%	93.65%	85.00%	100.00%			67.74%	100.00%	100.00%
FL	JCVLFLSJ	Local Number Portability (LNP) - Loop	97.65%	91.89%	97.87%	100.00%	94.12%	100.00%	100.00%	92.00%	97.37%
FL	JCVLFLSM	Local Number Portability (LNP) - Loop	95.35%	95.31%	94.44%	86.21%	100.00%	80.95%	82.69%	100.00%	66.67%
FL	JCVLFLWC	Local Number Portability (LNP) - Loop	60.87%	84.38%	100.00%	100.00%	100.00%	100.00%	93.75%	100.00%	100.00%
FL	JPTRFLMA	Local Number Portability (LNP) - Loop	100.00%	94.00%	100.00%	100.00%	77.78%	92.42%	88.10%	100.00%	100.00%
FL	LKMRFLMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
FL	MIAMFLAE	Local Number Portability (LNP) - Loop	71.05%	84.34%	87.76%	100.00%	82.22%	76.92%	39.18%	96.67%	59.52%
FL	MIAMFLAL	Local Number Portability (LNP) - Loop	85.00%	100.00%	100.00%	100.00%	100.00%	87.50%	100.00%	66.67%	
FL	MIAMFLBA	Local Number Portability (LNP) - Loop	95.92%	100.00%	71.43%	100.00%	100.00%	100.00%	97.37%	100.00%	100.00%
FL	MIAMFLBC	Local Number Portability (LNP) - Loop	92.31%	100.00%	100.00%	100.00%	87.50%	100.00%	83.33%	100.00%	57.14%
FL	MIAMFLBR	Local Number Portability (LNP) - Loop	72.88%	92.00%	71.59%	80.77%	60.00%	88.24%	100.00%	75.00%	82.76%
FL	MIAMFLCA	Local Number Portability (LNP) - Loop	92.73%	100.00%	91.67%	100.00%	100.00%	100.00%	82.95%	94.59%	100.00%
FL	MIAMFLFL	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	36.36%	65.52%	100.00%	100.00%	100.00%	100.00%
FL	MIAMFLGR	Local Number Portability (LNP) - Loop	92.31%	74.39%	84.48%	87.18%	98.72%		65.00%	28.57%	93.75%
FL	MIAMFLHL	Local Number Portability (LNP) - Loop	94.80%	88.15%	94.38%	84.48%	88.46%	92.86%	75.34%	81.58%	89.47%
FL	MIAMFLIC	Local Number Portability (LNP) - Loop	91.30%	85.71%	100.00%	80.00%	100.00%	100.00%	100.00%	100.00%	100.00%
FL	MIAMFLNM	Local Number Portability (LNP) - Loop	100.00%	97.37%	90.38%	100.00%	100.00%	100.00%	100.00%	88.89%	87.50%
FL	MIAMFLNS	Local Number Portability (LNP) - Loop	100.00%	100.00%	88.89%	100.00%	100.00%	85.71%	100.00%	100.00%	100.00%
FL	MIAMFLOL	Local Number Portability (LNP) - Loop	93.75%	84.62%	45.45%	61.11%	100.00%	100.00%	100.00%	85.00%	100.00%
FL	MIAMFLPB	Local Number Portability (LNP) - Loop	97.12%	100.00%	100.00%	90.91%	84.62%	86.67%	100.00%	90.63%	95.35%
FL	MIAMFLPL	Local Number Portability (LNP) - Loop	97.27%	97.79%	96.69%	86.92%	88.14%	100.00%	89.02%	96.09%	80.37%
FL	MIAMFLRR	Local Number Portability (LNP) - Loop	100.00%	98.28%	100.00%	89.29%	91.67%	100.00%	73.53%	100.00%	100.00%
FL	MIAMFLSH	Local Number Portability (LNP) - Loop	100.00%	80.95%	90.91%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
FL	MIAMFLSO	Local Number Portability (LNP) - Loop	84.91%	92.65%	94.59%	79.55%	84.00%	83.33%	95.83%	73.17%	81.48%
FL	MIAMFLWD	Local Number Portability (LNP) - Loop	100.00%	73.33%	100.00%	100.00%	100.00%	100.00%	84.85%	100.00%	100.00%
FL	MIAMFLWM	Local Number Portability (LNP) - Loop	98.84%	90.91%	100.00%	96.43%	85.71%	93.88%	89.47%	98.25%	93.33%
FL	MLBRFLMA	Local Number Portability (LNP) - Loop	96.47%	100.00%	30.00%	100.00%	100.00%	82.35%	100.00%	100.00%	100.00%
FL	MNDRFLAV	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%				85.71%	100.00%	
FL	MNDRFLLO	Local Number Portability (LNP) - Loop	98.75%	98.11%	100.00%	100.00%	100.00%	100.00%	100.00%	95.45%	100.00%
FL	NDADFLAC	Local Number Portability (LNP) - Loop	90.28%	93.42%	96.97%	97.96%	100.00%	100.00%	100.00%	90.32%	100.00%
FL	NDADFLBR	Local Number Portability (LNP) - Loop	100.00%	95.83%	100.00%	100.00%	100.00%	92.31%	100.00%	20.00%	42.86%
FL	NDADFLGG	Local Number Portability (LNP) - Loop	89.47%	100.00%	97.30%	100.00%	100.00%	100.00%	100.00%	100.00%	91.94%
FL	NDADFLOL	Local Number Portability (LNP) - Loop	85.00%	69.57%	84.62%	85.94%	95.65%	81.48%	100.00%	57.14%	61.29%
FL	ORLDFLAP	Local Number Portability (LNP) - Loop	94.29%	98.81%	100.00%	97.92%	100.00%	95.00%	100.00%	71.43%	97.22%
FL	ORLDFLCL	Local Number Portability (LNP) - Loop	94.44%	98.54%	100.00%	100.00%	100.00%	100.00%		75.00%	100.00%
FL	ORLDFLMA	Local Number Portability (LNP) - Loop	90.59%	80.41%	100.00%	98.86%	98.61%	100.00%	96.30%	96.97%	100.00%
FL	ORLDFLPC	Local Number Portability (LNP) - Loop	72.63%	82.44%	86.49%	100.00%	100.00%	100.00%	65.52%	100.00%	77.19%
FL	ORLDFLPH	Local Number Portability (LNP) - Loop	100.00%	96.46%	100.00%	100.00%	100.00%	100.00%	100.00%	39.47%	100.00%
FL	ORLDFLSA	Local Number Portability (LNP) - Loop	95.65%	95.71%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
FL	ORPKFLMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	75.00%	100.00%	100.00%
FL	OVIDFLCA	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
FL	PMBHFLCS	Local Number Portability (LNP) - Loop	98.92%	100.00%	98.28%	100.00%	100.00%	95.24%	100.00%	95.08%	100.00%
FL	PMBHFLFE	Local Number Portability (LNP) - Loop	83.33%	89.58%	100.00%	100.00%	85.00%	96.43%	80.56%	97.22%	93.18%
FL	PMBHFLMA	Local Number Portability (LNP) - Loop	98.51%	91.27%	89.47%	69.35%	65.52%	61.76%	88.89%	85.71%	45.33%
FL	PMBHFLTA	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
FL	PNSCFLBL	Local Number Portability (LNP) - Loop	96.30%	100.00%	100.00%						
FL	PNSCFLFP	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%					
FL	PNSCFLWA	Local Number Portability (LNP) - Loop	100.00%								
FL	PRRNFLMA	Local Number Portability (LNP) - Loop	84.62%	95.70%	94.44%	73.91%	75.56%	70.83%	100.00%	100.00%	100.00%
FL	SNFRFLMA	Local Number Portability (LNP) - Loop	100.00%	98.59%	100.00%	100.00%	100.00%	100.00%	83.33%	100.00%	100.00%
FL	STAGFLMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	86.11%	100.00%	100.00%	97.50%	100.00%	100.00%

Percent Hot Cuts Completed with Service Disruptions <= 5 Minutes

State	Wire Center	Portability Identity	Jan-03 0 - 5 Minutes	Feb-03 0 - 5 Minutes	Mar-03 0 - 5 Minutes	Apr-03 0 - 5 Minutes	May-03 0 - 5 Minutes	Jun-03 0 - 5 Minutes	Jul-03 0 - 5 Minutes	Aug-03 0 - 5 Minutes	Sep-03 0 - 5 Minutes
FL	JCVLFLOW	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%		100.00%	66.67%		100.00%	100.00%
FL	JCVLFLRV	Local Number Portability (LNP) - Loop	100.00%	100.00%	71.43%	100.00%	100.00%		57.14%	88.89%	66.67%
FL	JCVLFLSJ	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	75.00%	100.00%	100.00%	100.00%	100.00%
FL	JCVLFLSM	Local Number Portability (LNP) - Loop	95.83%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
FL	JCVLFLWC	Local Number Portability (LNP) - Loop	100.00%	100.00%	87.50%	50.00%	50.00%	100.00%	100.00%	100.00%	100.00%
FL	JPTRFLMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	69.70%	98.72%	100.00%	100.00%
FL	LKMRFLMA	Local Number Portability (LNP) - Loop	100.00%				61.76%	100.00%	96.67%	100.00%	100.00%
FL	MIAMFLAE	Local Number Portability (LNP) - Loop	79.17%	72.73%	70.00%		42.86%		75.00%	50.00%	100.00%
FL	MIAMFLAL	Local Number Portability (LNP) - Loop		100.00%	100.00%	100.00%	100.00%				100.00%
FL	MIAMFLBA	Local Number Portability (LNP) - Loop	100.00%		100.00%	100.00%	100.00%	100.00%	100.00%	25.00%	100.00%
FL	MIAMFLBC	Local Number Portability (LNP) - Loop			100.00%		100.00%	100.00%	100.00%	100.00%	100.00%
FL	MIAMFLBR	Local Number Portability (LNP) - Loop	52.00%		85.71%	83.33%	78.57%	100.00%	100.00%	66.67%	100.00%
FL	MIAMFLCA	Local Number Portability (LNP) - Loop	100.00%	95.24%	80.00%	100.00%	91.67%	85.71%	84.62%	100.00%	26.83%
FL	MIAMFLFL	Local Number Portability (LNP) - Loop	100.00%	100.00%	69.23%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
FL	MIAMFLGR	Local Number Portability (LNP) - Loop	95.24%	87.50%	18.18%	86.67%	20.00%	89.47%	71.43%		81.82%
FL	MIAMFLHL	Local Number Portability (LNP) - Loop	94.83%	83.72%	93.18%	88.24%	79.17%	78.95%	48.15%	90.91%	87.50%
FL	MIAMFLIC	Local Number Portability (LNP) - Loop	100.00%	100.00%		100.00%	100.00%		100.00%	100.00%	100.00%
FL	MIAMFLNM	Local Number Portability (LNP) - Loop	100.00%		100.00%	100.00%	100.00%	75.00%	75.00%		100.00%
FL	MIAMFLNS	Local Number Portability (LNP) - Loop	100.00%	100.00%	50.00%	100.00%	100.00%	100.00%	75.00%	100.00%	100.00%
FL	MIAMFLOL	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%		100.00%		100.00%	100.00%
FL	MIAMFLPB	Local Number Portability (LNP) - Loop	100.00%	100.00%	61.54%	100.00%	93.75%	100.00%	100.00%	100.00%	100.00%
FL	MIAMFLPL	Local Number Portability (LNP) - Loop	89.83%	92.23%	67.74%	100.00%	95.00%	86.67%	86.67%	91.11%	68.25%
FL	MIAMFLRR	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	87.50%	100.00%	100.00%	85.71%
FL	MIAMFLSH	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
FL	MIAMFLSO	Local Number Portability (LNP) - Loop	64.00%	65.52%	100.00%	100.00%	82.35%	80.00%	81.82%	93.33%	100.00%
FL	MIAMFLWD	Local Number Portability (LNP) - Loop	100.00%	76.47%	62.50%		77.78%	100.00%	100.00%	100.00%	100.00%
FL	MIAMFLWM	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
FL	MLBRFLMA	Local Number Portability (LNP) - Loop		100.00%	100.00%	90.00%	63.64%	92.86%	100.00%	80.00%	76.47%
FL	MNDRFLAV	Local Number Portability (LNP) - Loop					100.00%			100.00%	100.00%
FL	MNDRFLLO	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	92.31%	100.00%		77.78%
FL	NDADFLAC	Local Number Portability (LNP) - Loop	100.00%	86.21%	93.33%	100.00%	100.00%	94.12%	100.00%	100.00%	73.33%
FL	NDADFLBR	Local Number Portability (LNP) - Loop	100.00%	100.00%	86.67%	100.00%	83.33%	50.00%	100.00%	100.00%	100.00%
FL	NDADFLGG	Local Number Portability (LNP) - Loop	100.00%	100.00%	73.68%	63.64%	94.74%	60.00%	100.00%	100.00%	
FL	NDADFLOL	Local Number Portability (LNP) - Loop	89.29%	100.00%	77.78%	80.00%	40.63%	100.00%		62.50%	80.00%
FL	ORLDFLAP	Local Number Portability (LNP) - Loop	75.00%	71.43%	72.41%	100.00%	93.33%	94.59%	100.00%	100.00%	96.00%
FL	ORLDFLCL	Local Number Portability (LNP) - Loop	100.00%	88.89%	100.00%	93.33%	100.00%	100.00%	90.00%	88.89%	96.67%
FL	ORLDFLMA	Local Number Portability (LNP) - Loop	100.00%	82.35%	65.52%	80.00%	95.24%	100.00%	66.10%	100.00%	100.00%
FL	ORLDFLPC	Local Number Portability (LNP) - Loop	100.00%	81.08%	100.00%	100.00%	100.00%	88.89%	100.00%	70.83%	100.00%
FL	ORLDFLPH	Local Number Portability (LNP) - Loop	100.00%	96.55%	100.00%	98.59%	87.04%	100.00%	100.00%	98.21%	100.00%
FL	ORLDFLSA	Local Number Portability (LNP) - Loop	100.00%	95.24%	100.00%	100.00%	81.03%	100.00%	100.00%	100.00%	93.33%
FL	ORPKFLMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%		100.00%	100.00%	100.00%	100.00%	87.50%
FL	OVIDFLCA	Local Number Portability (LNP) - Loop		100.00%	100.00%	66.67%	100.00%	100.00%	100.00%	83.33%	100.00%
FL	PMBHFLCS	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	98.00%	88.64%	93.33%	82.61%	85.00%	90.48%
FL	PMBHFLFE	Local Number Portability (LNP) - Loop	100.00%	89.47%	100.00%	100.00%	95.24%	83.33%	96.30%	89.29%	81.82%
FL	PMBHFLMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	88.00%	48.98%	91.67%	83.93%	85.00%	81.58%	87.88%
FL	PMBHFLTA	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
FL	PNSCFLBL	Local Number Portability (LNP) - Loop									
FL	PNSCFLFP	Local Number Portability (LNP) - Loop									
FL	PNSCFLWA	Local Number Portability (LNP) - Loop									
FL	PRRNFLMA	Local Number Portability (LNP) - Loop	100.00%	75.86%	91.67%	87.50%	100.00%	90.00%	95.24%	85.71%	85.71%
FL	SNFRFLMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
FL	STAGFLMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	33.33%	100.00%	100.00%	100.00%

Percent Hot Cuts Completed with Service Disruptions <= 5 Minutes

State	Wire Center	Portability Identity	Apr-02 0 - 5 Minutes	May-02 0 - 5 Minutes	Jun-02 0 - 5 Minutes	Jul-02 0 - 5 Minutes	Aug-02 0 - 5 Minutes	Sep-02 0 - 5 Minutes	Oct-02 0 - 5 Minutes	Nov-02 0 - 5 Minutes	Dec-02 0 - 5 Minutes
FL	STRTFLMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	94.02%	93.33%	81.58%	97.18%	100.00%	100.00%	76.00%
FL	TTVLFLMA	Local Number Portability (LNP) - Loop		100.00%	100.00%	100.00%		100.00%	100.00%	100.00%	100.00%
FL	VRBHFLMA	Local Number Portability (LNP) - Loop	100.00%	76.67%	100.00%	90.91%	91.67%	100.00%	100.00%	86.84%	94.12%
FL	WPBHFLAN	Local Number Portability (LNP) - Loop	81.25%	86.36%	95.83%	81.36%	67.35%	100.00%	80.65%	45.24%	96.43%
FL	WPBHFLGA	Local Number Portability (LNP) - Loop	91.89%	98.48%	98.80%	87.10%	89.09%	90.48%	100.00%	100.00%	93.02%
FL	WPBHFLGR	Local Number Portability (LNP) - Loop	97.37%	97.65%	100.00%	100.00%	93.75%	100.00%	86.67%	100.00%	97.78%
FL	WPBHFLHH	Local Number Portability (LNP) - Loop	82.57%	90.16%	100.00%	93.24%	97.87%	95.56%	91.89%	96.83%	94.44%
FL	WPBHFLLE	Local Number Portability (LNP) - Loop	99.14%	98.55%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
FL	WPBHFLRB	Local Number Portability (LNP) - Loop	96.51%	76.36%	95.83%	84.62%	100.00%	69.57%	89.66%	91.67%	96.30%
FL	WPBHFLRP	Local Number Portability (LNP) - Loop	100.00%	100.00%	66.67%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
GA	All	Local Number Portability (LNP) - Loop	92.59%	89.19%	92.60%	92.66%	92.31%	90.07%	88.54%	90.53%	89.44%
GA	ACWOGAMA	Local Number Portability (LNP) - Loop				100.00%		100.00%		100.00%	66.67%
GA	AGSTGAFL	Local Number Portability (LNP) - Loop									
GA	ALPRGAMA	Local Number Portability (LNP) - Loop	95.24%	82.22%	81.25%	92.65%	83.33%	100.00%	23.68%	36.36%	60.00%
GA	ASTLGAMA	Local Number Portability (LNP) - Loop	100.00%	100.00%		100.00%			100.00%		
GA	ATLNGABU	Local Number Portability (LNP) - Loop	100.00%	78.95%	100.00%	64.71%	100.00%	41.82%	100.00%	100.00%	
GA	ATLNGACS	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%		100.00%
GA	ATLNGAEL	Local Number Portability (LNP) - Loop		100.00%	100.00%	100.00%					
GA	ATLNGAEP	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	90.91%	100.00%	100.00%		100.00%
GA	ATLNGAFP	Local Number Portability (LNP) - Loop	47.83%	100.00%	100.00%		100.00%				100.00%
GA	ATLNGAIC	Local Number Portability (LNP) - Loop	80.00%	92.31%	80.00%	92.59%	100.00%	100.00%	80.00%	100.00%	100.00%
GA	ATLNGAPP	Local Number Portability (LNP) - Loop	85.71%	80.00%	97.83%	100.00%	77.42%	100.00%	100.00%	100.00%	100.00%
GA	ATLNGASS	Local Number Portability (LNP) - Loop	100.00%	48.84%	92.11%	100.00%	87.50%	100.00%	100.00%	100.00%	100.00%
GA	ATLNGATH	Local Number Portability (LNP) - Loop		79.31%	71.19%	91.89%	100.00%	100.00%	83.33%	60.00%	
GA	ATLNGAWD	Local Number Portability (LNP) - Loop	90.91%	55.56%	67.86%	100.00%	76.47%		71.43%		100.00%
GA	BUFRGABH	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%			77.78%	100.00%	100.00%	
GA	CHMBGAMA	Local Number Portability (LNP) - Loop	100.00%	95.24%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	25.00%
GA	CLMBGAMT	Local Number Portability (LNP) - Loop		100.00%						100.00%	
GA	CMNGGAMA	Local Number Portability (LNP) - Loop		100.00%	100.00%	100.00%		100.00%	100.00%	100.00%	100.00%
GA	CNYRGAMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%		
GA	CRTNGAMA	Local Number Portability (LNP) - Loop		100.00%	44.44%	100.00%					
GA	CVTNGAMT	Local Number Portability (LNP) - Loop	66.67%		100.00%	100.00%			100.00%		
GA	DGVLGAMA	Local Number Portability (LNP) - Loop	100.00%	81.82%	100.00%	100.00%	100.00%	100.00%	100.00%		
GA	DLTHGAHS	Local Number Portability (LNP) - Loop	100.00%	100.00%	76.92%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
GA	DNWDGAMA	Local Number Portability (LNP) - Loop	100.00%	81.25%	100.00%	100.00%	46.67%	100.00%	100.00%	76.47%	
GA	JNBOGAMA	Local Number Portability (LNP) - Loop	50.00%	100.00%	100.00%	100.00%	100.00%	76.92%	100.00%	100.00%	100.00%
GA	LLBNGAMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
GA	LRVLGAOS	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%		100.00%	100.00%	100.00%
GA	MRTTGAEA	Local Number Portability (LNP) - Loop	100.00%	66.67%	92.86%	100.00%	100.00%	100.00%	100.00%	37.50%	
GA	MRTTGAMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	88.00%	100.00%	91.67%	100.00%	100.00%	66.67%	100.00%
GA	NRCRGAMA	Local Number Portability (LNP) - Loop	95.96%	100.00%	100.00%	87.50%	100.00%	100.00%	93.94%	100.00%	100.00%
GA	PANLGAMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%		100.00%				100.00%
GA	PTCYGAMA	Local Number Portability (LNP) - Loop									100.00%
GA	RSWLGAMA	Local Number Portability (LNP) - Loop	75.00%	100.00%	94.55%	93.10%	100.00%	100.00%	93.33%	100.00%	100.00%
GA	RVDLGAMA	Local Number Portability (LNP) - Loop	100.00%	100.00%			100.00%	92.31%	100.00%	100.00%	100.00%
GA	SMYRGAMA	Local Number Portability (LNP) - Loop	88.89%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
GA	SMYRGAPF	Local Number Portability (LNP) - Loop	90.24%	94.12%	100.00%	92.86%	100.00%	100.00%	83.33%	100.00%	100.00%
GA	SNLVGAMA	Local Number Portability (LNP) - Loop	100.00%	94.44%	100.00%	92.31%	100.00%	100.00%	100.00%	80.00%	100.00%
GA	SNMTGALR	Local Number Portability (LNP) - Loop			100.00%		100.00%	100.00%		71.43%	
GA	SVNHGABS	Local Number Portability (LNP) - Loop			100.00%	100.00%			100.00%		

Percent Hot Cuts Completed with Service Disruptions <= 5 Minutes

State	Wire Center	Portability Identity	Jan-03 0 - 5 Minutes	Feb-03 0 - 5 Minutes	Mar-03 0 - 5 Minutes	Apr-03 0 - 5 Minutes	May-03 0 - 5 Minutes	Jun-03 0 - 5 Minutes	Jul-03 0 - 5 Minutes	Aug-03 0 - 5 Minutes	Sep-03 0 - 5 Minutes
FL	STRTFLMA	Local Number Portability (LNP) - Loop	100.00%	92.31%	95.24%	70.00%	84.38%	80.00%	97.22%	82.35%	64.52%
FL	TTVLFLMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%			100.00%	100.00%	100.00%	93.75%
FL	VRBHFLMA	Local Number Portability (LNP) - Loop	80.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	94.12%	96.00%
FL	WPBHFLAN	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	97.37%	100.00%
FL	WPBHFLGA	Local Number Portability (LNP) - Loop	100.00%	93.33%	93.94%	88.89%	89.47%	100.00%	96.67%	78.95%	92.59%
FL	WPBHFLGR	Local Number Portability (LNP) - Loop	80.00%	100.00%	100.00%	100.00%	94.12%	100.00%	100.00%	94.87%	72.41%
FL	WPBHFLHH	Local Number Portability (LNP) - Loop	94.87%	96.00%	92.86%	73.33%	88.68%	89.47%	95.24%	95.45%	87.14%
FL	WPBHFLLE	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	97.30%	92.59%	93.75%	85.00%
FL	WPBHFLRB	Local Number Portability (LNP) - Loop	97.73%	85.29%	100.00%	88.89%	100.00%	86.67%	84.62%	90.91%	84.62%
FL	WPBHFLRP	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	92.00%	100.00%	80.88%	100.00%	81.43%
GA	All	Local Number Portability (LNP) - Loop	90.38%	90.67%	91.93%	89.23%	90.00%	90.00%	89.54%	89.21%	86.48%
GA	ACWOGAMA	Local Number Portability (LNP) - Loop	100.00%		100.00%	100.00%	100.00%		100.00%	87.50%	100.00%
GA	AGSTGAFL	Local Number Portability (LNP) - Loop		100.00%							
GA	ALPRGAMA	Local Number Portability (LNP) - Loop	75.86%	66.67%	100.00%	91.11%	93.33%	91.43%	81.08%	87.18%	58.57%
GA	ASTLGAMA	Local Number Portability (LNP) - Loop		100.00%	100.00%	100.00%	100.00%	100.00%	96.88%	84.62%	100.00%
GA	ATLNGABU	Local Number Portability (LNP) - Loop	100.00%	100.00%	76.00%	100.00%	100.00%	100.00%	90.91%	96.97%	93.75%
GA	ATLNGACS	Local Number Portability (LNP) - Loop	100.00%	100.00%		91.67%	100.00%	100.00%	100.00%	100.00%	100.00%
GA	ATLNGAEL	Local Number Portability (LNP) - Loop									
GA	ATLNGAEP	Local Number Portability (LNP) - Loop		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
GA	ATLNGAFP	Local Number Portability (LNP) - Loop				50.00%	73.08%	21.05%	40.00%	78.57%	100.00%
GA	ATLNGAIC	Local Number Portability (LNP) - Loop	100.00%	71.43%	95.83%	100.00%	100.00%	100.00%	100.00%	93.75%	93.33%
GA	ATLNGAPP	Local Number Portability (LNP) - Loop	100.00%	91.67%	100.00%	100.00%	100.00%	100.00%	90.00%	100.00%	92.86%
GA	ATLNGASS	Local Number Portability (LNP) - Loop	83.33%	90.00%	100.00%	100.00%	50.00%	100.00%	95.65%	100.00%	81.82%
GA	ATLNGATH	Local Number Portability (LNP) - Loop	100.00%	75.00%	82.61%	40.00%	30.77%	73.33%	53.33%	85.19%	82.35%
GA	ATLNGAWD	Local Number Portability (LNP) - Loop			100.00%	100.00%	85.71%	88.89%	100.00%	80.00%	100.00%
GA	BUFRGABH	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%		100.00%	100.00%	80.00%	100.00%	100.00%
GA	CHMBGAMA	Local Number Portability (LNP) - Loop	71.43%	100.00%	95.00%	100.00%	100.00%	96.15%	90.74%	81.82%	92.86%
GA	CLMBGAMT	Local Number Portability (LNP) - Loop									
GA	CMNGGAMA	Local Number Portability (LNP) - Loop	100.00%		100.00%			75.00%	90.00%	100.00%	100.00%
GA	CNYRGAMA	Local Number Portability (LNP) - Loop	100.00%		100.00%			100.00%	84.62%	72.22%	78.57%
GA	CRTNGAMA	Local Number Portability (LNP) - Loop									
GA	CVTNGAMT	Local Number Portability (LNP) - Loop	100.00%				66.67%	100.00%	78.57%	91.53%	54.55%
GA	DGVLGAMA	Local Number Portability (LNP) - Loop		100.00%	100.00%	100.00%	100.00%	100.00%	86.36%	85.19%	90.00%
GA	DLTHGAHS	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	40.00%	100.00%	100.00%	89.29%	86.36%	78.95%
GA	DNWDGAMA	Local Number Portability (LNP) - Loop			100.00%	100.00%	100.00%	82.35%	100.00%	56.25%	93.55%
GA	JNBOGAMA	Local Number Portability (LNP) - Loop	85.71%	100.00%	100.00%	83.33%	100.00%	75.00%	78.57%	100.00%	93.75%
GA	LLBNGAMA	Local Number Portability (LNP) - Loop				100.00%	100.00%	71.43%	84.62%	73.68%	75.00%
GA	LRVLGAOS	Local Number Portability (LNP) - Loop		90.00%	100.00%	60.00%	100.00%	100.00%	94.59%	87.93%	90.32%
GA	MRTTGAEA	Local Number Portability (LNP) - Loop	100.00%	100.00%	71.43%	100.00%	75.00%	100.00%	90.91%	89.47%	85.71%
GA	MRTTGAMA	Local Number Portability (LNP) - Loop	96.15%	66.67%	100.00%	83.33%	85.00%	82.93%	85.11%	81.40%	95.92%
GA	NRCRGAMA	Local Number Portability (LNP) - Loop	54.55%	100.00%	93.10%	100.00%	95.56%	79.17%	88.89%	100.00%	85.71%
GA	PANLGAMA	Local Number Portability (LNP) - Loop		100.00%	100.00%	100.00%	100.00%	80.00%	95.65%	80.77%	100.00%
GA	PTCYGAMA	Local Number Portability (LNP) - Loop					100.00%		93.75%	100.00%	100.00%
GA	RSWLGAMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	86.96%	80.77%	85.71%	100.00%	100.00%	81.63%	83.33%
GA	RVDLGAMA	Local Number Portability (LNP) - Loop		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	66.67%	83.33%
GA	SMYRGAMA	Local Number Portability (LNP) - Loop	100.00%	66.67%	100.00%	100.00%	100.00%	100.00%	80.00%	82.35%	50.00%
GA	SMYRGAPF	Local Number Portability (LNP) - Loop	66.67%	100.00%	100.00%	88.00%	100.00%	100.00%	100.00%	100.00%	89.47%
GA	SNLVGAMA	Local Number Portability (LNP) - Loop		90.00%	100.00%		100.00%	75.00%	100.00%	100.00%	92.31%
GA	SNMTGALR	Local Number Portability (LNP) - Loop			100.00%	100.00%	100.00%	100.00%	80.00%	80.00%	25.00%
GA	SVNHGABS	Local Number Portability (LNP) - Loop								100.00%	

Percent Hot Cuts Completed with Service Disruptions <= 5 Minutes

State	Wire Center	Portability Identity	Apr-02 0 - 5 Minutes	May-02 0 - 5 Minutes	Jun-02 0 - 5 Minutes	Jul-02 0 - 5 Minutes	Aug-02 0 - 5 Minutes	Sep-02 0 - 5 Minutes	Oct-02 0 - 5 Minutes	Nov-02 0 - 5 Minutes	Dec-02 0 - 5 Minutes
GA	SVNHGADE	Local Number Portability (LNP) - Loop			100.00%						
GA	SVNHGAGC	Local Number Portability (LNP) - Loop			100.00%			100.00%			
GA	TUKRGAMA	Local Number Portability (LNP) - Loop	93.33%	100.00%	100.00%	100.00%	92.31%	100.00%	100.00%	100.00%	55.00%
GA	WDSTGACR	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	12.50%	88.89%	100.00%	50.00%		
KY	All	Local Number Portability (LNP) - Loop					100.00%				
KY	LSVLKYAP	Local Number Portability (LNP) - Loop									
KY	LSVLKYSM	Local Number Portability (LNP) - Loop									
KY	LSVLKYTS	Local Number Portability (LNP) - Loop									
KY	LSVLKYVS	Local Number Portability (LNP) - Loop					100.00%				
LA	All	Local Number Portability (LNP) - Loop	92.83%	81.82%	86.52%	94.00%	89.34%	93.83%	93.10%	96.79%	91.89%
LA	BRSSLAMA	Local Number Portability (LNP) - Loop	100.00%	100.00%		100.00%	100.00%	100.00%		100.00%	100.00%
LA	BTRGLAGW	Local Number Portability (LNP) - Loop	90.24%	72.22%	93.33%	100.00%	100.00%	100.00%	100.00%	75.00%	100.00%
LA	BTRGLAIS	Local Number Portability (LNP) - Loop	100.00%								
LA	BTRGLAMA	Local Number Portability (LNP) - Loop	100.00%	82.86%	80.00%	100.00%		100.00%	100.00%		92.86%
LA	BTRGLAOH	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%			100.00%	100.00%
LA	BTRGLASB	Local Number Portability (LNP) - Loop	100.00%	100.00%		100.00%	100.00%	100.00%	100.00%		100.00%
LA	BTRGLAWN	Local Number Portability (LNP) - Loop	100.00%								
LA	LFYTLAMA	Local Number Portability (LNP) - Loop	87.50%	77.78%	20.00%	100.00%	84.44%	100.00%	94.74%	100.00%	100.00%
LA	LFYTLAVM	Local Number Portability (LNP) - Loop	100.00%	100.00%	90.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
LA	LKCHLADT	Local Number Portability (LNP) - Loop	80.77%	87.88%	93.33%	95.00%	100.00%	83.33%	100.00%	100.00%	92.86%
LA	LKCHLAMW	Local Number Portability (LNP) - Loop	100.00%	100.00%	75.00%	100.00%	66.67%	95.45%		100.00%	100.00%
LA	LKCHLAUN	Local Number Portability (LNP) - Loop	94.87%	86.96%	77.78%	100.00%	100.00%	100.00%	100.00%	100.00%	85.19%
LA	MONRLADS	Local Number Portability (LNP) - Loop						100.00%	100.00%	100.00%	100.00%
LA	MONRLAMA	Local Number Portability (LNP) - Loop			85.71%	91.30%	77.78%	92.31%	86.67%	100.00%	100.00%
LA	NWORLAMA	Local Number Portability (LNP) - Loop									
LA	NWORLAMT	Local Number Portability (LNP) - Loop		100.00%							
LA	NWORLASW	Local Number Portability (LNP) - Loop				100.00%	50.00%				
LA	RSTNLAMA	Local Number Portability (LNP) - Loop									100.00%
LA	SHPTLABS	Local Number Portability (LNP) - Loop				80.00%	100.00%	100.00%	92.31%	91.30%	100.00%
LA	SHPTLACL	Local Number Portability (LNP) - Loop	100.00%	9.09%		100.00%	100.00%	100.00%		100.00%	100.00%
LA	SHPTLAHD	Local Number Portability (LNP) - Loop				100.00%	100.00%	100.00%	78.57%	100.00%	25.00%
LA	SHPTLAMA	Local Number Portability (LNP) - Loop				100.00%	100.00%	100.00%	100.00%	100.00%	75.00%
LA	SHPTLAQB	Local Number Portability (LNP) - Loop		100.00%			85.71%	100.00%	66.67%	100.00%	71.43%
LA	SHPTLASG	Local Number Portability (LNP) - Loop			100.00%	100.00%		40.00%	100.00%	62.50%	100.00%
LA	SLPHLAMA	Local Number Portability (LNP) - Loop	87.50%	100.00%	100.00%	100.00%	100.00%				100.00%
MS	All	Local Number Portability (LNP) - Loop	100.00%	50.00%	100.00%	100.00%	50.00%		100.00%		50.00%
MS	BILXMSMA	Local Number Portability (LNP) - Loop		100.00%							
MS	GLPTMSTS	Local Number Portability (LNP) - Loop	100.00%		100.00%						
MS	HTBGMSMA	Local Number Portability (LNP) - Loop			100.00%						
MS	HTBGMSWE	Local Number Portability (LNP) - Loop			100.00%		100.00%				50.00%
MS	JCSNMSCP	Local Number Portability (LNP) - Loop	100.00%		100.00%						
MS	JCSNMSMB	Local Number Portability (LNP) - Loop			100.00%				100.00%		
MS	JCSNMSPC	Local Number Portability (LNP) - Loop				100.00%					
MS	JCSNMSRW	Local Number Portability (LNP) - Loop			100.00%						
NC	All	Local Number Portability (LNP) - Loop	90.63%	92.53%	92.45%	85.06%	93.09%	89.30%	86.68%	87.91%	86.29%

Percent Hot Cuts Completed with Service Disruptions <= 5 Minutes

State	Wire Center	Portability Identity	Jan-03 0 - 5 Minutes	Feb-03 0 - 5 Minutes	Mar-03 0 - 5 Minutes	Apr-03 0 - 5 Minutes	May-03 0 - 5 Minutes	Jun-03 0 - 5 Minutes	Jul-03 0 - 5 Minutes	Aug-03 0 - 5 Minutes	Sep-03 0 - 5 Minutes
GA	SVNHGADE	Local Number Portability (LNP) - Loop									100.00%
GA	SVNHGAGC	Local Number Portability (LNP) - Loop								100.00%	
GA	TUKRGAMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
GA	WDSTGACR	Local Number Portability (LNP) - Loop	100.00%		100.00%		63.64%	100.00%	93.10%	90.00%	73.33%
KY	All	Local Number Portability (LNP) - Loop					100.00%				100.00%
KY	LSVLKYAP	Local Number Portability (LNP) - Loop									
KY	LSVLKYSM	Local Number Portability (LNP) - Loop					100.00%				
KY	LSVLKYTS	Local Number Portability (LNP) - Loop									100.00%
KY	LSVLKYVS	Local Number Portability (LNP) - Loop									
LA	All	Local Number Portability (LNP) - Loop	82.42%	87.74%	96.65%	89.92%	86.74%	86.89%	78.36%	91.43%	94.48%
LA	BRSSLAMA	Local Number Portability (LNP) - Loop		100.00%	100.00%			100.00%	100.00%	100.00%	
LA	BTRGLAGW	Local Number Portability (LNP) - Loop	100.00%	60.00%	100.00%	93.33%	95.16%	100.00%	14.29%	100.00%	100.00%
LA	BTRGLAIS	Local Number Portability (LNP) - Loop									
LA	BTRGLAMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%			
LA	BTRGLAOH	Local Number Portability (LNP) - Loop		33.33%	100.00%				100.00%	100.00%	
LA	BTRGLASB	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	37.50%	100.00%		100.00%	100.00%
LA	BTRGLAWN	Local Number Portability (LNP) - Loop									
LA	LFYTLAMA	Local Number Portability (LNP) - Loop		100.00%	100.00%	100.00%	100.00%	95.24%	100.00%	100.00%	100.00%
LA	LFYTLAVM	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	69.23%	100.00%
LA	LKCHLADT	Local Number Portability (LNP) - Loop	100.00%	100.00%	90.91%	96.00%	92.31%	100.00%	94.44%	100.00%	86.96%
LA	LKCHLAMW	Local Number Portability (LNP) - Loop	75.00%	100.00%	100.00%	100.00%	100.00%		100.00%	100.00%	100.00%
LA	LKCHLAUN	Local Number Portability (LNP) - Loop	100.00%	83.33%	50.00%	50.00%	80.00%			100.00%	100.00%
LA	MONRLADS	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	33.33%	20.00%	78.95%	100.00%		100.00%
LA	MONRLAMA	Local Number Portability (LNP) - Loop	66.67%	100.00%	100.00%	83.05%	68.85%	77.14%	65.57%	50.00%	89.47%
LA	NWORLAMA	Local Number Portability (LNP) - Loop									
LA	NWORLAMT	Local Number Portability (LNP) - Loop									
LA	NWORLASW	Local Number Portability (LNP) - Loop									
LA	RSTNLAMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	57.14%	83.33%	100.00%	100.00%
LA	SHPTLABS	Local Number Portability (LNP) - Loop	100.00%	100.00%	97.14%	94.06%	100.00%	100.00%	100.00%	100.00%	
LA	SHPTLACL	Local Number Portability (LNP) - Loop	100.00%			100.00%	100.00%	63.64%	100.00%	100.00%	100.00%
LA	SHPTLAHD	Local Number Portability (LNP) - Loop	100.00%		91.67%	81.25%	95.83%	100.00%	90.00%	100.00%	100.00%
LA	SHPTLAMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	94.74%	100.00%	100.00%	14.29%	100.00%	100.00%
LA	SHPTLAQB	Local Number Portability (LNP) - Loop	100.00%		100.00%	100.00%	100.00%	66.67%			50.00%
LA	SHPTLASG	Local Number Portability (LNP) - Loop			100.00%	70.00%	100.00%	100.00%	100.00%	78.57%	
LA	SLPHLAMA	Local Number Portability (LNP) - Loop		100.00%	100.00%	100.00%	100.00%	100.00%		100.00%	
MS	All	Local Number Portability (LNP) - Loop	60.00%	100.00%	100.00%	100.00%	100.00%			100.00%	
MS	BILXMSMA	Local Number Portability (LNP) - Loop									
MS	GLPTMSTS	Local Number Portability (LNP) - Loop									
MS	HTBGMSMA	Local Number Portability (LNP) - Loop	100.00%	100.00%			100.00%				
MS	HTBGMSWE	Local Number Portability (LNP) - Loop		100.00%	100.00%	100.00%				100.00%	
MS	JCSNMSCP	Local Number Portability (LNP) - Loop			100.00%						
MS	JCSNMSMB	Local Number Portability (LNP) - Loop	100.00%		100.00%						
MS	JCSNMSPC	Local Number Portability (LNP) - Loop									
MS	JCSNMSRW	Local Number Portability (LNP) - Loop			100.00%						
NC	All	Local Number Portability (LNP) - Loop	86.87%	86.43%	84.14%	89.92%	93.37%	88.49%	85.40%	90.87%	93.95%

Percent Hot Cuts Completed with Service Disruptions <= 5 Minutes

State	Wire Center	Portability Identity	Apr-02 0 - 5 Minutes	May-02 0 - 5 Minutes	Jun-02 0 - 5 Minutes	Jul-02 0 - 5 Minutes	Aug-02 0 - 5 Minutes	Sep-02 0 - 5 Minutes	Oct-02 0 - 5 Minutes	Nov-02 0 - 5 Minutes	Dec-02 0 - 5 Minutes
NC	APEXNCCE	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%		100.00%	100.00%	100.00%	100.00%	
NC	BURLNCDA	Local Number Portability (LNP) - Loop	100.00%	90.91%	100.00%	100.00%	100.00%	100.00%			100.00%
NC	CARYNCCE	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	86.00%	85.71%	100.00%
NC	CHRLNCBO	Local Number Portability (LNP) - Loop	50.00%	100.00%	100.00%	100.00%	85.71%	91.67%	100.00%	100.00%	100.00%
NC	CHRLNCCA	Local Number Portability (LNP) - Loop	89.83%	98.31%	100.00%	100.00%	97.87%	81.08%	42.55%	81.25%	97.87%
NC	CHRLNCCE	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	83.33%	100.00%
NC	CHRLNCCR	Local Number Portability (LNP) - Loop	93.55%	100.00%		100.00%	63.64%		100.00%	100.00%	
NC	CHRLNCDE	Local Number Portability (LNP) - Loop		100.00%	10.00%		80.00%		100.00%		
NC	CHRLNCER	Local Number Portability (LNP) - Loop	100.00%		100.00%						
NC	CHRLNCLP	Local Number Portability (LNP) - Loop	100.00%	100.00%							
NC	CHRLNCRE	Local Number Portability (LNP) - Loop	60.00%		100.00%	84.62%					
NC	CHRLNCSH	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%						100.00%
NC	CHRLNCTH	Local Number Portability (LNP) - Loop	66.67%	100.00%	91.67%	100.00%	100.00%	100.00%	100.00%		100.00%
NC	CHRLNCUN	Local Number Portability (LNP) - Loop	100.00%	66.67%			100.00%	100.00%	100.00%	60.00%	66.67%
NC	CPHLNCRO	Local Number Portability (LNP) - Loop	100.00%	100.00%	66.67%	33.33%	81.25%	100.00%	100.00%	100.00%	25.00%
NC	DVSNNCPO	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	7.14%			
NC	GLBONCAD	Local Number Portability (LNP) - Loop	86.67%	60.00%		100.00%	100.00%				100.00%
NC	GLBONCMA	Local Number Portability (LNP) - Loop	96.67%	76.92%	100.00%	100.00%					100.00%
NC	GNBONCAP	Local Number Portability (LNP) - Loop			100.00%	100.00%		100.00%	66.67%		100.00%
NC	GNBONCAS	Local Number Portability (LNP) - Loop	98.15%	98.08%	100.00%	62.50%	90.91%	100.00%	100.00%	93.33%	100.00%
NC	GNBONCEU	Local Number Portability (LNP) - Loop	100.00%	100.00%	95.65%	100.00%	92.86%	100.00%	85.71%	96.30%	94.74%
NC	GNBONCLA	Local Number Portability (LNP) - Loop			100.00%	100.00%	100.00%	100.00%			100.00%
NC	GNBONCMC	Local Number Portability (LNP) - Loop		83.33%		100.00%	100.00%				
NC	GSTANCSO	Local Number Portability (LNP) - Loop	100.00%	100.00%	90.48%	81.25%	100.00%	77.78%	100.00%	100.00%	100.00%
NC	HSVLNCCE	Local Number Portability (LNP) - Loop			100.00%		100.00%	100.00%			
NC	KNDLNCCE	Local Number Portability (LNP) - Loop		100.00%		100.00%	100.00%		100.00%		
NC	LMTNNCMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	85.71%	90.91%	100.00%	100.00%	95.74%	100.00%	100.00%
NC	RDVLNCMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%		100.00%		100.00%	100.00%
NC	RLGHNCGA	Local Number Portability (LNP) - Loop	82.35%	100.00%	100.00%	87.50%	90.91%	100.00%	84.62%	83.33%	
NC	RLGHNCGL	Local Number Portability (LNP) - Loop	100.00%	100.00%	95.65%	54.17%	100.00%	86.67%	100.00%	90.00%	96.00%
NC	RLGHNCHO	Local Number Portability (LNP) - Loop	90.00%	100.00%	95.92%	47.92%	85.71%	54.55%	100.00%	100.00%	100.00%
NC	RLGHNCJO	Local Number Portability (LNP) - Loop	75.00%	100.00%	100.00%	100.00%		100.00%	100.00%	100.00%	100.00%
NC	RLGHNCMO	Local Number Portability (LNP) - Loop	40.00%	96.08%	100.00%	100.00%	100.00%	100.00%	38.46%	100.00%	100.00%
NC	RLGHNCSB	Local Number Portability (LNP) - Loop	100.00%	75.00%	100.00%	100.00%	100.00%	100.00%			
NC	RLGHNCSI	Local Number Portability (LNP) - Loop	87.50%	100.00%	66.67%	100.00%	66.67%	100.00%	100.00%		47.06%
NC	SHLBNCMA	Local Number Portability (LNP) - Loop			100.00%	93.75%	95.00%	88.46%		100.00%	
NC	SLBRNCMA	Local Number Portability (LNP) - Loop	63.16%	30.43%	59.18%	100.00%	100.00%	94.74%	100.00%	100.00%	100.00%
NC	SSVLNCMA	Local Number Portability (LNP) - Loop	94.44%	100.00%	100.00%		95.00%	100.00%	100.00%	100.00%	66.67%
NC	WGVLNCMA	Local Number Portability (LNP) - Loop		83.33%	100.00%	100.00%	100.00%	100.00%	100.00%		100.00%
NC	WLMGNCFO	Local Number Portability (LNP) - Loop	100.00%	90.48%	100.00%		96.67%	96.43%	100.00%		100.00%
NC	WLMGNCWI	Local Number Portability (LNP) - Loop	83.33%	100.00%	90.00%	71.74%	82.61%	83.33%	72.92%	75.00%	100.00%
NC	WNSLNCCL	Local Number Portability (LNP) - Loop	100.00%								
NC	WNSLNCFI	Local Number Portability (LNP) - Loop	100.00%	94.29%	72.22%	100.00%		100.00%	100.00%	63.64%	66.67%
NC	WNSLNCGL	Local Number Portability (LNP) - Loop	100.00%	100.00%							
NC	WNSLNCLE	Local Number Portability (LNP) - Loop		100.00%	100.00%	100.00%	100.00%	100.00%		100.00%	
NC	WNSLNCVI	Local Number Portability (LNP) - Loop	36.36%	92.31%	92.86%	100.00%	100.00%	69.57%	88.00%	100.00%	100.00%
SC	All	Local Number Portability (LNP) - Loop	93.27%	84.09%	93.75%	83.78%	99.20%	95.92%	68.93%	98.06%	73.08%
SC	ARSNSCMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	79.31%	100.00%	100.00%	100.00%	100.00%	100.00%
SC	CHTNSCDP	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Percent Hot Cuts Completed with Service Disruptions <= 5 Minutes

State	Wire Center	Portability Identity	Jan-03 0 - 5 Minutes	Feb-03 0 - 5 Minutes	Mar-03 0 - 5 Minutes	Apr-03 0 - 5 Minutes	May-03 0 - 5 Minutes	Jun-03 0 - 5 Minutes	Jul-03 0 - 5 Minutes	Aug-03 0 - 5 Minutes	Sep-03 0 - 5 Minutes
NC	APEXNCCE	Local Number Portability (LNP) - Loop	100.00%	100.00%		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
NC	BURLNCDA	Local Number Portability (LNP) - Loop	100.00%	100.00%	75.00%	100.00%	100.00%		100.00%	95.83%	
NC	CARYNCCE	Local Number Portability (LNP) - Loop	100.00%	95.00%	95.00%	100.00%	100.00%	88.57%	97.37%	100.00%	100.00%
NC	CHRLNCBO	Local Number Portability (LNP) - Loop	95.65%	100.00%	100.00%	100.00%	50.00%	50.00%	100.00%	75.00%	100.00%
NC	CHRLNCCA	Local Number Portability (LNP) - Loop	100.00%	54.55%	70.73%	100.00%	100.00%	97.92%	100.00%	92.31%	100.00%
NC	CHRLNCCE	Local Number Portability (LNP) - Loop		96.15%	70.37%	100.00%	100.00%	88.89%	100.00%	94.59%	100.00%
NC	CHRLNCCR	Local Number Portability (LNP) - Loop		100.00%	100.00%		100.00%				
NC	CHRLNCDE	Local Number Portability (LNP) - Loop				100.00%					85.19%
NC	CHRLNCER	Local Number Portability (LNP) - Loop			72.73%						
NC	CHRLNCLP	Local Number Portability (LNP) - Loop	100.00%						100.00%		
NC	CHRLNCRE	Local Number Portability (LNP) - Loop						100.00%	100.00%		100.00%
NC	CHRLNCSH	Local Number Portability (LNP) - Loop		100.00%	100.00%	100.00%		60.00%	100.00%		100.00%
NC	CHRLNCTH	Local Number Portability (LNP) - Loop	100.00%	100.00%	88.24%	37.50%	100.00%	100.00%	100.00%	100.00%	71.43%
NC	CHRLNCUN	Local Number Portability (LNP) - Loop	7.14%	100.00%	100.00%	100.00%		40.00%			100.00%
NC	CPHLNCRO	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	82.35%	100.00%	100.00%	100.00%
NC	DVSNNCPO	Local Number Portability (LNP) - Loop	100.00%		37.50%	100.00%	100.00%	100.00%	100.00%		
NC	GLBONCAD	Local Number Portability (LNP) - Loop	100.00%	50.00%	100.00%	100.00%		83.33%	100.00%	100.00%	
NC	GLBONCMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	58.33%	83.33%		100.00%	58.73%	91.67%	100.00%
NC	GNBONCAP	Local Number Portability (LNP) - Loop	92.31%			100.00%	66.67%			100.00%	100.00%
NC	GNBONCAS	Local Number Portability (LNP) - Loop	72.97%	98.57%	95.71%	73.58%	88.89%	100.00%	94.12%	100.00%	100.00%
NC	GNBONCEU	Local Number Portability (LNP) - Loop	100.00%	100.00%	78.57%	70.00%	97.06%	100.00%	100.00%	100.00%	100.00%
NC	GNBONCLA	Local Number Portability (LNP) - Loop	100.00%		100.00%						
NC	GNBONCMC	Local Number Portability (LNP) - Loop									
NC	GSTANCSO	Local Number Portability (LNP) - Loop	76.47%	51.85%	100.00%	86.21%	66.67%	42.86%	93.75%	100.00%	100.00%
NC	HSVLNCCE	Local Number Portability (LNP) - Loop		100.00%					62.50%		100.00%
NC	KNDLNCCE	Local Number Portability (LNP) - Loop	100.00%	100.00%				100.00%		100.00%	100.00%
NC	LMTNNCMA	Local Number Portability (LNP) - Loop	100.00%	27.27%	100.00%	100.00%	100.00%	80.95%	100.00%	44.00%	100.00%
NC	RDVLNCMA	Local Number Portability (LNP) - Loop				100.00%	100.00%	100.00%	100.00%		
NC	RLGHNCGA	Local Number Portability (LNP) - Loop	60.00%	50.00%	100.00%	100.00%	100.00%	100.00%	96.00%	100.00%	100.00%
NC	RLGHNCGL	Local Number Portability (LNP) - Loop	75.00%	100.00%	78.00%	75.00%	100.00%	96.43%	100.00%	92.54%	100.00%
NC	RLGHNCHO	Local Number Portability (LNP) - Loop	76.92%	100.00%	91.11%	100.00%	100.00%	72.73%	42.00%	93.55%	36.84%
NC	RLGHNCJO	Local Number Portability (LNP) - Loop	100.00%	44.44%	100.00%		100.00%	100.00%	100.00%	100.00%	100.00%
NC	RLGHNCMO	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	93.55%	100.00%	96.30%
NC	RLGHNCSB	Local Number Portability (LNP) - Loop	50.00%	100.00%	100.00%					100.00%	
NC	RLGHNCSI	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	95.45%	100.00%	100.00%	100.00%	100.00%
NC	SHLBNCMA	Local Number Portability (LNP) - Loop									
NC	SLBRNCMA	Local Number Portability (LNP) - Loop	100.00%	28.57%	100.00%	100.00%	100.00%	57.89%	100.00%	82.61%	76.19%
NC	SSVLNCMA	Local Number Portability (LNP) - Loop	100.00%		92.68%	81.63%	100.00%	90.57%	100.00%	88.89%	100.00%
NC	WGVLNCMA	Local Number Portability (LNP) - Loop	100.00%	100.00%				100.00%	100.00%	100.00%	50.00%
NC	WLMGNCFO	Local Number Portability (LNP) - Loop	42.86%	100.00%	100.00%	96.30%	83.33%	100.00%	100.00%	95.24%	100.00%
NC	WLMGNCWI	Local Number Portability (LNP) - Loop	100.00%	70.00%	78.67%	100.00%	100.00%	84.91%	100.00%	100.00%	100.00%
NC	WNSLNCCL	Local Number Portability (LNP) - Loop							100.00%		
NC	WNSLNCFI	Local Number Portability (LNP) - Loop	52.17%		45.71%	73.08%	84.21%	33.33%	58.82%	47.83%	91.67%
NC	WNSLNCGL	Local Number Portability (LNP) - Loop	100.00%				100.00%				
NC	WNSLNCLE	Local Number Portability (LNP) - Loop		100.00%	100.00%	100.00%			100.00%	66.67%	
NC	WNSLNCVI	Local Number Portability (LNP) - Loop			100.00%	100.00%	100.00%	100.00%		100.00%	100.00%
SC	All	Local Number Portability (LNP) - Loop	84.33%	83.33%	81.25%	95.00%	96.52%	88.14%	86.54%	79.08%	91.06%
SC	ARSNSCMA	Local Number Portability (LNP) - Loop		77.42%			100.00%	91.30%		100.00%	100.00%
SC	CHTNSCDP	Local Number Portability (LNP) - Loop	100.00%	100.00%		100.00%	100.00%	92.31%	100.00%	100.00%	100.00%

Percent Hot Cuts Completed with Service Disruptions <= 5 Minutes

State	Wire Center	Portability Identity	Apr-02 0 - 5 Minutes	May-02 0 - 5 Minutes	Jun-02 0 - 5 Minutes	Jul-02 0 - 5 Minutes	Aug-02 0 - 5 Minutes	Sep-02 0 - 5 Minutes	Oct-02 0 - 5 Minutes	Nov-02 0 - 5 Minutes	Dec-02 0 - 5 Minutes
SC	CHTNSCDT	Local Number Portability (LNP) - Loop	100.00%	50.00%	100.00%		100.00%			100.00%	
SC	CHTNSCLB	Local Number Portability (LNP) - Loop	100.00%	100.00%		100.00%	100.00%	100.00%		100.00%	
SC	CHTNSCNO	Local Number Portability (LNP) - Loop		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
SC	CHTNSCWA	Local Number Portability (LNP) - Loop	100.00%	100.00%	40.00%	100.00%	100.00%		100.00%		45.45%
SC	CLMASCAR	Local Number Portability (LNP) - Loop			100.00%		100.00%		100.00%	33.33%	
SC	CLMASCSA	Local Number Portability (LNP) - Loop									
SC	CLMASCSN	Local Number Portability (LNP) - Loop	90.00%	100.00%	100.00%			100.00%		100.00%	100.00%
SC	CLMASCSW	Local Number Portability (LNP) - Loop				100.00%				100.00%	
SC	ESLYSCMA	Local Number Portability (LNP) - Loop				100.00%					
SC	GNVLSCBE	Local Number Portability (LNP) - Loop		50.00%							
SC	GNVLSCCH	Local Number Portability (LNP) - Loop		100.00%		100.00%	94.74%			100.00%	
SC	GNVLSCDT	Local Number Portability (LNP) - Loop	100.00%	71.43%	100.00%	57.14%	100.00%	100.00%	76.92%	100.00%	
SC	GNVLSCWR	Local Number Portability (LNP) - Loop	100.00%	25.00%	100.00%	33.33%	100.00%	100.00%	34.38%	100.00%	100.00%
SC	GRERSCMA	Local Number Portability (LNP) - Loop	37.50%	76.47%	100.00%	100.00%		66.67%		100.00%	55.56%
SC	MNPLSCES	Local Number Portability (LNP) - Loop	100.00%	100.00%		100.00%	100.00%	87.50%	76.47%	100.00%	60.00%
SC	SPBGSCMA	Local Number Portability (LNP) - Loop	100.00%	87.50%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
SC	SPBGSCWV	Local Number Portability (LNP) - Loop		100.00%	100.00%	100.00%	100.00%				
TN	All	Local Number Portability (LNP) - Loop	86.98%	89.86%	90.40%	95.48%	84.62%	90.76%	96.36%	81.29%	90.05%
TN	CHTGTNBR	Local Number Portability (LNP) - Loop		100.00%		100.00%			80.00%		
TN	CHTGTNDT	Local Number Portability (LNP) - Loop	100.00%								
TN	CHTGTNNS	Local Number Portability (LNP) - Loop									
TN	CRVLTNMA	Local Number Portability (LNP) - Loop			100.00%		100.00%		100.00%	100.00%	
TN	FKLNTNMA	Local Number Portability (LNP) - Loop	100.00%		66.67%		12.50%	100.00%	100.00%	100.00%	
TN	KNVLTNBE	Local Number Portability (LNP) - Loop	100.00%		100.00%		75.00%	100.00%	100.00%		100.00%
TN	KNVLTNMA	Local Number Portability (LNP) - Loop	69.23%	100.00%	100.00%	100.00%	100.00%		97.50%	100.00%	77.78%
TN	KNVLTNWH	Local Number Portability (LNP) - Loop	85.71%	81.25%	81.25%	100.00%	100.00%	100.00%	92.11%	100.00%	100.00%
TN	KNVLTNYH	Local Number Portability (LNP) - Loop									
TN	MMPHTNBA	Local Number Portability (LNP) - Loop	100.00%	70.00%	92.86%	100.00%	90.00%	100.00%	95.12%	100.00%	94.74%
TN	MMPHTNCT	Local Number Portability (LNP) - Loop	87.50%	40.00%	100.00%	81.82%	100.00%	100.00%	100.00%	46.67%	73.33%
TN	MMPHTNEL	Local Number Portability (LNP) - Loop	73.33%	100.00%	100.00%	94.44%	80.00%	100.00%	100.00%		92.31%
TN	MMPHTNGT	Local Number Portability (LNP) - Loop	100.00%	100.00%	84.85%	77.78%	66.67%	78.57%	100.00%	78.57%	100.00%
TN	MMPHTNMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	86.67%	100.00%	100.00%	85.71%	100.00%		80.00%
TN	MMPHTNMT	Local Number Portability (LNP) - Loop	100.00%	100.00%		100.00%	70.00%	100.00%	100.00%	100.00%	100.00%
TN	MMPHTNOA	Local Number Portability (LNP) - Loop	90.00%	77.78%	100.00%	96.43%	87.50%	78.57%	100.00%	100.00%	92.31%
TN	MMPHTNSL	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%			100.00%
TN	MMPHTNST	Local Number Portability (LNP) - Loop		100.00%		100.00%	100.00%	58.82%	100.00%		100.00%
TN	MRBOTNMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	50.00%	100.00%	33.33%	100.00%	100.00%
TN	NSVLTNAP	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%		58.33%	100.00%	77.78%	88.89%
TN	NSVLTNBV	Local Number Portability (LNP) - Loop	100.00%	100.00%							
TN	NSVLTNBW	Local Number Portability (LNP) - Loop	60.00%	40.91%	100.00%	100.00%	100.00%	100.00%	100.00%	66.67%	90.91%
TN	NSVLTNCH	Local Number Portability (LNP) - Loop	88.89%	66.67%	100.00%	100.00%	92.31%	100.00%	81.82%	58.33%	50.00%
TN	NSVLTNDO	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
TN	NSVLTNIN	Local Number Portability (LNP) - Loop		100.00%	100.00%					100.00%	100.00%
TN	NSVLTNMC	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%						
TN	NSVLTNMT	Local Number Portability (LNP) - Loop	94.44%	94.74%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
TN	NSVLTNST	Local Number Portability (LNP) - Loop	50.00%	100.00%	44.44%	66.67%	37.50%	87.50%	100.00%	100.00%	72.73%
TN	NSVLTNUN	Local Number Portability (LNP) - Loop	100.00%	83.33%		100.00%	83.33%	100.00%	100.00%		100.00%
TN	NSVLTNWM	Local Number Portability (LNP) - Loop		100.00%	100.00%		100.00%				100.00%
TN	OKRGTNMT	Local Number Portability (LNP) - Loop									100.00%

Percent Hot Cuts Completed with Service Disruptions <= 5 Minutes

State	Wire Center	Portability Identity	Jan-03 0 - 5 Minutes	Feb-03 0 - 5 Minutes	Mar-03 0 - 5 Minutes	Apr-03 0 - 5 Minutes	May-03 0 - 5 Minutes	Jun-03 0 - 5 Minutes	Jul-03 0 - 5 Minutes	Aug-03 0 - 5 Minutes	Sep-03 0 - 5 Minutes
SC	CHTNSCDT	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	87.88%	100.00%	100.00%		
SC	CHTNSCLB	Local Number Portability (LNP) - Loop		100.00%		100.00%	100.00%		54.55%	100.00%	
SC	CHTNSCNO	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%		100.00%	100.00%	100.00%	100.00%	100.00%
SC	CHTNSCWA	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%			86.21%	100.00%	100.00%
SC	CLMASCAR	Local Number Portability (LNP) - Loop	76.92%	100.00%	100.00%			100.00%			81.82%
SC	CLMASCSA	Local Number Portability (LNP) - Loop									
SC	CLMASCSN	Local Number Portability (LNP) - Loop		100.00%		100.00%	100.00%	40.00%	56.25%	100.00%	100.00%
SC	CLMASCSW	Local Number Portability (LNP) - Loop									
SC	ESLYSCMA	Local Number Portability (LNP) - Loop									
SC	GNVLSCBE	Local Number Portability (LNP) - Loop									
SC	GNVLSCCH	Local Number Portability (LNP) - Loop			100.00%				100.00%	100.00%	50.00%
SC	GNVLSCDT	Local Number Portability (LNP) - Loop	60.71%	55.56%		100.00%	100.00%	100.00%	100.00%		100.00%
SC	GNVLSCWR	Local Number Portability (LNP) - Loop	100.00%			100.00%	100.00%	100.00%	100.00%	100.00%	66.67%
SC	GRERSCMA	Local Number Portability (LNP) - Loop	85.71%		66.67%	64.29%		100.00%			100.00%
SC	MNPLSCES	Local Number Portability (LNP) - Loop	100.00%	38.46%	100.00%	100.00%	100.00%	100.00%	100.00%	46.15%	100.00%
SC	SPBGSCMA	Local Number Portability (LNP) - Loop	100.00%	100.00%	22.22%	100.00%	100.00%	28.57%		68.97%	100.00%
SC	SPBGSCWV	Local Number Portability (LNP) - Loop				70.00%	100.00%			100.00%	
TN	All	Local Number Portability (LNP) - Loop	87.25%	92.36%	82.91%	87.90%	88.54%	84.08%	93.05%	96.41%	90.30%
TN	CHTGTNBR	Local Number Portability (LNP) - Loop									100.00%
TN	CHTGTNDT	Local Number Portability (LNP) - Loop									
TN	CHTGTNNS	Local Number Portability (LNP) - Loop			100.00%						
TN	CRVLTNMA	Local Number Portability (LNP) - Loop	100.00%			100.00%		100.00%		100.00%	
TN	FKLNTNMA	Local Number Portability (LNP) - Loop		60.00%	100.00%	95.45%	100.00%	100.00%	100.00%		100.00%
TN	KNVLTNBE	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	85.00%		87.50%	100.00%	100.00%
TN	KNVLTNMA	Local Number Portability (LNP) - Loop	100.00%	50.00%	100.00%	100.00%	100.00%	92.31%	100.00%	85.71%	97.44%
TN	KNVLTNWH	Local Number Portability (LNP) - Loop	100.00%	100.00%	84.00%	97.78%	89.29%	100.00%	100.00%	100.00%	100.00%
TN	KNVLTNYH	Local Number Portability (LNP) - Loop	100.00%							100.00%	
TN	MMPHTNBA	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	81.48%	92.31%	100.00%	100.00%	100.00%
TN	MMPHTNCT	Local Number Portability (LNP) - Loop		100.00%	100.00%	100.00%	92.31%	100.00%	100.00%	90.91%	
TN	MMPHTNEL	Local Number Portability (LNP) - Loop	100.00%	100.00%	91.67%	92.31%	87.50%	100.00%	100.00%	100.00%	80.00%
TN	MMPHTNGT	Local Number Portability (LNP) - Loop	95.00%	100.00%	37.50%	82.61%	93.55%	64.29%	100.00%	100.00%	33.33%
TN	MMPHTNMA	Local Number Portability (LNP) - Loop	100.00%			100.00%	87.50%	100.00%	60.00%	90.91%	
TN	MMPHTNMT	Local Number Portability (LNP) - Loop		100.00%	25.00%	100.00%	89.47%		100.00%	100.00%	100.00%
TN	MMPHTNOA	Local Number Portability (LNP) - Loop	96.15%	100.00%	100.00%	90.91%	87.88%	36.00%	84.21%	100.00%	100.00%
TN	MMPHTNSL	Local Number Portability (LNP) - Loop	100.00%	87.50%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
TN	MMPHTNST	Local Number Portability (LNP) - Loop			100.00%		83.33%	100.00%			100.00%
TN	MRBOTNMA	Local Number Portability (LNP) - Loop	88.89%	100.00%		100.00%	100.00%	66.67%		66.67%	100.00%
TN	NSVLTNAP	Local Number Portability (LNP) - Loop					83.33%	100.00%		75.00%	
TN	NSVLTNBV	Local Number Portability (LNP) - Loop		100.00%		100.00%			100.00%	100.00%	100.00%
TN	NSVLTNBW	Local Number Portability (LNP) - Loop	100.00%		100.00%	100.00%	66.67%	100.00%	100.00%	100.00%	100.00%
TN	NSVLTNCH	Local Number Portability (LNP) - Loop	72.73%		100.00%	92.31%	100.00%	75.00%	100.00%	100.00%	50.00%
TN	NSVLTNDO	Local Number Portability (LNP) - Loop	100.00%	100.00%	100.00%	100.00%	85.71%		100.00%	100.00%	100.00%
TN	NSVLTNIN	Local Number Portability (LNP) - Loop		100.00%	100.00%	100.00%	75.00%	50.00%	100.00%	100.00%	
TN	NSVLTNMC	Local Number Portability (LNP) - Loop									
TN	NSVLTNMT	Local Number Portability (LNP) - Loop	61.54%	100.00%	43.75%	74.07%	64.29%	100.00%	100.00%	100.00%	100.00%
TN	NSVLTNST	Local Number Portability (LNP) - Loop		100.00%	82.14%		100.00%	100.00%	50.00%	100.00%	14.29%
TN	NSVLTNUN	Local Number Portability (LNP) - Loop	100.00%	100.00%		62.50%	100.00%		100.00%	100.00%	100.00%
TN	NSVLTNWM	Local Number Portability (LNP) - Loop		100.00%	83.33%	66.67%	85.71%	100.00%		100.00%	
TN	OKRGTNMT	Local Number Portability (LNP) - Loop									

Proprietary Bates Pages:

BST000032 – BST000526

BellSouth Telecommunications, Inc.

MCI/WorldCom's 1st Request for Production of Documents

Item No. 1

Attachment to Interrogatory Item No. 37

FT MATRIX
PRODUCT/SERVICES
July 15, 2003

Product	PRODUCT TYPE	REQTYPE	ACT TYPE	F/T[3]	COMPLEX SERVICE	COMPLEX ORDER	PLANNED FALLOUT FOR MANUAL HANDLING[1]	EDI	TAG[2]	LENS[4]	COMMENTS
2 wire analog DID trunk port	U	F	N	No	UNE	Yes	NA	N	N	N	
2 wire analog port	U	F	N	No	UNE	No	Yes	Y	Y	Y	
2 wire ISDN digital line	U	A	N,T	No	UNE	Yes	NA	N	N	N	
2 wire ISDN digital loop	U	A	N,C,D	Yes	UNE	Yes	No	Y	Y	N	
2 wire ISDN digital loop - LNP	U	B	V,P,Q	Yes	UNE	Yes	No	Y	Y	N	
3 Way Calling	R,B	E,M	N,C,V,W,P,Q,T	Yes	No	No	No	Y	Y	Y	
3rd Party Call Block	R,B	E,M	N,C,V,W,D,P,Q,T	Yes	No	No	No	Y	Y	Y	
4 wire analog voice grade loop	U	A	T	No	UNE	Yes	Yes	Y	Y	N	
4 wire analog voice grade loop	U	A	N	Yes	UNE	Yes	No	Y	Y	N	
4 wire DS1 & PRI digital loop	U	A	N,T	No	UNE	Yes	NA	N	N	N	
4 wire DSO & PRI digital loop	U	A	N,T	No	UNE	Yes	NA	N	N	N	
4 wire ISDN DSI digital trunk ports	U	A	N,T	No	UNE	Yes	NA	N	N	N	
4-WIRE DS1 LOOP WITH CHANNELIZATION WITH PORT DS1	C	M	N,C,D,V	No	Yes	Yes	NA	N	N	N	
4-WIRE DS1 LOOP WITH CHANNELIZATION WITH PORT TRUNK SERVICE	C	M	N,C,D,V	No	Yes	Yes	NA	N	N	N	
900 Call Block	R,B	E,M	N,C,V,W,D,P,Q,T	Yes	No	No	No	Y	Y	Y	
Accupulse	C	E	N,C,T,V,W	No	Yes	Yes	NA	N	N	N	
ADSL	R,B,C	E	V,W,D	Yes	C/S	C/S	No	Y	Y	Y	NOTE THIS PRODUCT CAN BE ORDERED FOR RES/BUS AND CENTREX
Analog Data/Private Line	C	E	N,C,T,V,W,D	No	Yes	Yes	NA	N	N	N	
Area Plus	R,B	E,M	N,C,V,W,P,Q,T	Yes	No	No	No	Y	Y	Y	
ATM (ASYNCHRONOUS TRANFER MODE)	C	E	N,C,V,W,D	No	Yes	Yes	NA	N	N	N	
Basic Rate ISDN *Unbundled	U	A	T	No	Yes	Yes	Yes	Y	Y	N	
Basic Rate ISDN *Unbundled	U	A	N,V,D	Yes	UNE	Yes	No	Y	Y	Y	
Basic Rate ISDN *Unbundled	U	A	C,T	No	UNE	Yes	Yes	Y	Y	Y	
Basic Rate ISDN 2 Wire UNE P	C	M	N,C,D,V	No	Yes	Yes	NA	N	N	N	Manual
Basic Rate ISDN 2 Wire	C	E	N,C, D,T,V,P,Q	No	Yes	Yes	Yes	Y	Y	Y	
BELLSOUTH CHANNELIZED TRUNKS	C	E	N,C,D,T,V,W,P,Q	No	Yes	Yes	NA	N	N	N	
Call Block	R,B	E,M	N,C,V,W,P,Q,T	Yes	No	No	No	Y	Y	Y	
Call Forwarding	R,B	E,M	N,C,V,W,P,Q,T	Yes	No	No	No	Y	Y	Y	
Call Return	R,B	E,M	N,C,V,W,P,Q,T	Yes	No	No	No	Y	Y	Y	
Call Selector	R,B	E,M	N,C,V,W,P,Q,T	Yes	No	No	No	Y	Y	Y	
Call Tracing	R,B	E,M	N,C,V,W,P,Q,T	Yes	No	No	No	Y	Y	Y	
Call Waiting	R,B	E,M	N,C,V,W,P,Q,T	Yes	No	No	No	Y	Y	Y	
Call Waiting Deluxe	R,B	E,M	N,C,V,W,P,Q,T	Yes	No	No	No	Y	Y	Y	
Caller ID	R,B	E,M	N,C,V,W,P,Q,T	Yes	No	No	No	Y	Y	Y	
BELLSOUTH CENTREX*	C	P	N,C,D,W,T,S,B,L,V,P	No	Yes	Yes	NA	N	N	N	
UNE P CENTREX	C	M	N,C,D,V	No	Yes	Yes	NA	N	N	N	
Collect Call Block	R,B	E,M	N,C,V,W,D,P,Q,T	Yes	No	No	No	Y	Y	Y	
DID	C	N	N,C,D,V,W,T,P,Q	No	Yes	Yes	Yes	Y	Y	Y	
2-WIRE DIRECT INWARD DIAL (DID) TRUNK PORT AND VOICE GRADE LOOP COMBINATION	C	M	N,C,D,V	No	Yes	Yes	NA	N	N	N	
Digital Data Transport	U	E	N,C,T,V,W	No	UNE	Yes	NA	N	N	N	

DIGITAL DIRECT INTEGRATION TERMINATION SERVICES (DDITS) DS1	C	M	N,C,D,V	No	Yes	Yes	NA	N	N	N	
DIGITAL DIRECT INTEGRATION TERMINATION SERVICES (DDITS) TRUNK SERVICE	C	M	N,C,D,V	No	Yes	Yes	NA	N	N	N	
Directory Listing Indentions	B,U	B,C,E,F,J,M,N	N,C,T,R,V,W,P,Q	No	No	No	Yes	Y	Y	Y	
Directory Listings (simple)	R,B,U	B,C,E,F,J,M,N	N,C,R,V,W,P,Q	Yes	No	No	No	Y	Y	Y	
Directory Listings (simple)	R,B,U	B,C,E,F,J,M,N	T	No	No	No	Yes	Y	Y	N	
Directory Listings Captions	R,B,U	B,C,E,F,J,M,N	N,C,T,R,V,W,P,Q	No	No	Yes	Yes	Y	Y	N	
DIFFERENT PREMISE ADDRESS (DPA)	C	E	N,C,D,V,W,T	No	Yes	Yes	NA	N	N	N	
DS1Loop	U	A	N,D,V	Yes	UNE	Yes	No	Y	Y	Y	
DS3	U	A	N,C,V	No	UNE	Yes	NA	N	N	N	
DSO Loop	U	A	N,D,V	Yes	UNE	Yes	No	Y	Y	Y	
DSO Loop	U	A	C,T	No	No	No	Yes	Y	Y	Y	
Enhanced Caller ID	R,B	E	C,D,N,V,W,P,Q,T	Yes	No	No	No	Y	Y	Y	
Enhanced Extended Links (EELS)	U	A	C,D,N,T,V	Yes	No	No	No	Y	Y	Y	
ESSX	C	P	C,D,T,V,S,B,W,L,P,Q	No	Yes	Yes	NA	N	N	N	
Flat Rate/Business	B	E, M	C,D,N,V,W,T Y,B,L,S,D,T,P,Q	Yes	No	No	No	Y	Y	Y	
Flat Rate/Residence	R	E, M	C,D,N,V,W,T Y,B,L,S,D,T,P,Q	Yes	No	No	No	Y	Y	Y	
FLEXSERV	C	E	N,C,D,T,V,W,P,Q	No	Yes	Yes	NA	N	N	N	
Frame Relay	C	E	N,C,D,V,W	No	Yes	Yes	NA	N	N	N	
FX/FCO	C	E	N,C,D,T,V,W,P,Q	No	Yes	Yes	NA	N	N	N	
UNE P FX/FCO (RES,BUS,PBX) (NOTE: THIS PRODUCT WILL NOT BE AVAILABLE UNTIL 08--01-02	C	M	N,C,V,D,T,S,B,L,W,Y,P,Q	No	Yes	Yes	NA	N	N	N	
Ga. Community Calling	R,B	M	C,D,N,V,W,P,Q	No	No	No	NA	N	N	N	
Ga. Community Calling	R,B	E	T	No	No	No	Yes	Y	Y	N	
HDSL	U	A	T	No	UNE	No	Yes	Y	Y	N	
HDSL	U	A	N,C,D,V	Yes	UNE	No	No	Y	Y	Y	
Hunting MLH	R,B	E, M	C,D,N,T,V,W	No	C/S[4]	C/S	Yes	Y	Y	N	
Hunting Series Completion	R,B	E, M	C,D,N,V,W	Yes	C/S	C/S	No	Y	Y	Y	
Hunting Series Completion	R,B	E, M	T	Yes	No	No	No	Y	Y	Y	
INP to LNP Conversion	U	C	C	No	UNE	Yes	Yes	Y	Y	N	
LightGate	C	E	N,C,D,T,V,W,P,Q	No	Yes	Yes	NA	N	N	N	
Line Sharing	U	A	N,C,D,V,P,Q	Yes	UNE	No	No	Y	Y	Y	
Line Splitting	U	A	N,C,D	Yes	UNE	No	No	Y	Y	Y	
LNP With Complex Listing	U	C	P,V,Q	No	UNE	Yes	Yes	Y	Y	N	
LNP with Complex Services	U	C	P,V,Q	No	UNE	Yes	Yes	Y	Y	N	
LNP with Partial Migration	U	C	P,V,Q	No	UNE	Yes	Yes	Y	Y	N	
LNP	U	B,C	P,V,Q	Yes	UNE	Yes	No	Y	Y	Y	
Local Number Portability (INP to LNP)	U	C	C	No	UNE	No	Yes	Y	Y	N	
INP	U	B,C	D	No	UNE	No	Yes	Y	Y	N	
Loop+LNP	U	B	V,P,Q	Yes	UNE	No	No	Y	Y	Y	
Measured Rate/Bus	R,B	E,M	C,D,N,V,W,P,Q,T Y,B,L,S,D	Yes	No	No	No	Y	Y	Y	
Measured Rate/Res	R,B	E,M	C,D,N,V,W,P,Q,T Y,B,L,S,D	Yes	No	No	No	Y	Y	Y	

FT MATRIX
PRODUCT/SERVICES
July 15, 2003

Megalink POINT TO POINT	C	E	N,V,W,T,D,C,P,Q	No	Yes	Yes	NA	N	N	N	
Megalink CHANNELIZED	C	E	N,V,W,T,D,C,P,Q	No	Yes	Yes	NA	N	N	N	
Memory Call	R,B	E, M	C,D,N,V,W,P,Q,T	Yes	No	No	No	Y	Y	Y	
Memory Call Ans. Svc.	R,B	E, M	C,D,N,V,W,P,Q,T	Yes	No	No	No	Y	Y	Y	
Multiserv	C	P	N,C,D,T,V,S,B,W,L,P,Q	No	Yes	Yes	NA	N	N	N	
Native Mode LAN Interconnection (NMLI)	C	E	N,C,D,V,W	No	Yes	Yes	NA	N	N	N	
Off-Prem Stations	C	E	N,C,D,V,W,T,P,Q	No	Yes	Yes	NA	N	N	N	
Optional Calling Plan	R,B	E, M	N,V,P,Q,W	Yes	No	No	No	Y	Y	Y	
Package/Complete Choice and Area Plus	R,B	E, M	N,C,V,W,P,Q	Yes	No	No	No	Y	Y	Y	
Package/Complete Choice and Area Plus	R,B	E, M	T	No	No	No	Yes	Y	Y	N	
Pathlink/ Primary Rate ISDN	C	E	N,C,D,T,V,W,P,Q	No	Yes	Yes	NA	N	N	N	
4-WIRE ISDN PRI UNE COMBO	C	M	N,C,D,V	No	Yes	Yes	NA	N	N	N	
Pay Phone Provider	B	E,M	C,D,T,N,V,W,P,Q	Yes	No	No	No	Y	Y	Y	
PBX Standalone Port	C	F	N,C,D	No	Yes	Yes	Yes	Y	Y	N	
PBX Trunks	C	E	N,C,D,V,W,T,P,Q	No	Yes	Yes	Yes	Y	Y	N	
PIC/LPIC Change	R,B,C	E,M	C,V,P,Q,T	Yes	No	No	No	Y	Y	Y	
PIC/LPIC Freeze	R,B,C	E,M	N,C,V,P,Q,T	Yes	No	No	No	Y	Y	Y	
PORT/LOOP COMBO 2-WIRE PBX	C	M	N,C,D,V	No	No	No	Yes	Y	Y	N	
Port/Loop Simple	U	M	N,C,D,T,V,S,B,,L,P,Q,Y	Yes	No	No	No	Y	Y	Y	
Preferred Call Forward	R,B,U	E,M	C,D,N,V,W,P,Q,T	Yes	No	No	No	Y	Y	Y	
RCF Basic	R,B	E,M	N,D,W,V,P,Q,T	No	No	No	Yes	Y	Y	N	
Remote Access to CF	R,B	E,M	C,D,N,V,W,P,Q,T	Yes	No	No	No	Y	Y	Y	
Repeat Dialing	R,B	E,M	C,D,N,V,W,P,Q,T	Yes	No	No	No	Y	Y	Y	
Ringmaster	R,B	E,M	C,D,N,V,W,P,Q,T	Yes	No	No	No	Y	Y	Y	
Smartpath	R,B	E	C,D,T,N,V,W	No	Yes	Yes	NA	N	N	N	
SmartRING	C	E	N,D,C,V,W	No	Yes	Yes	NA	N	N	N	
Speed Calling	R,B	E,M	C,D,N,V,W,P,Q,T	Yes	No	No	No	Y	Y	Y	
Synchronet	C	E	N,D,C,V,W	No	Yes	Yes	Yes	Y	Y	N	
Three Way Call Block	R,B	E,M	C,D,N,V,W,P,Q,T	Yes	No	No	No	Y	Y	N	
Tie Lines	C	E	N,C,D,V,W,T,P,Q	No	Yes	Yes	NA	N	N	N	
TOLL FREE DIALING (TFD)	C	E	N,C,D,V,W	No	Yes	Yes	NA	N	N	N	
Touchtone	R,B	E	C,D,N,V,W,P,Q,T	Yes	No	No	No	Y	Y	Y	
Unbundled Loop-Analog 2W, SL1, SL2	U	A,B	D,N,V	Yes	UNE	No	No	Y	Y	Y	
Unbundled Loop-Analog 2W, SL1,SL2	U	A,B	C **	Yes	UNE	No	Yes	Y	Y	Y	
Unbundled Universal Digital Channel (UDC) Loop	U	A	N,D	Yes	UNE	No	No	Y	Y	Y	
WATS*	C	E	W,D,N,C,V	No	Yes	Yes	NA	N	N	N	
XDSL	U	A,B	N,C,V,D	Yes	UNE	No	No	Y	Y	Y	
XDSL	U	A,B	T	No	No	No	Yes	Y	Y	N	

Products:
U=UNE
C=Complex
R=Residence

REQ TYPE:
A=Loop Service
B=Loop with LNP/INP
C=LNP/INP
E=Resale

F=Port Service
J=Directory Listing
N=DID Resale
P=CENTREX Resale

ACT TYPE:
D=Disconnection
T=Outside move of end user or Inside Move
R=Record activity is for ordering administrative changes
V=Conversion of service to new LSP as specified
W=Conversion of service to new LSP "as is";
S=Suspend
B=Restore
Y=Deny
L=Seasonal Suspend
P=Partial Migration (Initial)
Q=Partial Migration (Subsequent)

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

Note 2:
The TAG column includes those LSRs submitted via Robo TAG.

Note 3:
For all services that indicate 'No' for flow-through, the following reasons, in addition to complex services or complex order, also prompt manual handling:
Expedites from CLEC's
Special Pricing Plans (If Special Pricing Plan is not addressed when issuing LSR)
Partial Migrations (although conversions -as-is flow through for issued 9 unless migrating the main TN and a new TN must be assigned)
Class of Service invalid in certain states with some TOS,. (Examples: Government, Cannot change when changing main TN on C activity)
Pendfing Order Review (Examples: Any pending service order (PSO) not related to currrent PON, pending service order with multiple service orders related to current PON and SUP received)
More than 25 business lines and more than 15 loops
CSR inaccuracies such as invalid or missing CSR data in CRIS
Directory Listings with Indetions or Captions
Transfer of Call Option for end user when new TN not yet posted to CRIS

Note 4:
Services with C/S in the Complex Service and/or the Complex Order columns can be either complex or simple

Note 5:
The following list of items will not flow through:
LSRs with Project or RPON fields populated
**SL1 REQTYP A, ACT C, LNA N, C, or D
**SL2 REQTYP A, ACT C, LNA C
REQTYP B, C, ACT P when migrating main telephone number
REQTYP B, C ACT V with Complex
REQTYP E, M, N and P; ACT = V, LNA = V (LNP to Resale/UNE Switched Combinations)

Proprietary Bates Pages:

BST000532 – BST000590

BellSouth Telecommunications, Inc.

MCI/WorldCom's 1st Request for Production of Documents

Item No. 1

Attachment to Interrogatory Item No. 73

Line Splitting
Collaborative Product Matrix

Phase 1	Product	Description	Characteristics / Conditions						Notes
			Splitter Provider	Physical Work by CO	Physical Work by I&M	Voice Provider Before	Voice Provider After	Service Order Type	
Available 6/19/01	Change existing UNEP Switched Combination to Line Splitting	Change existing Switched Combo to Line Splitting by changing to Port/Loop/2Collocation xConnections & where the C/DLEC provides the Splitter	C/DLEC	Y	If Spare Pair rsvd via LMU	CLEC	CLEC	C	
Collaborative Phase 2 Collaborative Priority as of 8/30/01	**Product**	**Description**	**Characteristics / Conditions**						**Notes**
			Splitter Provider	Physical Work by CO	Physical Work by I&M	Voice Provider Before	Voice Provider After	Service Order Type	
GA 11900-U Rqmt 1	Change existing UNEP Switched Combination to Line Splitting	Change existing Switched Combo to Line Splitting by changing to Port/Loop/DLEC Pair & 1 splitter connection, where **BST** provides the Splitter	BST	Y	If Spare Pair rsvd via LMU	CLEC	CLEC	C	Internal Team 1st draft concept design complete 9/4/01
2	BellSouth retail voice to line splitting	Change an existing BellSouth retail voice service to CLEC Voice with Line Splitting. BST Splitter is Port/Loop/DLEC Pair & 1 splitter connection; DLEC Splitter is Port/Loop/2Collocation xConnections.	BST or C/DLEC	Y	If Spare Pair rsvd via LMU	BST	CLEC	D & N	Internal Team 1st concept design complete 9/11/01
3	Line Sharing to CLEC Voice - data provider remaining	Change an existing Line Sharing service to CLEC Voice with Line Splitting where the data provider remains the same. BST Splitter is Port/Loop/DLEC Pair & 1 splitter connection; DLEC Splitter is Port/Loop/2Collocation xConnections.	BST or C/DLEC	N	N	BST	CLEC	D & N	Splitter connection does not change. Right of First Refusal applies (ROFR). Internal Team 1st concept design complete 9/11/01
4	Line Sharing to CLEC Voice - data provider changing	Change an existing Line Sharing service to CLEC Voice with Line Splitting where the data provider changes. BST Splitter is Port/Loop/DLEC Pair & 1 splitter connection; DLEC Splitter is Port/Loop/2Collocation xConnections.	BST or C/DLEC	Y	Y if Owning DLEC exercises ROFR	BST	CLEC	D & N	Right of First Refusal applies (ROFR). Internal Team 1st concept design complete 9/11/01
5	New service with Line Splitting where no service currently exists	New connect order where the Telephone Number does not exist for the end use. BST Splitter is Port/Loop/DLEC Pair & 1 splitter connection; DLEC Splitter is Port/Loop/2Collocation xConnections.	BST or C/DLEC	Y	If Spare Pair rsvd via LMU or where svc has never existed	NA	CLEC	N	TN does not exist for the customer
6	Add CLEC Voice to existing stand alone DSL UNE Loop	Change service type of existing DSL UNE Loop to Line Splitting loop and add CLEC Voice. Example: DLEC providing DSL via UCL UNE & voice provided by BellSouth via a separate loop. The DLEC wants to change from current UNE service to Line Splitting by moving the voice onto the existing DSL UNE loop. BST Splitter is Port/Loop/DLEC Pair & 1 splitter connection; DLEC Splitter is Port/Loop/2Collocation xConnections.	BST or C/DLEC	Y	?	BST	CLEC	D & N	
7	Change existing Resale Voice to Line Splitting	Change Resale Voice to Line Splitting. BST Splitter is Port/Loop/DLEC Pair & 1 splitter connection; DLEC Splitter is Port/Loop/2Collocation xConnections.	BST or C/DLEC	Y	If Spare Pair rsvd via LMU	CLEC	CLEC	D & N ?	Same CLEC or different?

Line Splitting
Collaborative Product Matrix

Phase 1	Product	Description	Characteristics / Conditions						Notes
			Splitter Provider	Physical Work by CO	Physical Work by I&M	Voice Provider Before	Voice Provider After	Service Order Type	
8	Move existing Line Splitting service to a new location (T&F orders)	Move existing service with no change.	BST or C/DLEC	Y	Y	CLEC	CLEC	T & F	

Line Splitting Options Delivered to Date
Last Update: 12-12-02

Ref	Change		Voice Provider		Data Provider		CO Work	1st Right	DLEC	Collaborative	Phase
Num	From Existing Service	To New Service	Change	Same	Change	Same	RQD	Of Refusal	Notification	Priority	Delivered
1	CO HFS – BST owned	Line Splitting – BST owned	X			X	No	No	No	3	2
2	CO HFS – BST owned	Line Splitting – BST owned	X		X			No	Yes	4	2
3	CO HFS – BST owned	Line Splitting – DLEC owned	X			X		No	No	3	2
4	CO HFS – BST owned	Line Splitting – DLEC owned	X		X			No	Yes	4	2
5	CO HFS – DLEC owned	Line Splitting – BST owned	X			X		No	No	3	2
6	CO HFS – DLEC owned	Line Splitting – BST owned	X		X			No	Yes	4	2
7	CO HFS – DLEC owned	Line Splitting – DLEC owned	X			X	No	No	No	3	2
8	CO HFS – DLEC owned	Line Splitting – DLEC owned	X		X			No	Yes	4	2
23	UNE-P	Line Splitting – BST owned		X	New	New		No	No	1	2
25	UNE-P	Line Splitting – DLEC owned		X	New	New		No	No	Avail 6/19/01	1
27	BellSouth Retail	Line Splitting – BST owned	X		New	New		No	No	2	2
28	BellSouth Retail	Line Splitting – DLEC owned	X		New	New		No	No	2	2
17	Line Splitting – DLEC owned	Line Splitting - BST owned	X		X			No	N/A	10	3
19	Line Splitting – DLEC owned	Line Splitting - BST owned		X	X			No	N/A	10	3
20	Line Splitting – DLEC owned	Line Splitting – DLEC owned	X			X	No	No	N/A	11	3
21	Line Splitting – DLEC owned	Line Splitting – DLEC owned	X		X			No	N/A	11	3
22	Line Splitting – DLEC owned	Line Splitting – DLEC owned		X	X			No	N/A	11	3
24	UNE-P	Line Splitting – BST owned	X		New	New		No	No	8	3
26	UNE-P	Line Splitting – DLEC owned	X		New	New		No	No	8	3
33	Resale	Line Splitting – BST owned		X	New	New		No	No	7	3
34	Resale	Line Splitting – DLEC owned		X	New	New		No	No	7	3
35	Resale	Line Splitting – BST owned	X		New	New		No	No	7	3
36	Resale	Line Splitting – DLEC owned	X		New	New		No	No	7	3

NOTE:
1. Ref number 25 can be ordered mechanically all other items must be ordered manually.
2. Phase 2 effective as of 11/9/01
3. Phase 3 effective as of 7/19/02

Line Splitting Options To Be Developed
Last Update: 12-12-02

Ref	Change		Voice Provider		Data Provider		CO Work	1st Right	DLEC	Collaborative
Num	From Existing Service	To New Service	Change	Same	Change	Same	RQD	Of Refusal	Notification	Priority
9	Line Splitting – BST owned	Line Splitting – BST owned	X			X	No	No	N/A	10
10	Line Splitting – BST owned	Line Splitting – BST owned	X		X			No	N/A	10
11	Line Splitting – BST owned	Line Splitting – BST owned		X	X			No	N/A	10
12	Line Splitting – BST owned	Line Splitting – DLEC owned	X			X		No	N/A	11
13	Line Splitting – BST owned	Line Splitting – DLEC owned	X		X			No	N/A	11
14	Line Splitting – BST owned	Line Splitting – DLEC owned		X		X		No	N/A	11
15	Line Splitting – BST owned	Line Splitting – DLEC owned		X	X			No	N/A	11
16	Line Splitting – DLEC owned	Line Splitting – BST owned	X			X		No	N/A	10
18	Line Splitting – DLEC owned	Line Splitting - BST owned		X		X		No	N/A	10
29	New Service	Line Splitting – BST owned	New	New	New	New		No	No	5
30	New Service	Line Splitting – DLEC owned	New	New	New	New		No	No	5
31	DLEC Stand-a-Lone UNE	Line Splitting – BST owned	New	New		X		No	No	6
32	DLEC Stand-a-Lone UNE	Line Splitting – DLEC owned	New	New		X		No	No	6
37	Move Existing (T&F)	New Address		X		X		No	N/A	9

2003 Shared Loop Work Plan

	A	B	C	D	E	F
1	**Collaborative Priority**	**PROJECT/INITIATIVE**	**LEVEL OF EFFORT**	**TARGET START DATE**	**TARGET END DATE**	**Definition/Scope**
2	1	CO Sync Test	L	April	Q3	CLECs have requested that BellSouth provide an option for BellSouth to perform a "sync test" with the CLEC's DSLAM. BellSouth uses several test sets to test its own ADSL. BellSouth's test equipment may or may not be able to test the DLEC's data signal. Some DLECs may use different data equipment, with different protocols, that require different test equipment. BellSouth will not guarantee that its test equipment is compatible with any CLEC DSLAM nor will BellSouth consider purchasing different test equipment. This CLEC request presents an opportunity for two premium tests from the CO. 1) ADSL Sync Test (AST) At Turn-up
3	2	TNPSO - Ph 2	L	Jan	2Q (Apr)	The scope of this project combines two initiatives: 1) Shared Loop order & voice connect order carry the same due date, 2) SL order & feature order (not a line connect) carry the same due date &/or can issue the SL order when a retail order is pending.
4	3	ULMPA: Loop Mod Pre-Approved	S	Jan	1Q	Complete the process flow diagram & business rules. Initiated by Covad via CCP on 1/17/02. CR0622, FTTF-33, CCP priority # 9 as of 12/11/02.
5	4	Go Ahead Notification	M	May	3Q	GAN would provide an email notice to the DLEC when the CO wiring was complete. This project is proposed as a billable enhancement. This initiative developed out of the Collaborative request from Covad to address Migration issues.
6	5	NTF: No Trouble Found Billing	L	April	Q3	Develop a manual process to enable billing for NTF on Dispatch In for all Shared Loops (CO Based UNE Line Sharing & Line Splitting) & UNE Non-Designed Loops; and, for Dispatch Out for all Shared Loops (CO & RT Based UNE Line Sharing and UNE Line Splitting). Note: NTF for Dispatch Out for UNE Non-Designed Loops is operational.

2003 Shared Loop Work Plan

	A	B	C	D	E	F
1	**Collaborative Priority**	**PROJECT/INITIATIVE**	**LEVEL OF EFFORT**	**TARGET START DATE**	**TARGET END DATE**	**Definition/Scope**
7	6	CO Line Sharing on resold lines	L	TBD	TBD	CLECs have requested BellSouth to investigate providing a CO based line sharing for the resale environement
8	7	Defective Splitters/Cable	M	Jan	1Q	Develop processes to handle defective BellSouth splitter or BellSouth wiring discovered during EU Activation. This initiative includes records reconciliation
9	7	RS Line Sharing on resold lines	L	TBD	TBD	CLECs have requested BellSouth to investigate providing a RS based line sharing for the resale environement
10	8	Line Splitting to Line Sharing Service Migration	L	TBD	TBD	Colaborative has requested that Bellsouth develop and implement a process allowing an EU's combined voice and data service to be migrated from a line splitting service to a line sharing service without disconnecting either the voice or data portion of the service. A migration scenario from line sharing to line splitting is already available via manual service order. An end user's data service should not be disrupted due to a change in the voice service provider.
11	9	Line Splitting in the RS	L	4Q03	TBD	CLECs have requested BellSouth to investigate providing a line splitting product for the RS-HFS environement
12	10	PG-DAML: Pair Gain DAML	S	Feb-Mar	2Q	Deliver "conditionally qualified" capability for the RS environment, as with copper DAML
13	11	DLEC Notification Ph 2 (HAL)	M	July	TBD	Mechanize the processes of TN chg & FRN/DLEC Notification letter and change process from an email notifictaion to a web posting notification as done with other lost notifications.
14	12	Line Sharing DOS Mechanization	S	Jan	TBD	ENC UR Doc = 21380 CRB Ref #: 3110 CCP Change Request #: CR0676 Prioritized @ #5 12/11/02

Line Sharing Subsequent Order Matrix
Rev 13 10/18/2001

Service Order	DT	FAC	LS	Offer UNE	BellSouth Notification	Collaborative Status
LS				N/A		
Denial	X			N/A	Notification not required	Agreement
Suspend	X			N/A	Line Sharing remains active	Agreement
Disconnect (Voice EU Relinquishes Loop)	X	X	X		Line share manual DLEC notification to DLEC to provide opportunity to purchase the existing loop as a stand-alone UNE	Agreement
F and T (Move **F**rom **T**o) (Voice EU Relinquishes Loop)	X	X	X		Line share manual DLEC notification to DLEC to provide opportunity to purchase the existing loop at the original location as a stand-alone UNE	Agreement
TN Change				N/A	Line share manual DLEC change of service notification to DLEC	Agreement
DLEC LS to BST ADSL (Change of data provider) (Voice EU does not Relinquish Loop)				N/A	Line share manual DLEC loss of service notification to DLEC Facility first right of refusal does not apply because voice line is not being disconnected	Agreement
DLEC to DLEC conversion (Change of data provider only) (Voice EU does not Relinquish Loop)				N/A	Line share manual DLEC loss of service notification to DLEC Facility first right of refusal does not apply because voice line is not being disconnected	Agreement
BST ADSL to DLEC LS (Change of data provider only) (Voice EU does not Relinquish Loop)				N/A	Notification not required	Agreement
BST voice to CLEC voice (Disconnect of data and voice End User relinquishes loop)	X	X	X	X	Notification not required Refer to the BST to CLEC Voice Change	
Transfer of Contract (Billing name change)				N/A	Notification not required	Agreement
Change request by customer to add a non-compatible service				N/A	Edits are in place to flag sales rep of line share incompatibility Order will be refused No notification to DLEC	Agreement

indicates presence
X indicates lack of presence
SVC - Service
DT - Dial tone
FAC - Facility
LS - Line Share

Baselined 11/08/01

Proprietary Bates Pages:

BST000599 – BST000701

BellSouth Telecommunications, Inc.

MCI/WorldCom's 1st Request for Production of Documents

Item No. 1

Attachment to Interrogatory Item No. 104

BellSouth Wire Centers in Tennessee with Collocation

Exhibit 104-a

No.	CLLI	Exchange	Wire Center Name	Street Address	Wire Center City	Zip Code
1	ATHNTNMA	ATHENS	ATHENS	202 HILL STREET	ATHENS	37303
2	CHTGTNBR	CHATTANOOGA	CHATTANOOGA - BRAINERD	505 AIRPORT ROAD	CHATTANOOGA	37421
3	CHTGTNDT	CHATTANOOGA	CHATTANOOGA - DODDS	2605 DUNCAN AVENUE	CHATTANOOGA	37404
4	CHTGTNMV	CHATTANOOGA	CHATTANOOGA - MIDDLE VALLEY	MIDDLE VALLEY	HIXSON	37343
5	CHTGTNNS	CHATTANOOGA	CHATTANOOGA - NINTH STREET	300 EAST MARTIN LUTHER KING BLVD.	CHATTANOOGA	37403
6	CHTGTNRB	CHATTANOOGA	CHATTANOOGA - RED BANK	105 WEST LEAWOOD AVENUE	CHATTANOOGA	37415
7	CHTGTNRO	CHATTANOOGA	CHATTANOOGA - ROSSVILLE	CHICKAMAUGA AVENUE	ROSSVILLE	30741
8	CHTGTNSE	CHATTANOOGA	CHATTANOOGA - ST. ELMO	4608 ST. ELMO AVENUE	CHATTANOOGA	37409
9	CLEVTNMA	CLEVELAND	CLEVELAND	549 BROAD STREET	CLEVELAND	37311
10	CLMATNMA	COLUMBIA	COLUMBIA	904 SOUTH HIGH STREET	COLUMBIA	38401
11	CLVLTNMA	CLARKSVILLE	CLARKSVILLE	417 MADISON STREET	CLARKSVILLE	37043
12	CRVLTNMA	COLLIERVILLE	COLLIERVILLE	105 WALNUT STREET	COLLIERVILLE	38017
13	FKLNTNCC	FRANKLIN	FRANKLIN - COOL SPRINGS	232 SEABORD LANE	FRANKLIN	37064
14	FKLNTNMA	FRANKLIN	FRANKLIN	327 CUMMINS STREET	FRANKLIN	37064
15	GALLTNMA	GALLATIN	GALLATIN	214 WEST SMITH STREET	GALLATIN	37066
16	GDVLTNMA	GOODLETTSVILLE	GOODLETTSVILLE	412 NORTH MAIN STREET	GOODLETTSVILLE	37072
17	GTWSTNSW	MEMPHIS	MEMPHIS - SOUTHWIND	3355 PLAYERS CLUB PARKWAY	MEMPHIS	38138
18	HDVLTNMA	HENDERSONVILLE	HENDERSONVILLE	121 WALTON FERRY ROAD	HENDERSONVILLE	37075
19	JCSNTNMA	JACKSON	JACKSON - MAIN	315 EAST COLLEGE STREET	JACKSON	38301
20	JCSNTNNS	JACKSON	JACKSON - NORTHSIDE	OLD HICKORY BLVD.	JACKSON	38301
21	KNVLTNBE	KNOXSVILLE	KNOXSVILLE - BEARDEN	4605 LYONS VIEW PIKE	KNOXVILLE	37919
22	KNVLTNFC	KNOXSVILLE	KNOXSVILLE - FOUNTAIN CITY	135 LYNNWOOD DRIVE	KNOXVILLE	37918
23	KNVLTNMA	KNOXSVILLE	KNOXSVILLE - MAIN	410 MAGNOLIA STREET	KNOXVILLE	37917
No.	**CLLI**	**Exchange**	**Wire Center Name**	**Street Address**	**Wire Center City**	**Zip Code**

No.	CLLI	Exchange	Wire Center Name	Street Address	Wire Center City	Zip Code
24	KNVLTNWH	KNOXSVILLE	KNOXSVILLE - WEST HILLS	1701 SOUTH WINSTON ROAD	KNOXVILLE	37919
25	KNVLTNYH	KNOXSVILLE	KNOXSVILLE - YOUNG HIGH	131 YOUNG HIGH PIKE	KNOXVILLE	37920
26	LBNNTNMA	LEBANON	LEBANON	230 WEST GAY STREET	LEBANON	37087
27	MAVLTNMA	MARYVILLE	MARYVILLE	285 SOUTH HALL ROAD	ALCOA	37701
28	MMPHTNBA	MEMPHIS	MEMPHIS - BARTLETT	5530 STAGE ROAD	MEMPHIS	38128
29	MMPHTNCK	MEMPHIS	MEMPHIS - CHEROKEE	3106 BARRON	MEMPHIS	38111
30	MMPHTNCT	MEMPHIS	MEMPHIS - CHICKASAW	105 SOUTH HOLMES STREET	MEMPHIS	38111
31	MMPHTNEL	MEMPHIS	MEMPHIS - EASTLAND	4960 BLACK ROAD	MEMPHIS	38117
32	MMPHTNFR	MEMPHIS	MEMPHIS - FRAYSER	1535 DELLWOOD AVENUE	MEMPHIS	38127
33	MMPHTNGT	MEMPHIS	MEMPHIS - GERMANTOWN	2101 GERMANTOWN ROAD	GERMANTOWN	38138
34	MMPHTNHP	MEMPHIS	MEMPHIS - HUMPHREYS	6363 HUMPHREYS BLVD.	MEMPHIS	N/A
35	MMPHTNMA	MEMPHIS	MEMPHIS - MAIN	201 COURT AVENUE	MEMPHIS	38103
36	MMPHTNMT	MEMPHIS	MEMPHIS - MIDTOWN	1430 MADISON AVENUE	MEMPHIS	38104
37	MMPHTNOA	MEMPHIS	MEMPHIS - OAKVILLE	3705 OUTLAND ROAD	MEMPHIS	38118
38	MMPHTNSL	MEMPHIS	MEMPHIS - SOUTHLAND	4230 FARONIA ROAD	MEMPHIS	38116
39	MMPHTNST	MEMPHIS	MEMPHIS - SOUTHSIDE	1389 SOUTH LAUDERDALE ROAD	MEMPHIS	38106
40	MMPHTNWW	MEMPHIS	MEMPHIS - WESTWOOD	4787 WEAVER ROAD	MEMPHIS	38109
41	MRBOTNMA	MURFREESBORO	MURFREESBORO	221 NORTH CHURCH STREET	MURFREESBORO	37130
42	MRTWTNMA	MORRISTOWN	MORRISTOWN	301 EAST MAIN STREET	MORRISTOWN	37814
43	NSVLTNAP	NASHVILLE	NASHVILLE - AIRPORT	1335 MURFREESBORO ROAD	NASHVILLE	37217
44	NSVLTNBH	NASHVILLE	NASHVILLE - BURTON HILLS	1630 HARDING PLACE	NASHVILLE	37215
45	NSVLTNBV	NASHVILLE	NASHVILLE - BELLEVUE	907 TODD PRIES DRIVE	NASHVILLE	37221
46	NSVLTNBW	NASHVILLE	NASHVILLE - BRENTWOOD	102 HIGH LEA DRIVE	BRENTWOOD	37027
47	NSVLTNCD	NASHVILLE	NASHVILLE - COCKRILL BD	6405 CENTENNIAL BLVD.	NASHVILLE	37209

48	NSVLTNCH	NASHVILLE	NASHVILLE - CRIEVE HALL	409 ELYSIAN FIELDS	NASHVILLE	37211
49	NSVLTNDO	NASHVILLE	NASHVILLE - DONELSON	158 McGAVOCK PIKE	NASHVILLE	37214
50	NSVLTNHH	NASHVILLE	NASHVILLE - HICKORY HOLLOW	5259 CAIN RIDGE ROAD	ANTIOCH	37013
51	NSVLTNIN	NASHVILLE	NASHVILLE - INGLEWOOD	1224 GALLATIN ROAD	NASHVILLE	37206
52	NSVLTNMC	NASHVILLE	NASHVILLE - MADISON	209 WOODRUFF STREET	MADISON	37115
53	NSVLTNMT	NASHVILLE	NASHVILLE - MAIN	185 2nd AVENUE NORTH	NASHVILLE	37201
54	NSVLTNST	NASHVILLE	NASHVILLE - SHARONDALE	3202 HILLSIDE DRIVE	NASHVILLE	37212
55	NSVLTNUN	NASHVILLE	NASHVILLE - UNIVERSITY	2222 ELLISTON PLACE	NASHVILLE	37203
56	NSVLTNWM	NASHVILLE	NASHVILLE - WEST MEADE	904 DAVIDSON DRIVE	NASHVILLE	37205
57	OKRGTNMT	OAK RIDGE	OAK RIDGE	119 MILAN WAY	OAK RIDGE	37830
58	SMYRTNMA	SMYRNA	SMYRNA	104 DIVISON STREET	SMYRNA	37164
59	SVVLTNMT	SEVIERVILLE	SEVIERVILLE	110 SOUTH BOULEVARD WAY	SEVIERVILLE	37862
60	TLLHTNMA	TULLAHOMA	TULLAHOMA	208 NORTH JACKSON	TULLAHOMA	37388

Types of Collocation Arrangements in Tennessee by Wire Center Exhibit 104-b

No.	CLLI	Wirecenter City	Wire Center Name	Physical Collo	Virtual Collo
1	ATHNTNMA	ATHENS	ATHENS	1	0
2	CHTGTNBR	CHATTANOOGA	CHTG - BRAINERD	11	1
3	CHTGTNDT	CHATTANOOGA	CHTG - DODDS	9	1
4	CHTGTNMV	HIXSON	CHTG - MIDDLE VALLEY	2	0
5	CHTGTNNS	CHATTANOOGA	CHTG - NINTH STREET	13	2
6	CHTGTNRB	CHATTANOOGA	CHTG - RED BANK	4	0
7	CHTGTNRO	ROSSVILLE	CHTG - ROSSVILLE	3	0
8	CHTGTNSE	CHATTANOOGA	CHTG - ST. ELMO	1	0
9	CLEVTNMA	CLEVELAND	CLEVELAND	3	0
10	CLMATNMA	COLUMBIA	COLUMBIA	2	0
11	CLVLTNMA	CLARKSVILLE	CLARKSVILLE	4	0
12	CRVLTNMA	COLLIERVILLE	COLLIERVILLE	8	0
13	FKLNTNCC	FRANKLIN	FRANKLIN - COOL SPRINGS	0	1
14	FKLNTNMA	FRANKLIN	FRANKLIN	11	1
15	GALLTNMA	GALLATIN	GALLATIN	4	1
16	GDVLTNMA	GOODLETTSVILLE	GOODLETTSVILLE	6	0
17	GTWSTNSW	MEMPHIS	MMPH - SOUTHWIND	1	0
18	HDVLTNMA	HENDERSONVILLE	HENDERSONVILLE	6	1
19	JCSNTNMA	JACKSON	JACKSON - MAIN	4	0
20	JCSNTNNS	JACKSON	JACKSON - NORTHSIDE	3	0
21	KNVLTNBE	KNOXVILLE	KNVL - BEARDEN	8	0
22	KNVLTNFC	KNOXVILLE	KNVL - FOUNTAIN CY	5	0
23	KNVLTNMA	KNOXVILLE	KNVL - MAIN	15	2
24	KNVLTNWH	KNOXVILLE	KNVL - WEST HILLS	8	0
25	KNVLTNYH	KNOXVILLE	KNVL - YOUNG HIGH	7	0
26	LBNNTNMA	LEBANON	LEBANON	4	1
27	MAVLTNMA	ALCOA	MARYVILLE	6	0
28	MMPHTNBA	MEMPHIS	MMPH - BARTLETT	11	1
29	MMPHTNCK	MEMPHIS	MMPH - CHEROKEE	2	0
30	MMPHTNCT	MEMPHIS	MMPH - CHICKASAW	10	1
31	MMPHTNEL	MEMPHIS	MMPH - EASTLAND	11	2
32	MMPHTNFR	MEMPHIS	MMPH - FRAYSER	1	0
33	MMPHTNGT	GERMANTOWN	MMPH - GERMANTOWN	11	2
34	MMPHTNHP	MEMPHIS	MMPH - HUMPHREYS	1	0
35	MMPHTNMA	MEMPHIS	MMPH - MAIN	18	2
36	MMPHTNMT	MEMPHIS	MMPH - MIDTOWN	10	1
37	MMPHTNOA	MEMPHIS	MMPH - OAKVILLE	12	2
38	MMPHTNSL	MEMPHIS	MMPH - SOUTHLAND	11	2
39	MMPHTNST	MEMPHIS	MMPH - SOUTHSIDE	5	0
40	MMPHTNWW	MEMPHIS	MMPH - WESTWOOD	1	0
40	MRBOTNMA	MURFREESBORO	MURFREESBORO	10	1
42	MRTWTNMA	MORRISTOWN	MORRISTOWN	1	0
41	NSVLTNAP	NASHVILLE	NSVL - AIRPORT	7	1
44	NSVLTNBH	NASHVILLE	NSVL - BURTON HILLS	1	0
45	NSVLTNBV	NASHVILLE	NSVL - BELLEVUE	2	0
46	NSVLTNBW	BRENTWOOD	NSVL - BRENTWOOD	13	3
47	NSVLTNCD	NASHVILLE	NSVL - COCKRILL BD	1	0
48	NSVLTNCH	NASHVILLE	NSVL - CRIEVE HALL	11	1
49	NSVLTNDO	NASHVILLE	NSVL - DONELSON	14	2
50	NSVLTNHH	ANTIOCH	NSVL - HICKORY HOLLOW	1	0
51	NSVLTNIN	NASHVILLE	NSVL - INGLEWOOD	9	0
52	NSVLTNMC	MADISON	NSVL - MADISON	8	1
53	NSVLTNMT	NASHVILLE	NSVL - MAIN	23	2
54	NSVLTNST	NASHVILLE	NSVL - SHARONDALE	16	1
55	NSVLTNUN	NASHVILLE	NSVL - UNIVERSITY	14	0
56	NSVLTNWM	NASHVILLE	NSVL - WEST MEADE	6	0
57	OKRGTNMT	OAK RIDGE	OAK RIDGE	7	0
58	SMYRTNMA	SMYRNA	SMYRNA	4	1
59	SVVLTNMT	SEVIERVILLE	SEVIERVILLE	4	0
60	TLLHTNMA	TULLAHOMA	TULLAHOMA	2	0
			TOTAL	**407**	**37**

No.	Central Office	Approximate Assigned Collocation Floor Space (sq.ft.)*	Wire Center Name	City
1	ATHNTNMA	15	ATHENS	ATHENS
2	CHTGTNBR	1,810	CHTG - BRAINERD	CHATTANOOGA
3	CHTGTNDT	662	CHTG - DODDS	CHATTANOOGA
4	CHTGTNMV	58	CHTG - MIDDLE VALLEY	HIXSON
5	CHTGTNNS	1,158	CHTG - NINTH ST.	CHATTANOOGA
6	CHTGTNRB	237	CHTG - RED BANK	CHATTANOOGA
7	CHTGTNRO	247	CHTG - ROSSVILLE	ROSSVILLE
8	CHTGTNSE	91	CHTG - ST. ELMO	CHATTANOOGA
9	CLEVTNMA	45	CLEVELAND	CLEVELAND
10	CLMATNMA	24	COLUMBIA	COLUMBIA
11	CLVLTNMA	290	CLARKSVILLE	CLARKSVILLE
12	CRVLTNMA	765	COLLIERVILLE	COLLIERVILLE
13	FKLNTNCC	23	FKLN - COOL SPRINGS	FRANKLIN
14	FKLNTNMA	920	FRANKLIN	FRANKLIN
15	GALLTNMA	330	GALLATIN	GALLATIN
16	GDVLTNMA	897	GOODLETTSVILLE	GOODLETTSVILLE
17	GTWSTNSW	63	MMPH - SOUTHWIND	MEMPHIS
18	HDVLTNMA	408	HENDERSONVILLE	HENDERSONVILLE
19	JCSNTNMA	71	JACKSON MAIN	JACKSON
20	JCSNTNNS	75	JACKSON NRTHSIDE	JACKSON
21	KNVLTNBE	925	KNVL - BEARDEN	KNOXVILLE
22	KNVLTNFC	367	KNVL - FOUNTAIN CY	KNOXVILLE
23	KNVLTNMA	1,659	KNVL - MAIN	KNOXVILLE
24	KNVLTNWH	951	KNVL - WEST HILLS	KNOXVILLE
25	KNVLTNYH	820	KNVL - YOUNG HIGH	KNOXVILLE
26	LBNNTNMA	523	LEBANON	LEBANON
27	MAVLTNMA	259	MARYVILLE	ALCOA
28	MMPHTNBA	1,130	MMPH - BARTLETT	MEMPHIS
29	MMPHTNCK	197	MMPH - CHEROKEE	MEMPHIS
30	MMPHTNCT	869	MMPH - CHICKASAW	MEMPHIS
31	MMPHTNEL	2,086	MMPH - EASTLAND	MEMPHIS
32	MMPHTNFR	369	MMPH - FRAYSER	MEMPHIS
33	MMPHTNGT	1,532	MMPH - GERMANTOWN	GERMANTOWN
34	MMPHTNHP	61	MMPH - HUMPHREYS	MEMPHIS
35	MMPHTNMA	1,854	MMPH - MAIN	MEMPHIS
36	MMPHTNMT	1,718	MMPH - MIDTOWN	MEMPHIS
37	MMPHTNOA	1,606	MMPH - OAKVILLE	MEMPHIS
38	MMPHTNSL	1,337	MMPH - SOUTHLAND	MEMPHIS
39	MMPHTNST	896	MMPH - SOUTHSIDE	MEMPHIS
40	MMPHTNWW	389	MMPH - WESTWOOD	MEMPHIS
41	MRBOTNMA	1,121	MURFREESBORO	MURFREESBORO
42	MRTWTNMA	109	MORRISTOWN	MORRISTOWN
43	NSVLTNAP	844	NSVL - AIRPORT	NASHVILLE
44	NSVLTNBH	26	NSVL - BURTON HILLS	NASHVILLE
45	NSVLTNBV	67	NSVL - BELLEVUE	NASHVILLE
46	NSVLTNBW	1,097	NSVL - BRENTWOOD	BRENTWOOD
47	NSVLTNCD	7	NSVL - COCKRILL BD	NASHVILLE
48	NSVLTNCH	1,229	NSVL - CRIEVE HALL	NASHVILLE
49	NSVLTNDO	913	NSVL - DONELSON	NASHVILLE
50	NSVLTNIN	886	NSVL - INGLEWOOD	NASHVILLE
51	NSVLTNMC	742	NSVL - MADISON	MADISON
52	NSVLTNMT	3,241	NSVL - MAIN	NASHVILLE
53	NSVLTNST	1,008	NSVL - SHARONDALE	NASHVILLE
54	NSVLTNUN	907	NSVL - UNIVERSITY	NASHVILLE
55	NSVLTNWM	805	NSVL - WEST MEADE	NASHVILLE
56	OKRGTNMT	424	OAK RIDGE	OAK RIDGE
57	SMYRTNMA	151	SMYRNA	SMYRNA
58	SVVLTNMT	171	SEVIERVILLE	SEVIERVILLE
59	TLLHTNMA	24	TULLAHOMA	TULLAHOMA
	TOTAL	**41,512**		

* The above information is an approximation of the assigned collocation floor space.
Recent collocation activity (adds/removals) may not be reflected.

Tennessee 2-Wire and 4-Wire Collocation Cross-Connects
In-Service as of September 2003

Exhibit 104-e

No.	CLLI Code	Wire Center	2-Wire	4-Wire	Total
1	ATHNTNMA	Athens	0		**0**
2	CHTGTNBR	Chattanooga - Brainerd	936		**936**
3	CHTGTNDT	Chattanooga - Dodds	481		**481**
4	CHTGTNMV	Chattanooga - Middle Valley	0		**0**
5	CHTGTNNS	Chattanooga - Ninth Street	963		**963**
6	CHTGTNRB	Chattanooga - Red Bank	0		**0**
7	CHTGTNRO	Chattanooga - Rossville	0		**0**
8	CHTGTNSE	Chattanooga - St. Elmo	2		**2**
9	CLEVTNMA	Cleveland	0		**0**
10	CLMATNMA	Columbia	0		**0**
11	CLVLTNMA	Clarksville	0		**0**
12	CRVLTNMA	Collierville	400		**400**
13	FKLNTNCC	Franklin - Cool Springs	0		**0**
14	FKLNTNMA	Franklin	827		**827**
15	GALLTNMA	Gallatin	21		**21**
16	GDVLTNMA	Goodlettsville	42		**42**
17	GTWSTNSW	Memphis - Southwind	0		**0**
18	HDVLTNMA	Hendersonville	29		**29**
19	JCSNTNMA	Jackson - Main	92		**92**
20	JCSNTNNS	Jackson - Northside	107		**107**
21	KNVLTNBE	Knoxsville - Bearden	741		**741**
22	KNVLTNFC	Knoxsville - Fountain City	12		**12**
23	KNVLTNMA	Knoxsville - Main	1200		**1,200**
24	KNVLTNWH	Knoxsville - West Hills	1,180		**1,180**
25	KNVLTNYH	Knoxsville - Young High	28		**28**
26	LBNNTNMA	Lebanon	53		**53**
27	MAVLTNMA	Maryville	7		**7**
28	MMPHTNBA	Memphis - Bartlett	2,930		**2,930**
29	MMPHTNCK	Memphis - Cherokee	0		**0**
30	MMPHTNCT	Memphis - Chickasaw	1,426		**1,426**
31	MMPHTNEL	Memphis - Eastland	2,901		**2,901**
32	MMPHTNFR	Memphis - Frayser	0		**0**
33	MMPHTNGT	Memphis - Germantown	2,166		**2,166**
34	MMPHTNHP	Memphis - Humphreys	0		**0**
35	MMPHTNMA	Memphis - Main	1,370		**1,370**
36	MMPHTNMT	Memphis - Midtown	913		**913**
37	MMPHTNOA	Memphis - Oakville	2,590		**2,590**
38	MMPHTNSL	Memphis - Southland	1,363		**1,363**
39	MMPHTNST	Memphis - Southside	129		**129**
40	MMPHTNWW	Memphis - Westwood	0		**0**
41	MRBOTNMA	Murfreesboro	696		**696**
42	MRTWTNMA	Morristown	0		**0**
43	NSVLTNAP	Nashville - Airport	750		**750**
44	NSVLTNBH	Nashville - Burton Hills	0		**0**
45	NSVLTNBV	Nashville - Bellevue	129		**129**
46	NSVLTNBW	Nashville - Brentwood	1,801	6	**1,807**
47	NSVLTNCD	Nashville - Cockrill Bd.	0		**0**
48	NSVLTNCH	Nashville - Crieve Hall	1,697	1	**1,698**
49	NSVLTNDO	Nashville - Donelson	1,588		**1,588**
50	NSVLTNHH	Nashville - Hickory Hollow	0		**0**
51	NSVLTNIN	Nashville - Inglewood	552		**552**
52	NSVLTNMC	Nashville - Madison	384		**384**
53	NSVLTNMT	Nashville - Main	4,525	3	**4,528**
54	NSVLTNST	Nashville - Sharondale	2,401		**2,401**
55	NSVLTNUN	Nashville - University	1,958		**1,958**
56	NSVLTNWM	Nashville - West Meade	190		**190**
57	OKRGTNMT	Oak Ridge	76		**76**
58	SMYRTNMA	Smyrna	20		**20**
59	SVVLTNMT	Sevierville	0		**0**
60	TLLHTNMA	Tullahoma	0		**0**
		TOTAL	**39,676**	**10**	**39,686**

Tennessee Collocation Cross-Connects
In-Service as of September 2003

Exhibit 104-i

No.	CLLI Code	Wire Center	2-Wire	4-Wire	DS-1	DS-3	2-Fiber	4-Fiber	Total
1	ATHNTNMA	Athens	0						**0**
2	CHTGTNBR	Chattanooga - Brainerd	936		257	6			**936**
3	CHTGTNDT	Chattanooga - Dodds	481		162	5			**481**
4	CHTGTNMV	Chattanooga - Middle Valley	0						**0**
5	CHTGTNNS	Chattanooga - Ninth Street	963		363	14			**963**
6	CHTGTNRB	Chattanooga - Red Bank	0						**0**
7	CHTGTNRO	Chattanooga - Rossville	0						**0**
8	CHTGTNSE	Chattanooga - St. Elmo	2						**2**
9	CLEVTNMA	Cleveland	0		2				**0**
10	CLMATNMA	Columbia	0						**0**
11	CLVLTNMA	Clarksville	0		159	5			**0**
12	CRVLTNMA	Collierville	400		42	2			**400**
13	FKLNTNCC	Franklin - Cool Springs	0		18				**0**
14	FKLNTNMA	Franklin	827		230	6			**827**
15	GALLTNMA	Gallatin	21		4	1			**21**
16	GDVLTNMA	Goodlettsville	42		54	2			**42**
17	GTWSTNSW	Memphis - Southwind	0						**0**
18	HDVLTNMA	Hendersonville	29		27	1			**29**
19	JCSNTNMA	Jackson - Main	92		76	3			**92**
20	JCSNTNNS	Jackson - Northside	107		77	2			**107**
21	KNVLTNBE	Knoxsville - Bearden	741		40	10			**741**
22	KNVLTNFC	Knoxsville - Fountain City	12		12	2			**12**
23	KNVLTNMA	Knoxsville - Main	1200		589	88		1	**1,200**
24	KNVLTNWH	Knoxsville - West Hills	1,180		68	7			**1,180**
25	KNVLTNYH	Knoxsville - Young High	28		130	7			**28**
26	LBNNTNMA	Lebanon	53		47	2			**53**
27	MAVLTNMA	Maryville	7		3				**7**
28	MMPHTNBA	Memphis - Bartlett	2,930		550	20			**2,930**
29	MMPHTNCK	Memphis - Cherokee	0						**0**
30	MMPHTNCT	Memphis - Chickasaw	1,426		208	11			**1,426**
31	MMPHTNEL	Memphis - Eastland	2,901		545	31			**2,901**
32	MMPHTNFR	Memphis - Frayser	0						**0**
33	MMPHTNGT	Memphis - Germantown	2,166		485	13			**2,166**
34	MMPHTNHP	Memphis - Humphreys	0						**0**
35	MMPHTNMA	Memphis - Main	1,370		423	57			**1,370**
36	MMPHTNMT	Memphis - Midtown	913		155	9			**913**
37	MMPHTNOA	Memphis - Oakville	2,590		611	24			**2,590**
38	MMPHTNSL	Memphis - Southland	1,363		345	10			**1,363**
39	MMPHTNST	Memphis - Southside	129		61	4			**129**
40	MMPHTNWW	Memphis - Westwood	0						**0**
41	MRBOTNMA	Murfreesboro	696		174	5			**696**
42	MRTWTNMA	Morristown	0						**0**
43	NSVLTNAP	Nashville - Airport	750		211	8			**750**
44	NSVLTNBH	Nashville - Burton Hills	0						**0**
45	NSVLTNBV	Nashville - Bellevue	129		10	3			**129**
46	NSVLTNBW	Nashville - Brentwood	1,801	6	605	19			**1,807**
47	NSVLTNCD	Nashville - Cockrill Bd.	0						**0**
48	NSVLTNCH	Nashville - Crieve Hall	1,697	1	283	6			**1,698**
49	NSVLTNDO	Nashville - Donelson	1,588		443	18			**1,588**
50	NSVLTNHH	Nashville - Hickory Hollow	0						**0**
51	NSVLTNIN	Nashville - Inglewood	552		76	4		1	**552**
52	NSVLTNMC	Nashville - Madison	384		144	2			**384**
53	NSVLTNMT	Nashville - Main	4,525	3	1,535	84		2	**4,528**
54	NSVLTNST	Nashville - Sharondale	2,401		564	21			**2,401**
55	NSVLTNUN	Nashville - University	1,958		214	10			**1,958**
56	NSVLTNWM	Nashville - West Meade	190		27	4			**190**
57	OKRGTNMT	Oak Ridge	76		4	3			**76**
58	SMYRTNMA	Smyrna	20		17	1			**20**
59	SVVLTNMT	Sevierville	0						**0**
60	TLLHTNMA	Tullahoma	0						**0**
		TOTAL	**39,676**	**10**	**10,050**	**530**	**0**	**4**	**39,686**

BellSouth Telecommunications, Inc.

MCI/WorldCom's 1st Request for Production of Documents

Item No. 1

Attachment to Interrogatory Item No. 105

NO.	SWITCH ID	EXCHANGE	STREET	CITY	ST	ZIP
1	ACHLTNMT	ADAMS - CEDAR HILL	7356 HWY 41N	ADAMS CEDAR HILL	TN	37010
2	ARTNTNMT	ARLINGTON	11950 WALKER RD	ARLINGTON	TN	38002
3	ASCYTNMA	ASHLAND CITY	106 MULBERRY ST	ASHLAND CITY	TN	37015
4	ATHNTNMA	ATHENS	202 N HILL ST	ATHENS	TN	37303
5	BGSNTNMA	BIG SANDY	141 EASY ST	BIG SANDY	TN	38221
6	BLGPTNMA	BULLS GAP	415 HIGHWAY 11 E	BULLS GAP	TN	37711
7	BLLSTNMA	BELLS	105 HOPKINS AVE	BELLS	TN	38006
8	BLNCTNMT	BLANCHE	55 BLANCHE RD	TAFT	TN	37334
9	BLVRTNMA	BOLIVAR	305 LAFAYETTE ST	BOLIVAR	TN	38008
10	BNTNTNMT	BENTON	200 CLEMMER FERRY RD	BENTON	TN	37307
11	BTSPTNMA	BETHEL SPRINGS	244 FRONT ST	BETHEL SPRINGS	TN	38315
12	BWVLTNMA	BROWNSVILLE	125 JEFFERSON ST W	BROWNSVILLE	TN	38012
13	CHRLTNMT	CHARLOTTE	108 DUNNING ST	CHARLOTTE	TN	37036
14	CHTGTNBR	CHATTANOOGA - BRAINERD	505 AIRPORT RD	CHATTANOOGA	TN	37421
15	CHTGTNDT	CHATTANOOGA - DODDS	2605 DUNCAN AVE	CHATTANOOGA	TN	37404
16	CHTGTNHT	CHATTANOOGA -	6222 HIGHWAY 58	HARRISON	TN	37408
17	CHTGTNMV	CHATTANOOGA - MIDDLE VALLEY	1710 CRABTREE RD	HIXSON	TN	37412
18	CHTGTNNS	CHATTANOOGA - NINTH STREET	300 E M L KING BLVD	CHATTANOOGA	TN	37421
19	CHTGTNRB	CHATTANOOGA - RED BANK	105 W LEAWOOD AVE	CHATTANOOGA	TN	37415
20	CHTGTNRO	CHATTANOOGA - ROSSVILLE	832 CHICKAMAUGA AVE	ROSSVILLE	TN	30741
21	CHTGTNSE	CHATTANOOGA - ST. ELMO	4608 ST ELMO AVE	CHATTANOOGA	TN	37408
22	CHTGTNSM	CHATTANOOGA -	802 KENTUCKY AVE	SIGNAL MOUNTAIN	TN	37377
23	CHTNTNMT	CHARLESTON	112 SCOTT ST NE	CHARLESTON	TN	37310
24	CLDGTNMA	CUMBERLAND GAP	216 AHN SHAWANEE RD	CUMBERLAND GAP	TN	37752
25	CLEVTNMA	CLEVELAND	549 BROAD ST NW	CLEVELAND	TN	37311
26	CLMATNMA	COLUMBIA	904 S HIGH ST	COLUMBIA	TN	38401
27	CLTNTNMA	CLINTON	129 E CHURCH ST	CLINTON	TN	37716
28	CLVLTNMA	CLARKSVILLE	417 MADISON ST	CLARKSVILLE	TN	37040
29	CMCYTNMT	CUMBERLAND CITY	322 HIGHWAY 434	CUMBERLAND CITY	TN	37050
30	CMDNTNMA	CAMDEN	134 DERBY ST	CAMDEN	TN	38320
31	CNHMTNMA	CUNNINGHAM	5090 HIGHWAY 48	CUMBERLAND FURNACE	TN	37052
32	CNVLTNMA	CENTERVILLE	101 E SWAN ST	CENTERVILLE	TN	37033

33	CRHLTNCB	COPPER HILL	104 CREME ST	COPPERHILL	TN	37317
34	CRPLTNMA	CROSS PLAINS - ORLINDA RD.	5013 EAST ROBERTSON RD	CROSS PLAINS	TN	37049
35	CRTHTNMA	CARTHAGE	221 WARD AVE E	CARTHAGE	TN	37030
36	CRVLTNMA	COLLIERVILLE	105 WALNUT ST	COLLIERVILLE	TN	38017
37	CULKTNMA	CULLEOKA	2337 SCHOOL ST	CULLEOKA	TN	38451
38	CVTNTNMT	COVINGTON	569 S COLLEGE ST	COVINGTON	TN	38019
39	DCTRTNMT	DECATUR	75 AHN HIGHWAY 30 E	DECATUR	TN	37322
40	DKSNTNMT	DICKSON	305 N CHARLOTTE ST	DICKSON	TN	37055
41	DNRGTNMA	DANDRIDGE	203 E MEETING ST	DANDRIDGE	TN	37725
42	DOVRTNMT	DOVER	407 SPRING ST	DOVER	TN	37058
43	DYBGTNMA	DYERSBURG	405 TROY AVE	DYERSBURG	TN	38024
44	DYERTNMT	DYER	160 S MAIN ST	DYER	TN	38330
45	DYTNTNMA	DAYTON	116 S RAILROAD ST	DAYTON	TN	37321
46	EAVLTNMA	EAGLEVILLE	171 HIGHWAY 99	EAGLEVILLE	TN	37060
47	ETWHTNMT	ETOWAH	105 6TH ST	ETOWAH	TN	37331
48	FIVLTNMA	FRIENDSVILLE	205 E HILL AVE	FRIENDSVILLE	TN	37737
49	FKLNTNCC	FRANKLIN - COOL SPRINGS	232 SEABOARD LN	FRANKLIN	TN	37064
50	FKLNTNMA	FRANKLIN - MAIN	327 CUMMINS ST	FRANKLIN	TN	37064
51	FLVLTNMA	FLINTVILLE	6 ELORA RD	FLINTVILLE	TN	37335
52	FRDNTNMA	FREDONIA	4599 OLD ASHLAND CITY RD S	CLARKSVILLE	TN	37040
53	FRVWTNMT	FAIRVIEW	7112 ADAMS DR	FAIRVIEW	TN	37062
54	FYVLTNMA	FAYETTEVILLE	202 FRANKLIN AVE N	FAYETTEVILLE	TN	37334
55	GALLTNMA	GALLATIN	214 W SMITH ST	GALLATIN	TN	37066
56	GBSNTNMT	GIBSON	408 ROZELLE ST	GIBSON	TN	38338
57	GDJTTNMA	GRAND JUNCTION	140 CHARLESTON ROW E	GRAND JUNCTION	TN	38039
58	GDVLTNMA	GOODLETTSVILLE	410 N MAIN ST	GOODLETTSVILLE	TN	37072
59	GLSNTNMA	GLEASON	107 JANES MILL RD	GLEASON	TN	38229
60	GNBRTNMA	GREENBRIER	1003 SWIFT ST	GREENBRIER	TN	37073
61	GNFDTNMT	GREENFIELD	207 N SECOND ST	GREENFIELD	TN	38230
62	GRNBTNMA	GREENBACK	7750 HWY 95 S	GREENBACK	TN	37742
63	GTBGTNMT	GATLINBURG	420 TRENTHAM LN	GATLINBURG	TN	37738
64	GTWSTNSW	MEMPHIS - SOUTHWIND	3355 PLAYERS CLUB PKWY	MEMPHIS	TN	38138
65	HDVLTNMA	HENDERSONVILLE	121 WALTON FERRY RD	HENDERSONVILLE	TN	37075
66	HHNWTNMA	HOHENWALD	14 W 1ST AVE	HOHENWALD	TN	38462

67	HIMNTNMA	HARRIMAN	501 CARTER AV	HARRIMAN	TN	37748
68	HLLSTNMT	HALLS	479 S CHURCH ST	HALLS	TN	38040
69	HMBLTNMA	HUMBOLDT	1513 MAIN ST	HUMBOLDT	TN	38343
70	HMPSTNMA	HAMPSHIRE	4110 CHURCH ST	HAMPSHIRE	TN	38461
71	HNLDTNMA	HUNTLAND	712 MAIN ST	HUNTLAND	TN	37345
72	HNNGTNMA	HENNING	205 N CHAPMAN ST	HENNING	TN	38041
73	HNSNTNMT	HENDERSON	135 NORTH AVE	HENDERSON	TN	38340
74	HNTGTNMA	HUNTINGDON	132 6TH AVE	HUNTINGDON	TN	38344
75	HRFRTNMA	HARTFORD	3620 HARTFORD RD	HARTFORD	TN	37753
76	HRNBTNMT	HORNBEAK	211 WILLIAMS ST	HORNBEAK	TN	38232
77	HTVLTNMA	HARTSVILLE	107 ANDREWS AVE	HARTSVILLE	TN	37074
78	JCSNTNMA	JACKSON - MAIN	315 E COLLEGE ST	JACKSON	TN	38301
79	JCSNTNNS	JACKSON - NORTHSIDE	504 OLD HICKORY BLVD	JACKSON	TN	38301
80	JFCYTNMA	JEFFERSON CITY	717 E COLLEGE ST	JEFFERSON CITY	TN	37760
81	JLLCTNMA	JELLICO	606 FIFTH ST	JELLICO	TN	37762
82	JSPRTNMT	JASPER	6 ACADEMY AVE	JASPER	TN	37347
83	KGTNTNMT	KINGSTON	411 N KENTUCKY ST	KINGSTON	TN	37763
84	KNTNTNMA	KENTON	300 W TAYLOR ST	KENTON	TN	38233
85	KNVLTNBE	KNOXSVILLE - BEARDEN	4605 LYONS VIEW PKE	KNOXVILLE	TN	37939
86	KNVLTNFC	KNOXSVILLE - FOUNTAIN CITY	135 LYNNWOOD DR	KNOXVILLE	TN	37918
87	KNVLTNMA	KNOXSVILLE - MAIN	410 W MAGNOLIA AV	KNOXVILLE	TN	37917
88	KNVLTNWH	KNOXSVILLE - WEST HILLS	1701 WINSTON RD	KNOXVILLE	TN	37917
89	KNVLTNYH	KNOXSVILLE - YOUNG HIGH	131 YOUNG HIGH PKE	KNOXVILLE	TN	37920
90	LBNNTNMA	LEBANON	230 W GAY ST	LEBANON	TN	37087
91	LFLTTNMA	LAFOLLETTE	518 W ASH ST	LAFOLLETTE	TN	37766
92	LKCYTNMA	LAKE CITY	220 FIFTH ST	LAKE CITY	TN	37769
93	LNCYTNMA	LENOIR CITY	315 BROADWAY W	LENOIR CITY	TN	37771
94	LODNTNMA	LOUDON	407 CEDAR ST	LOUDON	TN	37774
95	LRBGTNMA	LAWRENCEBURG	313 E GAINES ST	LAWRENCEBURG	TN	38464
96	LWBGTNMA	LEWISBURG	425 W CHURCH ST	LEWISBURG	TN	37091
97	LXTNTNMA	LEXINGTON	CHURCH ST	LEXINGTON	TN	38351
98	LYBGTNMT	LYNCHBURG	30 MAIN ST	LYNCHBURG	TN	37352
99	LYLSTNMA	LYLES	4899 HIGHWAY 100	LYLES	TN	37098
100	LYVLTNMA	LYNNVILLE	1218 MAIN ST	LYNNVILLE	TN	38472

101	MAVLTNMA	MARYVILLE	285 S HALL RD	ALCOA	TN	37801
102	MCKNTNMA	MCKENZIE	434 WALNUT AVE W	MCKENZIE	TN	38201
103	MCWNTNMT	MCEWEN	58 COLLEGE ST	MCEWEN	TN	37101
104	MDTNTNMA	MIDDLETON	120 MOCKINGBIRD RD	MIDDLETON	TN	38052
105	MDVITNMT	MADISONVILLE	153 COLLEGE ST	MADISONVILLE	TN	37354
106	MEDNTNMA	MEDINA	236 MARKET AVE	MEDINA	TN	38355
107	MILNTNMA	MILAN	2005 S SECOND ST	MILAN	TN	38358
108	MMPHTNBA	MEMPHIS - BARTLETT	5530 STAGE RD	MEMPHIS	TN	38128
109	MMPHTNCK	MEMPHIS - CHEROKEE	3106 BARRON AVE	MEMPHIS	TN	38111
110	MMPHTNCT	MEMPHIS - CHICKASAW	105 S HOLMES ST	MEMPHIS	TN	38111
111	MMPHTNEL	MEMPHIS - EASTLAND	4960 BLACK RD	MEMPHIS	TN	38117
112	MMPHTNFR	MEMPHIS - FRAYSER	1535 DELLWOOD AVE	MEMPHIS	TN	38127
113	MMPHTNGT	MEMPHIS - GERMANTOWN	2101 S GERMANTOWN RD	GERMANTOWN	TN	38138
114	MMPHTNHP	MEMPHIS - HUMPHREYS	6363 HUMPHREYS BLVD	MEMPHIS	TN	38119
115	MMPHTNMA	MEMPHIS - MAIN	201 COURT AVE	MEMPHIS	TN	38103
116	MMPHTNMT	MEMPHIS - MIDTOWN	1430 MADISON AVE	MEMPHIS	TN	38104
117	MMPHTNOA	MEMPHIS - OAKVILLE	3705 OUTLAND RD	MEMPHIS	TN	38118
118	MMPHTNSL	MEMPHIS - SOUTHLAND	4230 FARONIA RD	MEMPHIS	TN	38116
119	MMPHTNST	MEMPHIS - SOUTHSIDE	1389 S LAUDERDALE ST	MEMPHIS	TN	38106
120	MMPHTNWW	MEMPHIS - WESTWOOD	4787 WEAVER RD	MEMPHIS	TN	38119
121	MNCHTNMA	MANCHESTER	401 E MAIN ST	MANCHESTER	TN	37355
122	MNPLTNMA	MOUNT PLEASANT	112 HAYLONG AVE	MOUNT PLEASANT	TN	38474
123	MRBOTNMA	MURFREESBORO	221 N CHURCH ST	MURFREESBORO	TN	37130
124	MRTWTNMA	MORRISTOWN	301 E MAIN ST	MORRISTOWN	TN	37814
125	MSCTTNMT	MASCOT	9436 JOHNSON RD	STRAWBERRY PLAINS	TN	37806
126	MSCWTNMA	MOSCOW	300 THIRD AVE	MOSCOW	TN	38057
127	MYVLTNMA	MAYNARDVILLE	115 PROSPECT RD	MAYNARDVILLE	TN	37807
128	NRRSTNMA	NORRIS	13 DEER RIDGE RD	NORRIS	TN	37828
129	NSVLTNAA	NASHVILLE -	651 DONELSON PKE	NASHVILLE	TN	37214
130	NSVLTNAP	NASHVILLE - AIRPORT	1335 MURFREESBORO PKE	NASHVILLE	TN	37217
131	NSVLTNBH	NASHVILLE - BURTON HILLS	1630 HARDING PL	NASHVILLE	TN	37215
132	NSVLTNBV	NASHVILLE - BELLEVUE	907 TODD PREIS DR	NASHVILLE	TN	27215
133	NSVLTNBW	NASHVILLE - BRENTWOOD	102 HIGH LEA RD	BRENTWOOD	TN	37027
134	NSVLTNCD	NASHVILLE - COCKRILL BD	6405 CENTENNIAL BLVD	NASHVILLE	TN	37209

135	NSVLTNCH	NASHVILLE - CRIEVE HALL	409 ELYSIAN FIELDS RD	NASHVILLE	TN	37211
136	NSVLTNDO	NASHVILLE - DONELSON	158 MC*GAVOCK PKE	NASHVILLE	TN	37214
137	NSVLTNHH	NASHVILLE - HICKORY HOLLOW	5200 CAIN RIDGE RD	ANTIOCH	TN	37013
138	NSVLTNIN	NASHVILLE - INGLEWOOD	1224 GALLATIN AVE	NASHVILLE	TN	37214
139	NSVLTNMC	NASHVILLE - MADISON	209 WOODRUFF ST	NASHVILLE	TN	37115
140	NSVLTNMT	NASHVILLE - MAIN	185 2ND AVE N	NASHVILLE	TN	37201
141	NSVLTNST	NASHVILLE - SHARONDALE	3203 HILLSIDE DR	NASHVILLE	TN	37212
142	NSVLTNUN	NASHVILLE - UNIVERSITY	2222 ELLISTON PL	NASHVILLE	TN	37203
143	NSVLTNWC	NASHVILLE -	4060 LLOYD RD	WHITES CREEK	TN	37218
144	NSVLTNWM	NASHVILLE - WEST MEADE	904 DAVIDSON ST	NASHVILLE	TN	37205
145	NWBRTNMA	NEWBERN	105 E JOHNSON ST	NEWBERN	TN	38059
146	NWPTTNMT	NEWPORT	400 LAKEVIEW ST	NEWPORT	TN	37821
147	OKRGTNMT	OAK RIDGE	119 MILAN WAY	OAK RIDGE	TN	37830
148	OLHCTNMA	OLD HICKORY	1002 NINTH ST	OLD HICKORY	TN	37138
149	OLSPTNMA	OLIVER SPRINGS	502 WINTER GAP RD	OLIVER SPRINGS	TN	37840
150	PARSTNMA	PARIS	507 DUNLAP ST	PARIS	TN	38242
151	PLMYTNMA	PALMYRA	2730 PALMYRA RD	PALMYRA	TN	37142
152	PLSKTNMA	PULASKI	117 S THIRD ST	PULASKI	TN	38478
153	PSVWTNMT	PLEASANT VIEW	2519 HIGHWAY 49 E	PLEASANT VIEW	TN	37146
154	PTBGTNMA	PETERSBURG	106 MORGAN AVE	PETERSBURG	TN	37144
155	PTLDTNMA	PORTLAND	101 WHEELER ST	PORTLAND	TN	37148
156	RDGLTNMA	RIDGELY	530 LAKE ST	RIDGELY	TN	38080
157	RKWDTNMA	ROCKWOOD	201 S KINGSTON AVE	ROCKWOOD	TN	37854
158	RPLYTNMA	RIPLEY	148 LAKE DR	RIPLEY	TN	38063
159	RRVLTNMA	ROGERSVILLE	324 CLINCH ST	ROGERSVILLE	TN	37856
160	SANGTNMT	SANGO	170 SANGO RD	CLARKSVILLE	TN	37040
161	SDDSTNMA	SODDY - DAISY	10360 WALDEN ST	SODDY DAISY	TN	37403
162	SEWNTNMW	SEWANEE	60 WILLIE SIX RD	SEWANEE	TN	37375
163	SHVLTNMA	SHELBYVILLE	104 S JEFFERSON ST	SHELBYVILLE	TN	37160
164	SLMRTNMT	SELMER	280 WARREN AV	SELMER	TN	38375
165	SMTWTNMA	SUMMERTOWN	322 OAK ST	SUMMERTOWN	TN	38483
166	SMYRTNMA	SMYRNA	104 DIVISION ST	SMYRNA	TN	37167
167	SNTFTNMA	SANTA FE	2656 SANTA FE PKE	SANTA FE	TN	38482
168	SNVLTNMA	SNEEDVILLE	24 AHN JAIL ST	SNEEDVILLE	TN	37869

169	SOVLTNMT	SOMERVILLE	310 ARMOUR DR	SOMERVILLE	TN	38068
170	SPBGTNMA	SOUTH PITTSBURG	105 FOURTH ST	SOUTH PITTSBURG	TN	37380
171	SPCYTNMT	SPRING CITY	184 PICCADILLY AVE	SPRING CITY	TN	37381
172	SPFDTNMA	SPRINGFIELD	1007 CHEATHAM ST	SPRINGFIELD	TN	37172
173	SPHLTNMT	SPRING HILL	310 HARDIN ALLEY	SPRING HILL	TN	37174
174	SRVLTNMA	SURGOINSVILLE	CHURCH ST	SURGOINSVILLE	TN	37873
175	SVNHTNMT	SAVANNAH	210 PICKWICK ST N	SAVANNAH	TN	38372
176	SVVLTNMT	SEVIERVILLE	110 SOUTH BLVD	SEVIERVILLE	TN	37862
177	SWTWTNMT	SWEETWATER	204 MILL ST	SWEETWATER	TN	37874
178	TLLHTNMA	TULLAHOMA	210 N JACKSON ST	TULLAHOMA	TN	37388
179	TPVLTNMA	TIPTONVILLE	310 WALNUT ST	TIPTONVILLE	TN	38259
180	TRINTNMA	TRIUNE	3004 OLD MURFREESBORO RD	COLLEGE GROVE	TN	37014
181	TROYTNMT	TROY	225 W POLK ST	TROY	TN	38260
182	TRTNTNMA	TRENTON	303 S COLLEGE ST	TRENTON	TN	38382
183	TWNSTNMA	TOWNSEND	7709 RIVER RD	TOWNSEND	TN	37882
184	UNCYTNMA	UNION CITY	405 HARRISON ST	UNION CITY	TN	38261
185	VNLRTNMA	VANLEER	4505 HIGHWAY 49 W	VANLEER	TN	37181
186	WHBLTNMT	WHITE BLUFF	225 COMMERCE ST	WHITE BLUFF	TN	37187
187	WHHSTNMA	WHITE HOUSE	205 PORTLAND RD	WHITE HOUSE	TN	37188
188	WHPITNMA	WHITE PINE	1910 WALNUT ST	WHITE PINE	TN	37890
189	WHVLTNMT	WHITEVILLE	218 SYCAMORE ST	WHITEVILLE	TN	38075
190	WHWLTNMA	WHITWELL	132 E SPRING ST	WHITWELL	TN	37397
191	WLPTTNMA	WILLIAMSPORT	3669 OLD WILLIAMSPORT RD	WILLIAMSPORT	TN	38487
192	WNCHTNMA	WINCHESTER	117 S JEFFERSON ST	WINCHESTER	TN	37398
193	WRTRTNMT	WARTRACE	115 MILL ST	WARTRACE	TN	37183
194	WTTWTNMA	WATERTOWN	220 W WOODLAND ST	WATERTOWN	TN	37184
195	WVRLTNMT	WAVERLY	WYLY AND MILL ST	WAVERLY	TN	37185

Proprietary Bates Pages:

BST000717 – BST000720

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Item No. 1

Attachment to Interrogatory Item No. 114

Wire Center Name	CLLI	Street Address	City	Zip
NSVL-AIR-AUTH	NSVLTNAA	651 DONELSON PKE	NASHVILLE	37214
NSVL-AIRPORT	NSVLTNAP	1335 MURFREESBORO PKE	NASHVILLE	37217
NSVL-BELLEVUE	NSVLTNBV	907 TODD PREIS DR	NASHVILLE	37221
NSVL-BRENTWOOD	NSVLTNBW	102 HIGH LEA RD	BRENTWOOD	37027
NSVL-COCKRILL BD	NSVLTNCD	6405 CENTENNIAL BLVD	NASHVILLE	37209
NSVL-CRIEVE HALL	NSVLTNCH	409 ELYSIAN FIELDS RD	NASHVILLE	37211
NSVL-DONELSON	NSVLTNDO	158 MC*GAVOCK PKE	NASHVILLE	37214
NSVL-HICKORY HOLL	NSVLTNHH	5200 CANE RIDGE RD	ANTIOCH	37013
NSVL-INGLEWOOD	NSVLTNIN	1224 GALLATIN RD	NASHVILLE	37206
NSVL-MADISON	NSVLTNMC	209 WOODRUFF ST	MADISON	37115
NSVL-MAIN	NSVLTNMT	185 2ND AV N	NASHVILLE	37201
NSVL-SHARONDALE	NSVLTNST	3203 HILLSIDE DR	NASHVILLE	37212
NSVL-UNIVERSITY	NSVLTNUN	2222 ELLISTON PL	NASHVILLE	37203
NSVL-WHITESCREEK	NSVLTNWC	4060 LLOYD RD	WHITES CREEK	37218
NSVL-WEST MEADE	NSVLTNWM	904 DAVIDSON DR	NASHVILLE	37205

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Item No. 1

Attachment to Interrogatory Item No. 115

Technical Report

Committee T1 -
Telecommunications

Technical Report No. 60
July 1999

Unbundled Voicegrade Analog Loops

Prepared by T1A1.7
Working Group on
Signal Processing and Network
Performance for Voiceband Services

Alliance for Telecommunications Industry Solutions

Problem Solvers to the Telecommunications Industry

BST000724

Committee T1 is sponsored by the Alliance for Telecommunications Industry Solutions (ATIS) and accredited by the American National Standards Institute (ANSI)

A Technical Report on

Unbundled Voicegrade Analog Loops

Abstract

This T1 technical report discusses the transmission performance of unbundled voicegrade analog loops and is intended to help the telecommunications industry plan quality voicegrade local networks. The report provides performance information for unbundled subscriber access wherein the unbundled subscriber loop is connected to a competitive/incumbent local exchange carrier (CLEC/ILEC) inter-network interface (INI). This connection takes place when the CLEC is collocated and the ILEC distribution frame (DF) terminates the loop. Furthermore, the technical report reviews local access lines by discussing ANSI IEEE 820-1992, loop design methodologies, signal levels, and bridged taps. Finally, the document considers treated lines by reviewing ANSI T1.512-1994(R1999) and historical information regarding switched treated lines.

This document is written in the context of a carrier purchasing connectivity to the end-user, i.e., subscriber access. The document focuses only on analog voiceband services.

Document T1A1.7/99-005r3
Prepared by
T1A1.7
Working Group on Signal Processing and
Network Performance for Voiceband Services

Foreword

Changes in telecommunications law and markets have caused the industry to review and modify the way services are, and will be, provided in North America. The “local loop” represents one area in which the practices of the past are undergoing substantial change. Although it is not the only network element that the Telecommunications Act of 1996 has mandated for unbundling, the local loop represents a major area where transmission performance clarification and definition is needed. Other network elements that may effect end-to-end transmission or related performance include (trunk) transport and switching.

With the publication of this technical report, the industry has taken an important step in recognizing and addressing changes in the voicegrade telecommunications environment. However, while this technical report is forward looking in its scope, it maintains clear sight on the traditional aspects of service provisioning that have led to the quality of service associated with the Public Switched Telephone Network.

This document is written in the context of a carrier purchasing connectivity to the end-user, i.e., subscriber access. The document focuses only on analog voiceband services.

Suggestions for improvement of the Technical Report are welcome and should be sent to the Alliance for Telecommunications Industry Solutions - Committee T1 Secretariat, 1200 G Street N.W., Suite 500, Washington, D.C. 20005.

At the time this report was completed, T1A1.7 had the following members:

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Chuck Balogh
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Unbundled Voicegrade Analog Loops

1 Purpose, Scope, and Application

1.1 Purpose

In order to stimulate competition, the Telecommunications Act of 1996 (TA96) allows for Competitive Local Exchange Carriers (CLECs) to offer switched local network services to their (retail) telecommunications customers. CLECs may obtain part or all of the physical means for providing these services from the Incumbent Local Exchange Carriers (ILECs).

The purpose of this technical report is to help the telecommunications industry plan quality, voiceband transmission performance on unbundled voicegrade analog loops. Therefore, the technical report describes transmission performance parameters of unbundled loops used to provide connectivity to a subscribers' premises for analog voiceband services. The technical report is as quantitative as available sources permit. The information in this document will help the industry to cooperatively meet objectives for providing end-user analog voiceband services. This document fosters the provision of quality end-to-end service, as perceived by the end-user of analog voiceband services.

This document is written in the context of a carrier purchasing connectivity to the end-user, i.e., subscriber access. The document focuses only on analog voiceband services.

1.2 Scope

This technical report describes voiceband transmission performance parameter levels of voicegrade analog unbundled subscriber access (section 4), local access lines terminated at the NI at one end and the end office switching system at the other (section 5), and treated lines (section 6). In addition the technical report describes traditional and existing methods of ILEC loop facility design integral to local access service.

The technical report contains information which should be useful in CLEC design of local access lines regardless of the loop transport technology employed.

1.3 Application

This technical report is intended to help the telecommunications industry plan quality voicegrade local networks. The report accomplishes this by providing performance information for:

- unbundled subscriber access to the CLEC/ILEC INI collocated with the ILEC DF which terminates the loop,
- local access lines, and
- treated lines.

2 References

2.1 Standards

ANSI/IEEE Standard 820-1992, Telephone Loop Performance Characteristics.

ANSI T1.512-1994 (R 1999), Point-to-Point Voice-Grade Special Access Network Voiceband Data Transmission Objectives.

2.2 Texts

Engineering and Operations in the Bell System, Members of the Technical Staff and the Technical Publication Department, Bell Laboratories, Bell Telephone Laboratories, Inc, Murray Hill, NJ, 1977 (Seventh Printing, 1982).

Engineering and Operations in the Bell System (Second Edition), R.F. Rey, Technical Editor, AT&T Bell Laboratories, Murray Hill, NJ, 1983.

Transmission Systems for Communications (Fourth Edition), Members of the Technical Staff Bell Telephone Laboratories, Murray Hill, NJ, 1970.

Telecommunications Transmission Engineering, Volume 3 -Networks and Services (Third Edition) (ST-TEC-000053), BELLCORE, August 1989.

3 Generic Terminology

3.1 Definitions

3.1.1 Competitive Local Exchange Carrier (CLEC)

For the purposes of this document, an alternative provider of local access service (other than the ILEC).

3.1.2 Competitive Local Exchange Carrier (CLEC) Network

The network composed of network elements that are owned by the CLEC or leased by the CLEC from some other carrier to provide service to its telecommunications customers.

3.1.3 Channel

For the purposes of this document, a bi-directional voiceband transmission path between two points (one point may be a NI).

3.1.4 Connection

A temporary concatenation of transmission channels or telecommunication circuits, switching, and other functional units set up to enable a transfer of information between two or more points in a telecommunication network.

3.1.5 End-User (EU)

The calling party, or the called party, or both involved with a connection. End-users are typically on the customer side of the NI.

3.1.6 Incumbent Local Exchange Carrier (ILEC)

The Local Exchange Carrier that on the date of enactment of the Telecommunications Act of 1996, provided telephone exchange service in a specific geographical area.

3.1.7 Incumbent Local Exchange Carrier (ILEC) Network

The network composed of network elements that are used to provide service to an ILEC's telecommunications customers.

3.1.8 Internal Network Interface (INI)

A point in the local network transmission path that may be used as a point for interconnection, unbundling, and testing of network elements.

3.1.9 Local Access Line

Exchange network switching and transmission equipment and facilities that provide the service offering, commonly referred to as Plain Old Telephone Service (POTS) that enables an end-user to obtain access to the Public Switched Telephone Network.

3.1.10 Loop

For the purpose of this document, the channel between the NI and a distributing frame (DF).

3.1.11 Network Interface (NI)

The point of demarcation between the exchange carrier's facilities and the end-user installation that establishes the technical interface and may establish division of operational responsibility.

3.1.12 Terminal Equipment

Equipment, such as telephone sets, PBXs, and voiceband data modems, at the end of a communication circuit.

3.1.13 Unbundle

The process whereby an ILEC makes available to a CLEC specified ILEC network elements (e.g., facilities, or switching system technology), under a tariff, contract, or special assembly service offering.

3.1.14 Unbundled Voicegrade Analog Loop

The voicegrade analog channel leased by a CLEC from an ILEC that extends from the distributing frame (DF) to the network interface (NI).

3.1.15 Unbundled Loop

For this report, this term is used as a shorthand equivalent of an unbundled voicegrade analog loop.

3.1.16 Unbundled Network Element (UNE)

A network element owned and maintained by an ILEC that has been leased to CLEC. An unbundled network element is self-contained.

3.1.17 Unbundled Subscriber Access

The bi-directional channel, that contains an unbundled voicegrade analog loop, between the end-user NI and the first CLEC/ILEC INI.

3.1.18 Voiceband

The set of frequencies between approximately 300 Hz and approximately 3300 Hz (not necessarily a passband).[1]

3.1.19 Voicegrade

Suitable for transmitting a voice signal.

[1] The frequencies, approximately 300 Hz and approximately 3300 Hz, are based on cables with H88 loading scheme described in Section 5.2. If another loading scheme is used, e.g. D66, or if the plant is not loaded, the upper frequency of the voiceband is constrained by the anti-aliasing filter of the analog-to-digital conversion process to approximately 3,400 Hz.

3.2 Abbreviations and Acronyms

CLEC	Competitive Local Exchange Carrier
CREG	Concentrated Range Extension with Gain
DF	Distribution Frame
ILEC	Incumbent Local Exchange Carrier
INI	Internal Network Interface
LF	Linking Function
MDF	Main Distribution Frame
NI	Network Interface
POT	Point of Termination
SCS	Subscriber Carrier System
TA96	Telecommunications Act of 1996
UNE	Unbundled Network Element

4 Unbundled Subscriber Access

This section provides diagrams, technical parameters, and transmission objectives describing unbundled subscriber access. As shown in figures 1 and 2, an unbundled voicegrade analog loop is intended to refer to the portion of unbundled subscriber access between the NI and the DF. The ILEC loop, normally used to provide voiceband telephone service has 2-wire analog voice frequency interfaces at both ends and may be unbundled for use by a CLEC. In both of the unbundled loop applications shown in these figures, a linking function (LF) couples the unbundled loop to the CLEC facility. From here, as shown in figure 1, switching may be done by CLEC equipment to which the signal is transported (CLEC switching systems are generally not in collocated space.) Alternatively, as shown in figure 2, switching may be done by an ILEC switching system that couples to the CLEC facility with another LF. It is the responsibility of the CLEC to determine if impairment compensation such as gain is required to provide its service and to implement such impairment compensation or to arrange to have it implemented.

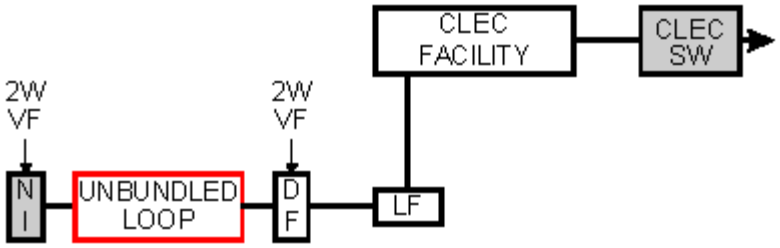

Figure 1 CLEC Local Access Line Architecture Using Unbundled Voicegrade Analog Loop and CLEC Switching System

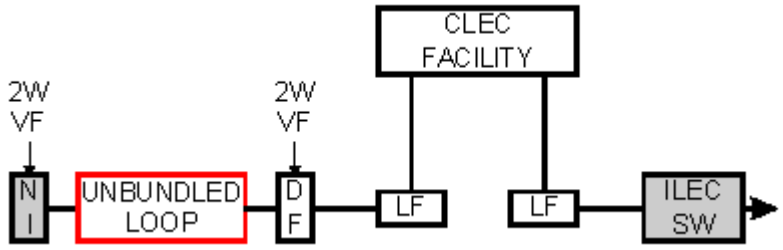

Figure 2 CLEC Local Access Line Architecture Using Unbundled Voicegrade Analog Loop and ILEC Switching System

The technologies used in unbundled voicegrade analog loops are illustrated in figure 3. They include purely metallic facilities, loaded (e.g., H-88) metallic facilities and those provisioned with subscriber carrier systems (SCS).[2] However, an unbundled voicegrade analog loop is understood to be a bandwidth-limited facility whose bandwidth would be consistent with a (e.g., H-88) loaded metallic facility or one provisioned with SCS technology. When SCS is used, it may be implemented in terms of analog carrier, universal digital loop carrier, or other pair-gain systems.

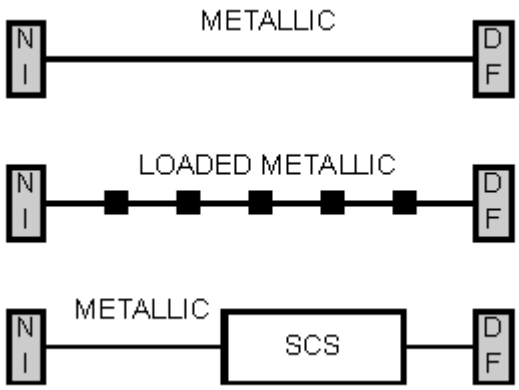

Figure 3 Unbundled Voicegrade Analog Loop Technologies

This document does not attempt to delineate the possible unbundling methods.

4.1 Unbundled Subscriber Access Elements

Unbundled subscriber access to an end-user is provided via an unbundled voicegrade analog loop and a linking function. Figure 4 is an example of this architecture. Central office intra-office[3] transmission facilities link a terminal block or frame at the CLEC/ILEC INI to a terminal block on the main distribution frame (MDF). (In this example the INI-to-MDF transport is provided by the ILEC, but there are also arrangements in which the CLEC or other agents may provide this transport.) A jumper wire (which is part of the LF

[2] Unbundled voicegrade analog loops provisioned with SCS will also generally include metallic or loaded metallic facilities between the SCS remote terminal and the NI.

[3] This assumes the CLEC/ILEC INI is collocated with the ILEC DF that terminates the unbundled loop. This report recognizes that the CLEC/ILEC INI may be remotely located from the traditional ILEC serving central office. However, in this technical report expected performance limits have not been provided for non-collocated CLEC/ILEC INI-DF configurations.

in this example) is inserted between the aforementioned MDF terminal block and another MDF terminal block that is used to terminate the loop (metallic pair or SCS). Finally, the unbundled loop extends between the MDF and the NI.

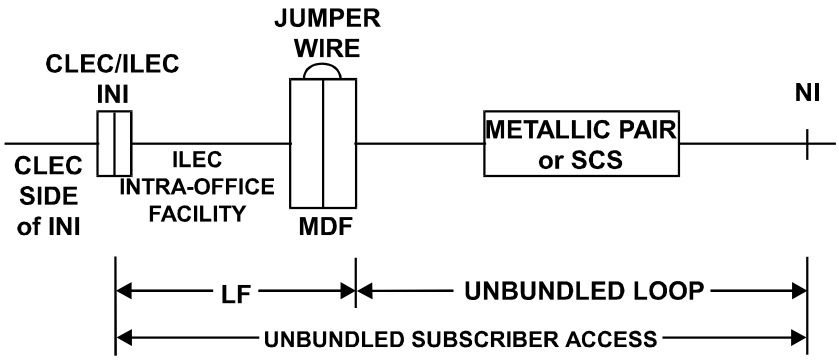

Figure 4 Example of Unbundled Voicegrade Analog Loop and Connecting Link Configuration

The unbundled voicegrade analog loop and linking function provide an analog transmission path which extends from the CLEC/ILEC INI to the NI (unbundled subscriber access) and is intended to facilitate the transmission of voicegrade signals of approximately 3 kHz useful bandwidth.

This transmission path may include one technology or combinations of different types of technologies. Examples are: metallic paired cable, metallic paired cable with loading coils and /or build out capacitors, metallic pair based digital loop carrier systems, and optical fiber based loop carrier systems. If metallic paired cable is used to provide the loop, there may be bridged taps present. Additionally, in some cases, different facility technologies may be used in tandem.

4.2 Expected Performance Limits - Unbundled Subscriber Access

Table 1 shows the expected performance values for unbundled subscriber access when the CLEC/ILEC INI is collocated with the DF terminating an unbundled loop. All unbundled subscriber access from the customer premises (i.e., the customer network interface point (NI)) to the INI are expected to be bounded by these worst-case values. These parameters and numbers are derived from the long route design methodology described in Section 5.

Table 1 Analog Voiceband Service Parameters for Unbundled Subscriber Access

Parameter	Expected Performance Values
Insertion Loss (1004 Hz)	0 dB ≤ Loss ≤ 17 dB
Attenuation Distortion at 2804 Hz, relative to 1004 Hz	–1.5 dB to +9.5 dB Loss
C-Message Noise at the NI [1,5]	≤ 30 dBrnC
C-Message Noise at the INI (at the CLEC/ILEC INI) [2,5]	≤ 30 dBrnC
Return Loss (at the CLEC/ILEC INI) [3]	Echo Return Loss: ≥ 5 dB [4]
Resistance	If metallic continuity is provided, ≤ 3,200 Ω
Leakage Resistance	If metallic continuity is provided, ≥ 10,000 Ω

Notes

1. The INI end of the circuit must be terminated in a standard 900 Ω impedance when the loss or noise is being measured at the NI end of the connection.
2. The NI end of the circuit must be terminated in a standard 600 Ω impedance when the loss or noise is being measured at the INI end of the connection.
3. The NI end of the circuit must be terminated in a standard 600 Ω impedance and the ERL test set must measure the ERL, at the INI end of the connection, using a 900 Ω + 2 μfarad balance network. The return loss is usually performed using a swept measurement on a test set that has a 900 Ω input termination and a 900 Ω + 2 μfarad balance network.
4. This value applies to all loops with an insertion loss ≤ 10 dB. When the loop loss is greater than 10 dB it will have a return loss greater than 16 dB as it is typically provided using loaded, e.g. H88 loading, cable pairs.
5. This limit assumes that adequate ac induction protection is installed by the CLEC.

5 Local Access Lines

This section provides guidance to CLECs about local access lines. The CLEC may wish to enhance the performance of relatively long unbundled voicegrade analog loops by applying gain and/or slope compensation. Whether provided by separate devices or as an integral part of a CLEC transport channel to the serving switching system, this gain and/or slope compensation should be designed to treat voiceband signals in such a manner that they will not unduly cause interference with other ILEC or CLEC services that are or may be carried on adjacent pairs, in the same physical cable, or within the same SCS. In order to preclude interference resulting from excessive gain, the maximum output from any gain device at the INI should be limited to 6 dB or less.

5.1 Summary of IEEE Standard Telephone Loop [4] Performance Characteristics (ANSI IEEE 820-1992)

The purpose of ANSI standard IEEE 820-1992 is to describe quantitatively the performance characteristics of local access lines and indicate current acceptable performance criteria. The standard covers the general parameters and characteristics associated with local access lines from the (voiceband analog) NI to the local switching system interface, which for digital switching systems is at the center of the switch. It includes only those business and residential lines in the North American public switched network where no special performance requirements are involved.

The standard provides common denominators for NI-to-switching system interface transmission performance, independent of facility types, construction processes or equipment, and circuit provisioning methods. The standard does not attempt to allocate impairments to the individual facilities and equipment that comprise the NI-to-switching system segment. Such allocations are performed by the service providers to achieve the overall subscriber access and telephone system performance.

The local access line performance characteristics described in the standard include:

- Loop loss
- Loss Variability
- Frequency Response
- Frequency Response Variability
- Loop Current
- Loop Noise
  - Idle-Circuit Noise
  - C-Notched Noise
  - 3 kHz Flat Noise
  - Impulse Noise
  - Quantization Noise
  - Longitudinal Noise
- Longitudinal Balance

Some important local access line parameter performance limits identified as acceptable in IEEE 820 are summarized in Table 2.

[4] Note that the term “loop” in this IEEE standard is equivalent to the term local access line (i.e., includes the switching system connection) in this Technical Report.

Table 2 Some Important Local Access Parameter Limits

Parameter	Limit
1004 Hz Insertion Loss (dB) (L is loop length in kft)	<[(0.19x L) + 7]; where L < 18 < 10.5; where L ≥ 18
Frequency Response (dB) (relative to 1004 Hz Loss) 300 Hz 3000 Hz	 −6.5 to 3.5 −3.0 to 16
Loop Current (mA)	≥ 20
Idle Circuit Noise (dBrnC)	≤ 30
3 kHz Flat Noise (dBrn 3 kHz Flat)	≤ 60
Longitudinal Noise (dBrnC)	≤ 90
Longitudinal Balance (dB)	≥ 50

Although ANSI IEEE 820 has not been reaffirmed recently, the information contained in the document continues to be useful and representative of the transmission performance of local access lines. The standard contains a number of sections that have been upgraded by the telecommunications industry. In particular, descriptions of subjective opinion models and results have been replaced, and section 4.3 (Loop Current) has been superseded by ANSI T1.401.

5.2 Loop Design Methodologies

Loop plant is the term used to refer to facilities that are placed between the DF and the customer premises. There are a number of ways in which these facilities have been designed; each of these will be explained below. For convenience the historical names of these different methods have been retained.

Several voiceband system design methods have been used in the loop plant. They have evolved as a result of continuing efforts to reduce the cost of the loop cable plant while maintaining satisfactory local access line transmission and signaling performance on an overall statistical basis. Table 3 summarizes these design methods, and they are described below.

Table 3 Summary of Loop Design Methods

Design Method	Resistance Range (Ω)[4,5]	H88 Loading (kft)	Gauging	Maximum Length (kft)
Resistance	0-1300	> 18	Mixed	75
Unigauge	0-2500	> 24	Mixed	30
Long-Route	1300-3200	All	Mixed [1]	210
CREG [3]	0-2800	> 15	Mixed	52
Revised Resistance	0-1300 0-1500	none All	Mixed Mixed	18 [2] 24 [2]

Notes:

1. To 30 kft
2. Total length including bridged tap
3. Concentrated Range Extension with Gain
4. To measure resistance of the facility the tip and ring conductors are joined at one end and the series resistance of the cable pair is measured at the other end.
5. The resistance includes the resistance of any load coils that may be used.

Load coils are sometimes used to improve the transmission performance of certain loops. Loading is used because it reduces the attenuation of the transmission path in the normal voiceband range (approximately 300 to 3300 Hz). However, it does this at the expense of increasing the attenuation loss of the transmission path outside the normal passband range. An ILEC may rearrange its network to replace non-loaded facilities with loaded facilities, or vice versa, as part of normal network maintenance or operations. Thus, a frequency range greater than approximately 300 to 3300 Hz should not be expected and cannot be guaranteed.[1]

5.2.1 Resistance Design

The resistance design method controls transmission loss by limiting loop cable resistance and requiring loading on loops 18 kft or longer. The rules include limitations on the maximum allowable lengths of bridged taps and tolerances on load-coil spacing. By employing coarser gauge cable pairs where needed, loops designed in accordance with the resistance design procedure usually meet the needs of POTS customers without the need for electronic equipment for gain (amplification), equalization, or network control signaling.

Resistance design makes use of varying gauges of cable, (e.g., 26 gauge, 24 gauge, 22 gauge and 19 gauge) and limits the maximum loop resistance to 1300 ohms. This design methodology allows for loop lengths of up to about 75 kft.

5.2.2 Unigauge Design

Unigauge design has as its objective the use of finer 26-gauge cable rather than coarse gauge, thereby reducing the amount of copper required. This design uses 26-gauge pairs exclusively to a range of 30 kft, beyond which coarser gauge may be added to the

loop. Loops longer than 24 kft are loaded, and range extenders, when needed for local access line service, are shared rather than permanently connected to each loop. These devices, which extend signaling as well as transmission range, are switched in by the local switching system.

5.2.3 Long Route Design

Long Route Design is a loop design technique that makes use of varying gauges of cable, (e.g., 26 gauge, 24 gauge, 22 gauge, and 19 gauge) and limits the maximum loop resistance to 3200 ohms. This design methodology allows for loop lengths starting at about 32 kft. In all cases the loops are loaded. Thus, the passband of the facility is constrained to voiceband frequency limits as defined in 3.1.18.[1]

Long route design is intended to serve the small fraction of telephone customers in rural areas who are located beyond the range covered by resistance or unigauge design. A specific combination of range extension and fixed gain is prescribed on local access lines utilizing long route design loops to compensate for loss and resistance of long loops. Loop lengths as much as 210 kft (about 40 miles) can be achieved using 19-gauge, H88-loaded cable.

5.2.4 Concentrated Range Extension with Gain

The concentrated range extension with gain (CREG) design method offers a uniform and flexible approach that is compatible with resistance design and long route design methods. This method enables the increased utilization of finer gauge cables in the loop plant through the use of switched range extension shared by several customers. The application of CREG design rules results in lower loop losses than other designs over a considerable range of conditions. Because of the improved overall transmission performance of CREG loops as compared with unigauge loops, in addition to administrative and design advantages, CREG design has superseded unigauge design.

5.2.5 Revised Resistance Design

While the above methods describe the design of much of the existing loop plant, newer rules for loop design became available in 1983. The principal application characteristics for these approaches are:

- Revised resistance design will be used for loops that are 1500 ohms or less and 24 kft or less.
  - Loops 18 kft or less must be designed to 1300 ohms maximum and must be nonloaded.
  - Loops greater than 18 kft but less than or equal to 24 kft, may be designed to 1500 ohms maximum and require H88 loading.
- Subscriber carrier systems (SCS) will be used for loops longer than 24 kft.

5.2.6 Subscriber Carrier System Design

Subscriber carrier systems used in local access lines are typically based on economic considerations. Subscriber carrier system channels *do* restrict the passband to approximately 300 Hz to 3400 Hz and they do not provide metallic continuity. When Subscriber Carrier System Design is invoked, the metallic pairs remaining in the cross-section between the central office and the carrier system remote terminal may not conform to the intent of other design methods. For example, should a metallic pair be either offered to, or requested by, a CLEC to provide service in an area where

Subscriber Carrier System Design has been invoked, the cable pair may have more gauge changes than that allowed by the aforementioned loop planning approaches.

5.3 Signal Levels

The maximum allowable signal level provided by the CLEC at the CLEC/ILEC INI should conform to FCC Part 68 (which is –12 dBm). The maximum allowable signal levels provided by the customer terminal equipment into the NI must conform to the requirements specified in FCC Part 68 (which is –9 dBm).

5.4 Bridged Tap

The following design rules are typically used to restrict the amount of bridged tap on metallic voicegrade analog loops. These rules are as follows:

The maximum amount of bridged tap is 6 kft for unloaded loops.

The maximum end section[5] plus bridged tap for loaded loops is 12 kft.

6 Treated Lines

This section provides information to CLECs regarding treated lines. Treated lines can be used to enhance performance over that provided by normally provisioned access described in section 5.1. This section contains information about dedicated and switched treated lines. Section 6.1 provides a summary about dedicated lines taken from ANSI T1.512. Some end users that employ dedicated treated lines also desire switched treated lines as a backup for the dedicated service. Section 6.2 contains historical information that may be useful in that regard.

6.1 Summary of Point-to-Point Voice-grade Special Access Network Voiceband Data Transmission Objectives (ANSI T1.512-1994 (R1999))

Many end-users address their voice and voiceband data communication needs with the use of private line services. ANSI T1.512 provides guidance for design of special service applications when using an unbundled voiceband analog loop segment for provisioning of service to an end-user. In particular, some voicegrade special access services may contain 2- or 4-wire unbundled loop-like segments as an integral part of the path between the NI and the IC INI (or POT).

ANSI T1.512 provides transmission performance objectives for point-to-point voiceband data, voicegrade special access services covering the bi-directional path between an exchange carrier's end-user network interface and an interexchange carrier's point of termination.

The transmission performance objectives specified in ANSI T1.512 are based on end-user needs and applications, characteristics of voiceband data modems, and capabilities of evolving telecommunications networks. A discussion of end-user application needs, and the relationship of these needs to voiceband channel transmission performance, can be found in annex A of ANSI T1.512. The objectives are considered to be reasonable criteria for circuit acceptance and restoral. Actual in-service performance will depend on the initial values and variance of parameters, not the objectives alone.

The transmission objectives for point-to-point voicegrade special access are given for the following parameters:

[5] The cable pair length between the loading point farthest from the central office and the NI.

- Loss Deviation
- Signal-to-C-notched noise ratio
- Attenuation Distortion
- Envelope delay distortion
- Impulse noise threshold
- Intermodulation distortion
- Phase jitter
- Frequency offset
- Echo control

Furthermore, the objectives for the parameters fall into three groups and one of the groups (Group 2) is further divided into two tiers. The groups define technology needs of predominant end-user applications.

6.2 Switched Treated Lines

Pre-divestiture Bell System Practices specified local loop requirements on performance. Some of these documents describe the transmission test requirements on subscriber, remote exchange, foreign exchange, PBX, and wide area telecommunications service lines used to access the switched telecommunications network for data transmission. For example, two types of access line terminations were defined for data use: lines terminated in voice jacks and lines terminated in data jacks.[6] These jacks were used to connect either telephone company data sets or customer provided equipment. At installation, both were treated the same as any other business line regardless of bit rate or modem ownership. That is, only a normal business line test was required. However, insertion loss was measured as part of the data jack installation.

Voice jacks were used to connect modems with a fixed output level not exceeding -9 dBm. Data jacks were used for modems with either -4 dBm or programmable output levels.

In the pre-divestiture environment the local loop was (and still is) defined as the facility from the customer premises to the main frame of the normal serving central office. Local loops are normally 2-wire facilities, and data transmission requirements for them were as given in Table 4. The table offers an example of loop characteristics which may have required line treatment. These values had past validity and may be applicable to today's services. These requirements are included as an example of changes that could be made over "acceptable" values found in IEEE 820.

[6] It should be noted that voice jacks and data jacks are considered to be customer premises equipment.

Table 4 Pre-Divestiture Treated Local Loop Requirements

	Limit	
Parameter	**Voice Jack**	**Data Jack**
1004-Hz Insertion Loss	10 dB Maximum	8.5 dB Maximum
C-Notched Noise (-13dBm0 holding tone)	30 dBrnC0	28 dBrnC0 Maximum
Impulse Noise at 59 dBrnC0	15 counts in 15 minutes Maximum	15 counts in 15 minutes Maximum
Attenuation Distortion (slope) 404 to 2804 Hz referenced to 1004 Hz	No Requirement	–1 to +3 dB Maximum
Transmitted Data Power (at serving CO)	–12 dBm Maximum	–12 dBm Maximum
Envelope Delay Distortion[1]	Not Specified	100 microseconds (1004 to 2804 Hz)

1. Peak-to-average ratio (P/AR) is also specified, but this parameter is rarely used today.

BELLSOUTH®

Technical Reference
73600
Issue 7, June, 2003

UNBUNDLED LOCAL LOOP - TECHNICAL SPECIFICATIONS

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Notice

This Technical Reference describes Unbundled Local Loops provided by BellSouth Telecommunications (BST), Inc. An Unbundled Local Loop provides a transmission path between a BST central office and an end-user location. This document describes the signals as they appear at the associated interfaces. It also describes some aspects of the performance of the channel.

BST reserves the right to revise this document for any reason, including but not limited to, conformity with standards promulgated by various governmental or regulatory agencies, utilization of advances in the state of the technical arts, or the reflection of changes in the design of any equipment, techniques, or procedures described or referred to herein. Liability to anyone arising out of use or reliance upon any information set forth herein is expressly disclaimed, and no representations or warranties, expressed or implied, are made with respect to the accuracy or utility of any information set forth herein.

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October, 2001

Contents

Introduction

Purpose

This document provides the technical specifications for the Unbundled Local Loops offered by BellSouth Telecommunications (BST).

Version Information

Whenever this practice is reissued, the reason(s) for reissue will be given in the table below.

Chapter	Action Request #	Date/Issue	Description	Changed Requested By/Made By
All	NA	June, 2003/Issue 7	Converted to TRDOC	Documentation Management/JT

This version is being revised as follows:

(1) To update the reference to Telcordia GR-1089-CORE

(2) To relax the voltage limit on HDSL-capable loops to the industry-standard limit of 200 Vdc.

(3) To clarify that the foreign voltage limit is applicable at the CO

(4) To differentiate clearly between insertion loss and measured signal level

(5) To specify our requirements in those cases involving the placement of cable into a new building

(6) To correct a typographical error in section 5.1

(7) To explicitly state the long-standing industry agreement that, on DS1 circuits employing ESF, the Facility Data Line is shared among all parties

(8) To explicitly quote the CSA design guidelines

1. General

1.1 Scope

This document provides the technical specifications for the Unbundled Local Loops offered by BellSouth Telecommunications (BST). Unbundled Local Loops enable a Competitive Local Exchange Carrier (CLEC) to provide services to an end-user location. While Unbundled Local Loops supporting a wide variety of signaling schemes are available, the widespread use of Digital Loop Carrier (DLC) in the BST network requires that a particular signaling scheme be specified when an Unbundled Local Loop is ordered.

A CLEC may utilize an unbundled loop to provide any telecommunications service it wishes. However, BST will only provision, maintain, and repair the loops to the standards that are consistent with the type of loop ordered. For example, if a CLEC orders an ISDN-capable loop but wants to use the loop for a service other than ISDN, BST will only support that the loop is capable of providing ISDN service.

BST will not make modifications to any loop to make it perform at a particular service level if it was not ordered as such. For example, if a loop was ordered as a Unbundled Voice Loop, but intended to be used for ADSL, BST will not remove any existing load coils from the loop.

1.2 Availability

Unbundled Local Loops are provided subject to availability on a first-come first-served basis.

2. References

2.1 General

The following documents are referenced:

(1) ANSI T1.102-1993, *Telecommunications - Digital Hierarchy - Electrical Interfaces*

(2) ANSI T1.401-1993, *Telecommunications - Interface Between Carriers and Customer Installations - Analog Voicegrade Switched Access Lines Using Loop-Start and Ground-Start Signaling*

(3) ANSI T1.403-1999, *Telecommunications - Network and Customer Installation Interfaces - DS1 Electrical Interface*

(4) ANSI T1.405-1996, *Telecommunications - Interface Between Carriers and Customer Installation Interfaces, Direct-Inward-Dialing Analog Voicegrade Switched Access Using Loop Reverse-Battery Signaling*

(5) ANSI T1.407-1997, *Telecommunications - Interface Between Carriers and Customer Installations - Analog Voicegrade Special Access Lines Using Customer-Installation-Provided Loop-Start Supervision*

(6) ANSI T1.410-1992, *Telecommunications - Carrier-to-Customer Metallic Interface - Digital Data at 64 kbit/s and Subrates*

(7) ANSI T1.413-1998, *Telecommunications - Network and Customer Installation Interfaces - Asymmetric Digital Subscriber Line (ADSL) Metallic Interface*

(8) ANSI T1.417-2001, *Telecommunications - Spectrum Management for Loop Transmission Systems*

(9) ANSI T1.601-1996, *Telecommunications - ISDN Basic Access Interface for use on Metallic Loops for Application on the Network Side of the NT*

(10) ANSI/IEEE 455-1985, *Standard Test Procedure for Measuring Longitudinal Balance of Telephone Equipment Operating in the Voice Band*

(11) ANSI/IEEE 743-1995, *Standard Equipment Requirements and Measurement Techniques for Analog Transmission Parameters for Telecommunications*

(12) Code of Federal Regulations, Title 47, FCC Rules and Regulations, Part 68, *Connection of Terminal Equipment to the Telephone Network.* Washington, D.C.: Federal Communications Commission.

(13) Committee T1 Technical Report No. 28, *A Technical Report on High-Bit-Rate Digital Subscriber Lines*

(14) Telcordia TA-TSY-000077, *Digital Channel Banks - Requirements for Dataport Channel Unit Functions, April 1986*

- continued -

(continued)

(15) Telcordia SR-TSV-002275, *BOC Notes on the LEC Networks* - 1994

(16) Telcordia GR-1089-CORE, *Electromagnetic Compatibility and Electrical Safety - Generic Criteria for Network Telecommunications Equipment - Issue 3, Revised October 2002.*

(17) Telcordia TR-NWT-000397, I*SDN Basic Access Transport System Requirements*, Issue 3, December 1993

3. Overview and Generic Requirements

3.1 Loop Topology

Unbundled Local Loops extend from the Main Distributing Frame (MDF) in BST's Central Office (CO) to the End User Network Interface. They may be composed in either of the following arrangements:

- entirely of paired metallic conductors, or
- the concatenation of a universal DLC channel with paired metallic conductors.

3.2 Digital Loop Carrier

The use of DLC brings up the following two considerations.

- Some technologies, such as High Bit-rate Digital Subscriber Line (HDSL), cannot be transported via DLC due to the bandwidth employed. When a customer is served by DLC, an Unbundled Local Loop providing such a wide bandwidth will not typically be available.
- Many dedicated voiceband circuits employ signaling that requires unique DLC line cards.

3.3 Inductive Loading

Of the loops employing only metallic facilities, significant percentages are loaded. Loading involves the placement of inductors, typically every 6000 feet, in the loop. These inductors introduce attenuation at frequencies above the voiceband, making wide bandwidth services unavailable.

3.4 Types of Unbundled Local Loops

Due to the above considerations, a number of types of Unbundled Local Loops have been developed in order to simplify the ordering and provisioning process. The different types of loops can be placed into the following categories:

- Unbundled Voice Loop (UVL)
- Unbundled Digital Loop (UDL)
- Unbundled Copper Loop (UCL)

Unbundled Voice Loops provide a two-wire or four-wire voiceband transmission channel with various signaling options.

Unbundled Digital Loops provide a channel that can support one of a described set of digital transmission schemes.

Unbundled Copper Loops provide an all-metallic, unloaded copper path to CLECs for use with any telecommunications service that can use this type of facility.

This document also covers some technical aspects of Unbundled Sub-Loops (USLs), Unbundled Network Terminating Wire (UNTW), Unbundled Sub-Loop Concentration (USLC) and Unbundled Loop Concentration (ULC).

3.5 Interfaces

Unbundled Local Loops are available with two-wire and four-wire interfaces, depending on the particular type. The same number of wires will be provided at both the MDF and the End User Interface. For two-wire interfaces, one conductor is denoted Tip and the other is denoted Ring. For four-wire interfaces, the conductors of one pair are denoted Tip and Ring; the conductors of the other pair are denoted Tip 1 and Ring 1.

The interface at the MDF is not accessible by the CLEC. Instead, it is connected to other BST unbundled elements, or it is connected-via tie cabling-to collocated CLEC equipment. The tie cabling is not part of the unbundled loop.

3.6 CLEC Equipment Requirements

Since a CLEC may utilize an Unbundled Local Loop to provide any telecommunications service it wishes and BST does not know what type of service is actually placed on the loop, regardless of how it was ordered, generic precautions must be specified for all local loop offerings.

Physical Requirements

In addition to applicable FCC, NEC, and UL requirements and orders, CLEC equipment shall also meet the following requirements:

- The equipment shall meet the requirements of Telcordia GR-1089-CORE.
- The dc voltage applied to either conductor shall be negative with respect to ground.
- Except as noted in 7.5, the open-circuit dc voltage applied to any conductor shall be less than 80 Vdc when measured to ground or any other conductor.
- The power delivered to a load via BST facilities shall not exceed 2.5 watts.
- The current provided, via BST facilities, shall not exceed 150 mA.
- AC voltages, other than those used for ringing, shall not be applied to BST facilities. The intent here is to preclude the use of BST facilities for carrying AC power (at any level). This is not intended to limit voiceband or DSL signals.

Spectrum Considerations

On any unbundled loop that a CLEC chooses to employ any Digital Subscriber Line (DSL) technology, crosstalk into other cable facilities is a concern. Accordingly, the CLEC is responsible for ensuring that the DSL product - in concert with the loop over which the DSL technology is deployed - is in compliance with ANSI T1.417.

3.7 Copper Connectivity

As described in Sections 7.5, 7.6, and 8, BST provides loops that meet the characteristics of ADSL/HDSL industry standards with the Unbundled Digital Loops UDL-2W ADSL, UDL-2W/4W HDSL and the Unbundled Copper Loop service offerings. BellSouth also offers a non-designed copper loop, UCL-ND, which is a copper only loop. However, a CLEC can attempt to run ADSL on any UNE loop, even though BellSouth does not support it. Copper connectivity cannot be assured on any UNE loop except on the four mentioned above. For example, if ADSL is placed on a UVL loop, copper connectivity cannot be assured.

3.8 Right to Disconnect

When an unbundled loop is shown to be causing harm to other systems or services, and when BellSouth has attempted to contact the Competitive Local Exchange Carrier (CLEC) and the CLEC has not responded in a reasonable length of time, BellSouth reserves the right to disconnect the offending equipment in the BellSouth Central Office and or the end user's location.

3.9 Foreign Voltage

The foreign voltage on any UNE pair at the CO shall be less than the value shown in the following table, when measured with a voltmeter having an impedance of 100 kΩ.

Notes:
(1) The use of a higher-impedance voltmeter will result in significantly higher values of foreign voltage than would be measured with a voltmeter impedance of 100 KΩ.

(2) If an open is not provided at the NI, measurement results may be affected by customer premises equipment and wiring.

(3) BellSouth does not consider a conductor-to-conductor measurement of AC Foreign Voltage to be valid.

	Maximum Value	Measured between:
DC Foreign Voltage	6 V	conductor to conductor, or either conductor to ground
AC Foreign Voltage	50 V RMS	either conductor to ground

3.10 Insulation Resistance

The insulation resistance of any UNE pair shall be at least 300 kΩ, when measured between the conductors, or between either conductor and ground.

Note: If an open is not provided at the NI, measurement results may be affected by customer premises equipment and wiring.

3.11 Capacitive balance

This test compares the capacitance, of each conductor to ground, with the far end open. Capacitive balance is expressed as a ratio of the two values of capacitance. The numerator of the ratio is the smaller value. The denominator of the ratio is the larger value.

The capacitive balance of any UNE pair shall be at least 0.95 or 95%.

Note: If an open is not provided at the NI, measurement results may be affected by customer premises equipment and wiring.

3.12 Insertion Loss vs. Signal Level

The specifications in this document, when addressing the 'loss' of a loop, are stated in terms of insertion loss. Insertion loss is defined as the loss resulting from the insertion of the device or network under test, between the source and the load. It is expressed as the ratio — of the signal power delivered to the load when the device or network under test is inserted — to the signal power delivered to the load with the device or network under test without its insertion. It is typically expressed in dB.

A convenient method of measuring the loss of a loop is to connect a signal generator in the CO, and measure the signal level at the end-user's location. When the two instruments have been calibrated against each other — at the frequency and terminating impedances being used — the difference in signal level is the insertion loss of the loop.

It should be noted that the measured signal is NOT the insertion loss. The insertion loss is stated in positive values of dB, while the received signal level is generally in negative values of dBm.

3.13 Construction in New Buildings

BellSouth will not place cable, conduit, or any facility of any sort when, in its judgment, that facility will be used only by one or more CLECs.

4. Unbundled Voice Loop - Description

4.1 General

Unbundled Voice Loops provide a two-wire or four-wire voiceband transmission channel with various signaling options. UVLs are offered in a single non-design version and several design versions. Copper continuity is not assured with this service.

Note: If an open is not provided at the NI, measurement results may be affected by customer premises equipment and wiring.

4.2 Non-Design UVL 2-Wire/Service Level 1

This Unbundled Voice Loop provides a voice grade transmission channel suitable for loop-start signaling and the transport of analog voice grade signals. This loop, which is typically used to provide switched access telephone service, is non-designed. This offering does not have test points and does not come with Order Coordination.

This loop provides loop-start signaling, arranged-for battery-feed by the CLEC and loop closure by the end-user. This loop is only available via a 2-wire, loop-start interface.

4.3 Designed Unbundled Voice Loops

The following signaling and interface combinations are supported on Designed Unbundled Voice Loops:

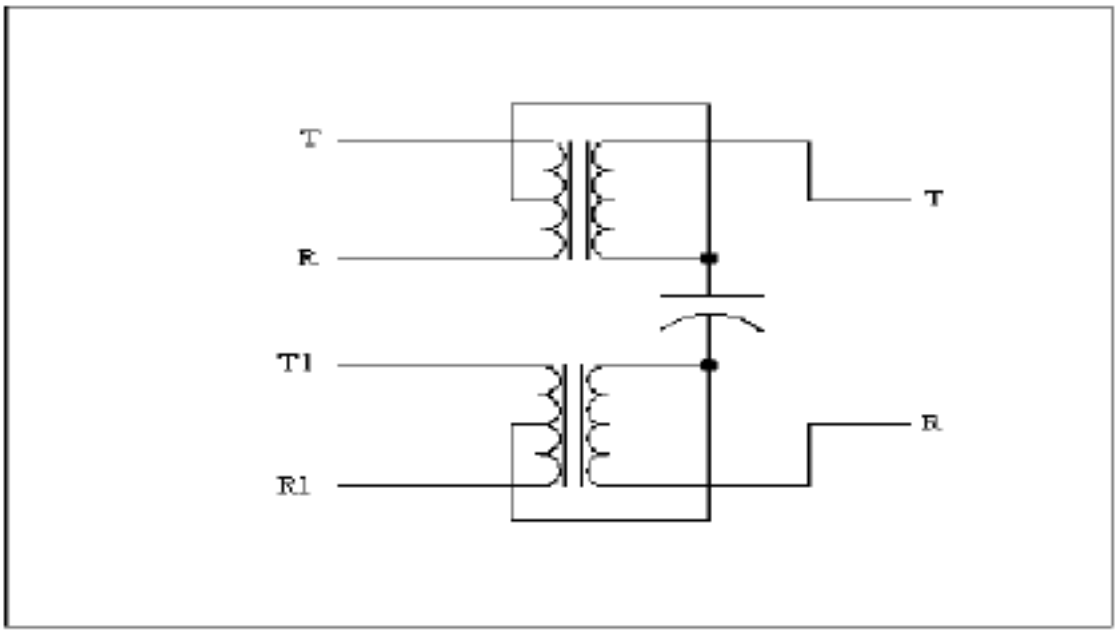
Number of Wires	Signaling Options	Service Abbreviation
2	Loop-start signaling - office end at MDF	UVL-2W/SL2 (loop)
2	Ground-start signaling - office end at MDF	UVL-2W/SL2 (ground)
2	Reverse-Battery - originating end at MDF	UVL-2W/ (reverse battery)
4	Loop-start signaling - station end at MDF	UVL-4W (loop)
4	Ground-start signaling - office end at MDF	UVL-4W (ground)

These types of signaling are described briefly below. Telcordia SR-TSV-002275 contains a more thorough discussion. Section 5 contains detailed requirements for these types of signaling at both interfaces of each Designed Unbundled Voice Loop.

4.3.1 Two-wire and Four-wire Signaling

In the discussion below, a two-wire circuit is assumed. Four-wire circuits employ similar signaling, except that the dc signaling - instead of being applied directly to the tip and ring conductors - is applied to a center-taps of coupling transformer, so that the dc signals appear in the common-mode across both

conductors of each of the four-wire pairs. A circuit suitable for the conversion of four-wire to two-wire is shown below.



4.3.2 Loop Start

The two ends of a loop-start circuit are denoted the office end and the station end. The office end provides a voltage across Tip and Ring. In the idle state, the station presents a high resistance across Tip and Ring. To request service, the station presents a low resistance between the conductors. The resultant current flow is detected by the office end. To alert an idle station of an incoming call, the office end applies ringing voltage, relative to ground, to the Ring.

Loop-start circuits arranged with the office end at the MDF interface are commonly used to provide exchange access service. Section 5.2 contains signaling requirements for both the MDF and End User interfaces.

4.3.3 Ground Start

Ground-start signaling is similar to loop-start, except that in the idle state, the office doesn't apply a voltage across Tip and Ring. Instead it applies a voltage, relative to ground, on only the Ring. This results in the following differences, relative to loop-start service:

- In order to request service, the station provides a low resistance from Tip to ground. Sensing current flow in the Ring, the office provides a (differential) voltage across both Tip and Ring.

Upon the application of the differential voltage, the station places a low resistance across the Tip and Ring, and removes the shunt to ground.

- Upon alerting the station, the office applies differential voltage, even between bursts of ringing. If suitably arranged, the station can sense this differential voltage and detect the alerting signal, even before a ringing burst is sent by the office.

Ground-start circuits arranged with the office end at the MDF interface are often used to provide two-way trunks to a PBX. Section 5.3 contains signaling requirements for both the MDF and End User Interface in such an arrangement.

4.3.4 Reverse Battery

Reverse-Battery signaling is typically used on trunks, rather than lines. There is no ‘‘office end’’ or ‘‘station end’’ convention. Ringing is not employed. Reverse-battery signaling accommodates only one-way trunks[1]. For this reason, the ends of the circuit are usually denoted the originating and terminating end.

The terminating end of the circuit provides a voltage across Tip and Ring. In the idle state, the originating end presents a high resistance across Tip and Ring. To request service, the originating end places a low resistance across the conductors. The terminating end senses the resultant loop current. To signal that toward the originating that, for instance, it is ready to accept address digits, the terminating end reverses the polarity across Tip and Ring.

The originating end can return to idle by removing the low resistance across Tip and Ring. If properly equipped, the originating end can sense a reversal of polarity as an indication of return to idle by the terminating end.

The originating end can return to idle by removing the low resistance across Tip and Ring. If properly equipped, the originating end can sense a reversal of polarity as an indication of return to idle by the terminating end.

Reverse-Battery circuits, with the originating end at the MDF, are often used to provide Direct Inward Dialing (DID) trunks to PBX’s located behind the End User Interface. Section 5.4 contains signaling requirements for such an arrangement.

4.4 Signaling Requirements

In practically all cases employing metallic facilities, the loop resistance (the sum of the resistance of both tip and ring) is less than 1500 Ω.

In those cases where loop resistance exceeds 1500 Ω, it will never exceed 2800 Ω. In these cases, BST cannot meet the prescribed signaling requirements at the End User Interface unless the CLEC provides sufficient voltage at the office end of the circuit. The open circuit tip-to-ring dc voltage provided by the CLEC equipment shall be less than 80 Vdc.

1 The term ‘‘one-way" indicates that a trunk can only be originated from one end. The voice-frequency capability is bi-directional.

4.5 Transmission Requirements

In those rare cases where the loop resistance exceeds 1500 Ω, the insertion loss at 1 kHz, measured with a 900 Ω termination at the MDF and a 600 Ω termination at the End User Interface will never exceed 15 dB.

5. Unbundled Voice Loop - Signaling Requirements

5.1 General

When metallic facilities are employed, signaling and supervision is dependent, of course, on the source voltage (provided by either the CLEC equipment or BST equipment to which the loop is connected), and the total circuit resistance. For all service offerings, in practically all cases, the loop resistance (the sum of the resistance of both tip and ring) shall be less than 1500 Ω. For some UVL loops, loop resistance may exceed 1500 Ω, but will never exceed 2800W. In these cases, BST cannot meet the prescribed signaling requirements at the End User Interface unless the CLEC provides sufficient voltage at the office end of the circuit. The open circuit tip-ring dc voltage provided by the CLEC equipment shall be less than 80 Vdc. For all service offerings, the dc resistance between the tip conductor and ground and the ring conductor and ground shall each be greater than 100 kΩ.

Except for instances within ringing burst (as described below), the CLEC shall not apply voltages to either conductor that are positive with respect to ground. Current supplied by CLEC equipment shall be less than 150 mA. Voltages from either conductor to ground shall be more positive than -80 Vdc.

When DLC is employed, both the DLC system and the CLEC must employ compatible signaling. The following requirements are intended to ensure such compatibility, both when the loop is provided via DLC and via metallic facilities.

The following requirements apply to both two-wire and four-wire interfaces. For purposes of clarity, the requirements are based on two-wire interfaces. When four-wire interfaces are employed, references and/or measurements to Tip apply to the common mode (simplex) path via both Tip and Ring. Similarly, references and/or measurements to Ring apply to the common mode (simplex) path via Tip 1 and Ring 1.

5.2 Loop-Start - Office End at MDF

5.2.1 General

A small percentage of Designed Unbundled Voice Loops provided via DLC may not be able to support the distinctive ringing or forward disconnect features.

5.2.2 MDF Interface - Idle State

In the idle state, the CLEC equipment shall provide an open circuit Tip-to-Ring voltage between 42.5 and 80 Vdc. The Ring shall be negative, relative to the Tip. No positive voltage - relative to ground - shall be applied to either conductor.

In the idle state, the loop shall provide a dc resistance at the MDF meeting either of the following requirements:

- A dc resistance between Tip and Ring ≥ 10,000 Ω (loop provided via DLC), or
- A dc resistance between Tip and Ring ≥ the parallel combination of the following:
  - the series combination of the on-hook dc resistance of connected equipment at the End User Interface and the dc resistance of the loop, and
  - a leakage resistance of 100,000 Ω.

5.2.3 MDF Interface - Alerting State

In the alerting state, the CLEC equipment shall alternately apply a ringing signal and the normal idle-state potential. The ringing signal shall be applied to the Ring conductor. The voltage on the Tip conductor, relative to Ground shall be between 0.0 and -5.0 Vdc. In any six-second period, there shall be at least three continuous seconds of the normal idle-state voltage. The ringing signal shall consist of an ac signal superimposed on a dc signal.

The requirements of the ac component are as follows:

- The frequency shall be 20 ± 3 Hz
- The magnitude shall be between 84 and 104 V_{rms}.
- The waveform shall have a peak-to-rms ratio between 1.35 and 1.45.
- The ac current into a line shall be limited to less than 220 mA.

The potential of the dc component shall be between -36 and 56.6 Vdc, relative to ground.

The ringing signal (ac component + dc component) shall be applied to the Ring, with a source impedance ≤ 500 Ω. Ground shall be applied to the Tip, with a source impedance of ≤ 500 Ω.

The ringing signal shall be removed within 200 milliseconds after the line has gone off-hook, as defined below. The ringing signal shall not be 'tripped' when ringing into the parallel combination of the following:

- 10,000 Ω of dc resistance
- a 2 µF capacitor and the series combination of 1386 Ω and 20 µF (simulating 5 bridged ringers)
- the series combination of 1386 Ω and 20 µF (simulating 5 bridged ringers)

5.2.4 MDF Interface - Off-Hook State

The CLEC equipment shall recognize a resistance of 1900 Ω applied between Tip and Ring at the MDF as off-hook. For interoperability with loops with resistance greater than 1500 Ω, the CLEC equipment shall recognize a resistance of 3200 Ω applied between Tip and Ring at the MDF as off-hook. In either case, the CLEC must provide at least 20 mA through the limiting resistance.

The CLEC shall also meet the following requirements:

- The power delivered to any load via Tip and/or Ring shall not exceed 2.5 W.
- The current provided, via Tip and/or Ring, shall not exceed 150 mA.

In the off-hook state, the loop shall provide a dc resistance at the MDF meeting one of the following requirements:

- A dc resistance between Tip and Ring ≤ 1150 Ω (loop provided via DLC), or
- A dc resistance between Tip and Ring ≤ the series combination of the off-hook dc resistance of connected equipment at the End User Interface and the dc resistance of the loop.

5.2.5 End-User Interface

Signaling provided by connecting equipment at the End User Interface shall meet the Customer Installation requirements in ANSI T1.401-1993. The loop shall meet the network requirements in ANSI T1.401-1993.

5.3 Ground-Start - Office End at MDF

5.3.1 General

This arrangement is commonly used to support two-way trunks providing switched access to PBX's.

A small percentage of Designed Unbundled Voice Loops provided via DLC may not be able to support the distinctive ringing or forward disconnect features.

5.3.2 MDF Interface - Idle State

In the idle state, the CLEC equipment shall provide an open circuit Ring-to-ground voltage between 16 and 55 Vdc. The Ring shall be negative, relative to ground. The dc resistance from Tip to ground shall be ≥ 50,000 Ω.

In the idle state, the loop shall provide a dc resistance at the MDF meeting one of the following requirements:

- A dc resistance from Ring to Ground ≥ 10,000 Ω (loop provided via DLC), or
- A dc resistance from Ring to Ground ≥ the parallel combination of the following:
  - the series combination of the dc resistance from Ring to Ground at the End User Interface and ½ of the dc resistance of the loop, and
  - a leakage resistance of 100,000 Ω.

5.3.3 MDF Interface - Alerting State

The CLEC shall meet the requirements of 5.2.3.

5.3.4 MDF Interface - Service Request State

When the end user initiates a call by placing a low resistance (≤ 580 Ω) from Ring to Ground, the loop shall provide a dc resistance at the MDF meeting one of the following requirements:

- A dc resistance from Ring to Ground ≤ 900 Ω (loop provided via DLC), or
- A dc resistance from Ring to Ground ≤ the series combination of the dc resistance from Ring to Ground at the End User Interface and ½ of the dc resistance of the loop.

5.3.5 MDF Interface - Off-Hook State

Upon application of the Ring ground in the Service-Request State, the CLEC equipment shall provide a current-feed interface meeting the requirements of 5.2.4.

The loop shall present a dc resistance across Tip and Ring meeting the requirements of 5.2.4.

5.3.6 End-User Interface

Signaling provided by connecting equipment at the End User Interface shall meet the Customer Installation requirements in ANSI T1.401-1993. The loop shall meet the network requirements in ANSI T1.401-1993.

5.4 Reverse-Battery - Originating End at the MDF

5.4.1 MDF Interface - Idle State

In the idle state, the CLEC equipment shall maintain a dc resistance from Tip to Ring, Tip to Ground, and Ring to Ground ≥ 22,500 Ω.

If the loop is provided via Digital Loop Carrier, the loop shall provide at least 36 Vdc between Tip and Ring, with the Tip positive with respect to the Ring, in the idle state.

5.4.2 MDF Interface - Seizure

The Originating end signals an off-hook (seizure) by placing a low resistance between Tip and Ring. In this state, the CLEC equipment shall provide a dc resistance between Tip and Ring ≤ 670 Ω.

The current provided by the loop (with CLEC equipment attached that meets the above requirement) shall meet the following requirement:

- If the absolute value of the Tip to Ring voltage is ≥ 33.8 Vdc, the current shall be at least that produced by a 36 Vdc source in series with 135 Ω.
- If the absolute value of the Tip to Ring voltage ≥ 29.5 Vdc, but ≥ 33.8 Vdc, the current shall be at least that produced by a 41.7 Vdc source in series with 489 Ω.
- If the absolute value of the Tip to Ring voltage < 29.5 Vdc, the current may be as low as 0 mA.

5.4.3 MDF Interface - Reverse-Battery State

The Terminating end signals an off-hook by reversing the polarity of the voltage applied across Tip and Ring. In this state, the CLEC equipment shall maintain a dc resistance of ≤ 670 Ω across Tip and Ring. In this state, the loop shall meet the requirements of 5.4.2.

5.4.4 End User Interface

Signaling provided by connecting equipment at the End User Interface shall meet the Customer Installation requirements in ANSI T1.405-1996. The loop shall meet the network requirements in ANSI T1.405-1996.

6. Unbundled Voice Loop - Voice-Frequency Transmission Requirements

6.1 General

When Loop-Start or Ground-Start signaling is employed, the following specifications are supported only during the off-hook state. These specifications apply to all Designed Unbundled Voice Loops, regardless of the signaling state, except where specified. ANSI/IEEE 743-1995 contains requirements for instrumentation necessary to measure compliance with the following requirements.

6.2 Insertion Loss

The following specifications apply to all Unbundled Voice Loops when measured with a 900 Ω ac impedance at the MDF and a 600 Ω ac impedance at the End User Interface:

- The actual measured insertion loss at 1 kHz shall be 10 dB or less. (See note below.)
- The actual measured insertion loss at 2.8 kHz shall be no greater than 9 dB above that at 1 kHz.

BST does not support transmission on any Designed Unbundled Voice Loop at frequencies below 300 Hz, or above 3.0 kHz.

Note: In those rare cases where a UVL loop resistance exceeds 1500 Ω, the insertion loss at 1 kHz will never exceed 15 dB.

6.3 Noise

The idle-channel noise shall be less than 20 dBrnC.

The Signal to C-Notched Noise Ratio shall be at least 32 dB, when measured with a -13 dBm holding tone.

6.4 Noise-to-Ground

The Noise-to-Ground parameter has two specifications. When measured with a C-message weighting filter, it should be less than 90 dBrnC. When measured with a high-impedance voltmeter, it shall not exceed 50 V (126 dBrn).

Note: While dBrn is in units of power, both of these requirements involve voltage measurement, with results displayed in units of power, assuming that the voltage is across a 600 Ω resistor.

The longitudinal balance (longitudinal to metallic conversion loss) of any metallic component of the loop shall be at least 50 dB for frequencies up to 1 kHz. The longitudinal balance of interconnected

CLEC equipment shall exceed 60 dB at any frequency up to 1 kHz. This parameter may be measured using ANSI/IEEE 455-1985.

6.5 Voiceband Data

BST does not guarantee that an Unbundled Voice Loop (non-designed or designed) will be suitable for analog data or Facsimile transmission. If a customer is able to send and receive data, BST does not guarantee a data rate.

6.6 Signal Power

The power of the voiceband signal, at either the End User Interface or the MDF, shall not exceed -9 dBm, when averaged over any 3-second period.

The out-of-band signal power shall meet the out-of-band signal power limits in Section 68.308 of FCC Part 68 requirements. In the event that connected equipment is not registered under Part 68, this requirement shall still apply.

7. Unbundled Digital Loop

7.1 General

An Unbundled Digital Loop provides a channel intended to support one of a described set of digital transmission schemes. These schemes include the following:

- Digital Baseband at 2.4, 4.8, 9.6, 19.2, 56 and 64 kbps
- Basic Rate Access ISDN
- Basic Rate Access UDC
- High-Bit-Rate Digital Subscriber Line (HDSL)
- Asymmetrical Digital Subscriber Line (ADSL)
- DS1

Requirements for each of these services are described below.

7.2 Digital Baseband at 2.4, 4.8, 9.6, 19.2, 56 and 64 kbps

7.2.1 Interfaces

The interface at the MDF is a 4-wire interface, described as a DS-0A interface in Telcordia TA-TSY-000077. The End User Interface is a 4-wire interface described in ANSI T1.410-1992. Signals applied at either interface shall meet the requirements of these documents.

7.2.2 Transport

The loop facility may be provided via metallic facilities, DLC, or both. Where metallic facilities are employed, loops measuring less than the insertion loss specified for each service in Table 7.2 will be served directly on copper. This loss should be measured between 135 Ω terminations at the insertion loss frequency specified for each service in Table 7.2. Loops measuring over the specified limit in Table 7.2 but less than 50 dB at 13.3 kHz may be served with range extension devices. Loops measuring more than this second limit will be considered out of range for metallic-only service but may be served if DLC exists in the area. Where spare DLC facilities exist, only the length of the copper extension from the DLC to the customer is an issue. DC signaling, in the simplex path, is only supported to the extent necessary to provide maintenance functions as described in Telcordia TA-TSY-000077 and ANSI T1.410-1992.

Table 7.2 Maximum Allowable Digital Baseband Service Insertion Losses

Service	Insertion Loss Frequency	Max Allowable Insertion Loss
2.4 kbps	1.2 kHz	34

- continued -

(continued)

4.8 kbps	2.4 kHz	34
9.6 kbps	4.8 kHz	34
19.2 kbps	9.6 kHz	40
56 kbps	28.0 kHz	40
64 kbps	36.0 kHz	40

7.3 Basic Rate Access ISDN

This unbundled loop provides for the transport of two 64 kbps (B) channels and one 16 kbps (D) channel. Time Slot Sequence Integrity is not ensured. If this unbundled loop is provisioned over DLC, the CLEC's data must be synchronous with the timing employed by BST.

7.3.1 Interfaces

The interface at both the CLEC (collocated or elsewhere) and the End User Interface is a 2-wire interface as defined in ANSI T1.601-1996. The supported arrangement involves an NT at the end-user and an LT provided by the CLEC. No other arrangements are supported. Signals applied at either interface shall meet the requirements of this document.

7.3.2 Transport

The loop facility may be provided via metallic facilities, DLC, or both. Where metallic facilities are employed, loops measuring less than 42 dB at 40 kHz will be served directly on copper. Loops measuring over this limit but less than 52 dB at 20 kHz may be served with range extension devices. Loops measuring more than this second limit will be considered out of range for metallic-only service but may be served if DLC exists in the area. Where spare DLC facilities exist, only the length of the copper extension from the DLC to the customer is an issue. No dc specifications are supported. Sealing current - even if not provided by the CLEC equipment (LT) - may be provided, but is not guaranteed. The noise requirements in Sections 6.3 and 6.4 apply to this service.

7.4 Basic Rate ISDN UDC

UDC loops are ISDN loops that are configured for data-only applications such as IDSL. UDC loops are intended to support a CLEC's IDSL service but are not guaranteed to do so.

UDC loops may be provisioned over metallic facilities, DLC, or both. When provisioned via a DLC system, the following applies:

- Transport for the 4 kb/s of the M-channel information plus the DSL superframe timing - as defined in Telcordia Technical Reference TR-NWT-000397 - will be provided in addition to the two 64 kbps (B) channels and one 16 kbps (D) channel.

- The CLEC's data shall be synchronous with the timing employed by BST.
- Time Slot Sequence Integrity will be ensured by BST.

7.4.1 Interfaces

The interface at both the CLEC (collocated or elsewhere) and the End User Interface is a 2-wire interface as defined in ANSI T1.601-1996. The supported arrangement involves an NT at the end-user and an LT provided by the CLEC. No other arrangements are supported. Signals applied at either interface shall meet the requirements of this document

7.4.2 Transport

The loop facility may be provided via metallic facilities, DLC, or both. Where metallic facilities are employed, loops measuring less than 42 dB at 40 kHz will be served directly on copper. Loops measuring over this limit but less than 52 dB at 20 kHz may be served with range extension devices. Loops measuring more than this second limit will be considered out of range for metallic-only service but may be served if DLC exists in the area. Where spare DLC facilities exist, only the length of the copper extension from the DLC to the customer is an issue. No dc specifications are supported. Sealing current - even if not provided by the CLEC equipment (LT) - may be provided, but is not guaranteed. The noise requirements in Sections 6.3 and 6.4 apply to this service.

7.5 HDSL-capable

7.5.1 Availability

This channel is not available when DLC is employed. This channel is not available if the loop facilities do not meet Carrier Serving Area (CSA) guidelines.

CSA guidelines are as follows:

1. Nonloaded cable only
2. Multi-gauge cable is restricted to two gauges (excluding short cable sections used for stubbing or fusing)
3. The total length of bridged tap may not exceed 2.5 kft. No single bridged tap may exceed 2.0 kft.
4. The amount of 26 gauge cable (used alone or in combination with another gauge cable) may not exceed a total length of 9 kft including bridged tap.
5. For single gauge or multi-gauge cables containing only 19, 22, or 24 gauge cable, the total cable length including bridged tap may not exceed 12 kft.
6. The total cable length including bridged tap of a multi-gauge cable that contains 26 gauge cable may not exceed

$$12 - \frac{3(L26)}{9 - LBTAP} \text{ kft}$$

where L26 is the total length of 26 gauge cable in the cable (excluding any 26 gauge bridged tap) and LBTAP is the total length of bridged tap in the cable. All lengths are in kilofeet (kft).

7.5.2 Interfaces

At the CLEC's request, either a 2-wire or 4-wire channel will be provided.

7.5.3 Transport

The loop facility consists of only non-loaded metallic facilities meeting CSA design guidelines as documented in Committee T1 Technical Report No. 28. The dc resistance of a single wire pair should not exceed 850 Ω. The total bridged tap length may not exceed 2.5kf, with no single bridged tap exceeding 2.0kf. The insertion loss of a pair at 100 kHz, measured between 135 Ω terminations, shall not exceed 35 dB. No industry-wide standard exists for a designed loss maximum for HDSL. Different HDSL equipment vendors may use different design parameters. The loss specified above was developed through extensive modeling of CSA loops at BST and represents the worst-case CSA loop loss.

For a CLEC-requested loop facility that does not meet HDSL-capable loop specifications due to the existence of load coils or excessive brideged tap, the CLEC may request that BellSouth modify the loop. In these situations and as a chargeable option, BellSouth will use the Unbundled Loop Modification (ULM) process to modify the requested loop facility to HDSL-capable loop specifications. Additionally, the ULM product may be utilized by the CLEC to remove any bridged tap sections on loops already meeting the HDSL-capable loop specification.

BellSouth does not guarantee a particular bit-rate associated with these loops. The transmission amd bit-rate speed of HDSL-type services are dependent on the CLEC's equipment.

7.5.4 7.5.4 DC Voltage on HDSL-capable loops

In the case of HDSL-capable loops, the DC voltage limits defined in section 3.6 are relaxed to the following:

The open-circuit dc voltage applied to any conductor shall be less than 200 Vdc when measured to ground or any other conductor.

7.6 ADSL-capable

7.6.1 Availability

This channel is not available when DLC is employed. This channel is not available if the loop facilities do not meet Revised Resistance Design (RRD) guidelines as defined in Telcordia SR-TSV-002275.

7.6.2 Interfaces

This offering is available as a 2-wire channel only.

7.6.3 Transport

The loop facility consists of only non-loaded metallic facilities meeting RRD design guidelines. RRD guidelines limit non-loaded loops to 18kf in length or less, including bridged tap, and 1300 Ω of resistance or less. RRD further limits total bridged tap to 6kf. The dc resistance of a single wire pair should not exceed 1300 Ω. The insertion loss of a pair at 40 kHz, measured between 135 Ω terminations, shall not exceed 42 dB, as specified in ANSI T1.601.

For a CLEC-requested loop facility that does not meet ADSL-capable loop specifications due to the existence of load coils or excessive brideged tap, the CLEC may request that BellSouth modify the loop. In these situations and as a chargeable option, BellSouth will use the Unbundled Loop Modification (ULM) process to modify the requested loop facility to ADSL-capable loop specifications. Additionally, the ULM product may be utilized by the CLEC to remove any bridged tap sections on loops already meeting the ADSL-capable loop specification.

BellSouth does not guarantee a particular bit-rate associated with these loops. The transmission and bit-rate speed of ADSL-type services are dependent on the CLEC's equipment.

7.7 DS1

7.7.1 Availability

This channel is available where DS1-capable facilities exist.

7.7.2 Interfaces

One balanced twisted pair shall be used for each direction of transmission.

The physical layer of the DS1 NI is consistent with the interface requirements delineated in the following specifications:

TR 73572 *Expanded Interconnection Service DS1 and DS3 Level Network Interface*

ANSI T1.403 *Network-and-Customer Installation - DS1 Metallic Interface*

TR 73572 defines the central office interface for Collocated transmission equipment with BST services. CLEC equipment that is connected to this offering shall meet the DSX-1 signal power limits specified in ANSI T1.102. BST will designate a meet point location within the central office where BST DS1 services will be terminated at the NI for interconnection to the CLEC transmission equipment.

ANSI T1.403 applies to end-user interfaces. End-user CPE that is connected to this offering shall meet the DS1 signal power limits in ANSI T1.403 and Part 68 of the FCC Rules. Interconnection at the DS1 End-User NI is through one of four Universal Service Order Code (USOC) connectors, RJ48C, RJ48X, RJ48M, RJ48H, as shown in ANSI T1.403 and Part 68 of the FCC Rules and Regulations as revised by Public Notice Numbers 4609 (September 21, 1988) and 4572 (October 3, 1988). The RJ48C or RJ48X

jack is used for single DS1 line installations, and the RJ48M (8 DS1s) or RJ48H (12 DS1s) may be used for multiple circuit installations. These have a jack to the network and a plug from the CI installation. Alternatively, an appropriate DS1 rate digital cross connect panel may function as the interconnection arrangement at the NI.

7.7.3 Transport

This service enables full duplex 1.544 Mbps digital transmission and supports either Superframe (SF) or Extended Superframe (ESF) framing formats as specified in ANSI T1.403-1999.

When ESF is employed, the Facility Data Link is shared between the end-user and all carriers.

The service is available with either the AMI or B8ZS line codes as specified in ANSI T1.403-1999. This DS1 offering may be provisioned via a variety of loop transmission technologies, including, but not limited to, metallic facilities without signal regeneration, metallic facilities with signal regeneration, metallic facilities with HDSL-based technology or fiber optic transport systems. The technology used will be based upon existing capacities and distance from the central office.

BST will conduct short-term bit-error-rate stress testing, as outlined in ANSI T1.510-1999, on each DS1 circuit during installation to insure proper circuit performance.

8. Unbundled Copper Loop

8.1 General

An Unbundled Copper Loop provides a dedicated, non-loaded all-metallic transmission facility from the BST Serving Wire Center MDF to the end user. A UCL will consist of one or two copper pairs that BST records indicate are non-loaded. The UCL will be offered in two versions: UCL/S (Short) and UCL/L (Long). The UCL/S is any copper loop less than or equal to 18kf in length. In addition, up to 6kf of bridged tap may be included on the facility. The UCL/L is any copper loop longer than 18kf.

The loop is not intended to support any particular service and may be utilized by the CLEC to provide a wide-range of telecommunications services, so long as those services do not adversely affect BST's network.

8.2 Availability

This channel is not available when DLC is employed. This channel is not available if the loop facilities do not meet Resistance Design (RD) guidelines as defined in Telcordia SR-TSV-002275. With this service, metallic copper continuity is assured. BST will provide UCLs where they already exist in the BST network. BST is not obligated to provision UCL service in a non-copper area.

8.3 Interfaces

This service offering is available in a 2-wire or 4-wire interface.

8.4 Transport

For the UCL/S (Short) offering, the loop facility consists of only unloaded metallic facilities which BST records indicate meet Resistance Design guidelines. The loop resistance must not exceed 1300 Ω. The total allowable length of the loop is 18kf. An additional 6kf of bridged tap is allowed. BST will guarantee electrical continuity and capacitive balance. The insertion loss of a pair meeting the RD guidelines shall not exceed 46 db at 40 kHZ, measured between 135 Ω terminations.

For the UCL/L (Long) offering, the loop facility consists of only non-loaded metallic facilities which BST records indicate are greater than 18kf. The loop resistance should not exceed 2800 Ω. In addition, up to 12kf of bridged tap may be included on the loop facility. On the UCL/L offering BST will only provide electrical continuity and balance.

Pairs of this length typically have load coils or other-extending equipment. For a CLEC-requested loop facility that does not meet the UCL loop specifications due to the existence of load coils or excessive bridged tap, the CLEC may request that BellSouth modify the loop. In these situations and as a chargeable option, BellSouth will use the Unbundled Loop Modification (ULM) process to modify the requested loop

facility to UCL loop specifications. Additionally, the ULM product may be utilized by the CLEC to remove any bridged tap sections on loops already meeting the UCL specifications.

BellSouth does not guarantee a particular bit-rate associated with these loops. The transmission and bit-rate speed of xDSL-type services are dependent on the CLEC's equipment.

9. Unbundled Copper Loop Non-Designed

9.1 General

An Unbundled Copper Loop Non-Designed (UCL-ND) provides a dedicated 2-wire non-loaded all metallic transmission facility from BellSouth's Serving Wire Center (SWC) Main Distribution Frame (MDF) to the end user (including the NID).

An UCL-ND will consist of one copper pair that BellSouth records indicate is non-loaded with a resistance of 1300 Ω or less. The loop may have up to 6,000 feet of bridged tap between the end user's premises and the SWC. The exact resistance, length and bridged tap are not guaranteed due to the loop being non-designed. The UCL-ND will be assigned based on BellSouth's records indicating that the loop resistance will not be greater than 1300 Ω resistance and, in most cases, will not exceed 18,000 feet in length, although the UCL-ND will not have a specific length limitation. For loops less than 18,000 feet and with less that 1300 Ω resistance, the loop will provide a voice grade transmission channel typically suitable for acceptable transport of voice grade signals. Test points are not available with UCL-ND because this is a Non-Designed product.

9.2 Availability

This channel is not available when DLC or DAML is employed. This channel is not available if the loop records used for qualification shows a resistance greater than 1300 Ω and/or loaded facilities. With this service, metallic continuity is assured. BellSouth will provide UCL-NDs where they already exist in the BellSouth network. BellSouth is not obligated to provision UCL-ND service in a non-copper area.

9.3 Interfaces

This service offering is available in a 2-wire interface.

9.4 Transport

For the UCL-ND offering, the loop facility consists of only unloaded metallic facilities which BellSouth records indicate are 1300 Ω of resistance or less. There is no maximum loop length, however most loops inventoried as non-loaded 1300 Ω circuits will be less than 18,000 feet. An additional 6kft of bridged tap is allowed. BellSouth will guarantee electrical continuity and capacitive balance.

For a CLEC-requested loop facility that does not meet the UCL-ND loop specifications due to the existence of load coils or excessive bridged tap, the CLEC may request that BellSouth modify the loop. In these situations and as a chargeable option, BellSouth will use the existing Unbundled Loop Modifications (ULM) process to modify the requested loop facility to UCL-ND loop specifications. Additionally, the ULM product may be utilized by the CLEC to remove any bridge tap sections on loops already meeting the UCL-ND specifications.

BellSouth does not guarantee a particular bit-rate associated with these loops. The transmission and bit-rate speed of xDSL type services are dependent on the CLEC's equipment.

10. Unbundled Sub-Loop

10.1 General

The two types of Unbundled Sub-Loops are Unbundled Sub-Loops Feeder, and Unbundled Sub-Loops. The latter are distribution facilities. These elements are available with either 2-wire or 4-wire interfaces.

10.2 Unbundled Sub-Loop Feeder

The Unbundled Sub-Loop Feeder element is a dedicated transmission facility that BST provides from a termination point within a BST central office to a cross-connect panel within a BST Remote Terminal (RT), Feeder-Distribution Interface (FDI) or other remote structure. This facility will allow a CLEC to order the feeder portion of an unbundled loop separate and apart from the other loop elements. Using this element, the end user will be able to send and receive telecommunications traffic when it is properly connected to the other needed network elements such as a loop distribution facility and either a circuit or packet switch.

USLFs intended to be utilized for voice traffic will have a loop resistance no greater than 2800 Ω. These elements may be loaded. They can be configured as follows:

2-wire voice (USLF-2W/V)
4-wire voice (USLF-4W/V)

USLFs intended to be utilized for digital traffic can be configured as follows:

2-wire ISDN (USLF-2W/I)
2 Wire UDC
4-wire DS0 level loop (USLF-4W/D0)
4-wire DS1 & ISDN (USLF-4W/DI)

Additionally, copper-only feeder pairs can be provided. They will have a loop resistance no greater than 2800 Ω. They may be loaded. They include the following:

2 Wire Copper USLF
4 Wire Copper USLF

10.3 Unbundled Sub-Loop

An Unbundled Sub-Loop is a dedicated transmission facility that BST provides from an end-user's point of demarcation to a BST FDI. The BST FDI may stand alone, or it may be located within an RT or an equipment room of a building. This facility is also referred to as the loop distribution portion of BST's network. Currently, the following offerings are available for Unbundled Sub-Loop:

- Unbundled Sub-Loop Distribution (USL-D) is a voice grade sub-loop facility from the FDI up to and including the end-user's point of demarcation. This facility may be loaded.

- Unbundled Sub-Loop-Intra-building Network Cable (USL-INC) (formerly known as riser cable) is the distribution facility inside a subscribers' buildings or between buildings on one customer's same premises (continuous property not separated by a public street or road). USL-INC includes the facility from the cross-connect device in the building equipment room up to and including the end-user's point of demarcation.
- Unbundled Copper Sub-Loop (UCSL) is a non-loaded copper facility of any length provided from the FDI up to and including the end-user's point of demarcation. If available, this facility will not have any intervening equipment such as load coils, repeaters, etc., between the end-user and the FDI.

11. Unbundled Network Terminating Wire

11.1 General

An Unbundled Network Terminating Wire (UNTW) is a dedicated transmission facility that BST provides from the Wiring Closet/Garden Terminal, or other cross-connect type, at the point of termination of BST's loop distribution facilities, to the end user premises.

When properly connected to the CLEC's loop distribution and CLEC's Network Interface Device facilities, the offering will provide a communication pathway from the CLEC to the end user's inside wire.

This service does not include a Network Interface Device (NID).

11.2 Availability

In the states where BST has been ordered to provide sub-loop unbundling, this service is available anywhere a CLEC chooses to place a feeder distribution cable in proximity to an existing customer served by BST.

11.3 Interfaces

This service offering is available as a 2-wire or 4-wire interface.

11.4 Transport

This service will provide a copper pair from the BST distribution terminal to the customer. BST does not provide any specific telecommunications services associated with the UNTW. BST will only provide electrical continuity and balance. The requirements in Sections 3.6 apply to these loops.

12. Network Interface Device (NID) Access

12.1 General

NID Access is designed to allow a CLEC the opportunity to connect its loop to the inside-wiring portion of BST's Network Interface Device (NID). It is expected that the CLEC will provision a loop and a NID to the customer's location. The CLEC will perform a physical cross-connect of the inside wire to its loop, through BST's NID.

In those states where the PSC has allowed the CLEC to remove the BST loop from a BST NID where no spare terminal capacity exists, it will be the CLEC's responsibility to ensure that there is no safety hazard and must hold BST harmless for any liablilty associated with the CLEC's removal of the BST loop from the BST NID. The BellSouth drop wire is terminated on a protector which provides over-voltage protection within the NID. Therefore, the CLEC will use the following procedures to insure that the BST drop wire, disconnected from the outside NID, is adequately protected:

1. The CLEC shall disconnect the drop wire and reconnect it to a nationally-recognized-testing-laboratory-listed station protector, which has been grounded as per Article 800 of the National Electrical Code, or;
2. If the CLEC does not wish to accept this responsibility, other options exist in which BST installs a NID for the CLEC as a chargeable service.

13. Unbundled Sub-Loop Concentration

13.1 General

Unbundled Sub-Loop Concentration (USLC) will allow a CLEC to concentrate loop distribution elements provided by the CLEC on to multiple DS1s for the purpose of connecting the loop distribution elements, at a concentrated level, to BST's feeder facilities. This concentration will take place at an existing BST remote terminal where spare capacity exists. BST will transport the DS1s carrying the distribution circuits back to the Serving Wire Center for termination on a BST DSX panel and will ultimately terminate to the CLEC's collocation space in that SWC.

13.2 Availability

BST will offer this capability in all locations where capacity is available. If no capacity exists in the BST RT or cross-box, BST will utilize its special construction process to determine if an additional RT or cross-box can be placed near the existing RT or cross-box for increased capacity. If this cannot be done, BST will not be able to provide USLC in that area.

13.3 Interfaces

This service can be provisioned with either a TR008 or a TR303 interface. Each USLC will be dedicated to a single CLEC.

13.4 Transport

In order for the BST loop concentration system to perform properly, certain interface requirements into the concentration system must be observed.

The interface requirements into a loop concentration system are service dependent. For each CLEC-requested service to be placed through the concentration system, BST will provision appropriate channel units. All dc voltage, current and signal powers applied to each channel unit by the CLEC shall comply with extant industry documents related to that service.

The optional test circuit, commonly referred to as a dc test pair, offered with this service shall comply with the appropriate system (TR008 or TR303) testing requirements. The maximum dc voltage allowed on the test pair is 120 Vdc, with a maximum resulting current of 15 mA. The maximum allowable ac voltage is 60 Vac. This test circuit will be emulated with Tollgrade channel units using two channels of the concentrated carrier system.

14. Unbundled Loop Concentration

14.1 General

Unbundled Loop Concentration (ULC) will be offered as an expandable unit that concentrates unbundled loops up to a DS1 level circuit within the BST Serving Wire Center where the loops terminate onto the MDF for transport to the CLEC's collocation space. BST will allow UVL and UDL loops to be combined onto the ULC offering.

14.2 Availability

BST will offer this capability in all locations.

14.3 Interfaces

This service can be provisioned with either a TR008 or a TR303 interface. Each ULC will be dedicated to a single CLEC.

14.4 Transport

In order for the BST loop concentration system to perform properly, certain interface requirements into the concentration system must be observed.

The interface requirements into a loop concentration system are service dependent. For each CLEC-requested service to be placed through the concentration system, BST will provision appropriate channel units. All dc voltage, current and signal powers applied to each channel unit by the CLEC shall comply with extant industry documents related to that service.

The optional test circuit, commonly referred to as a dc test pair, offered with this service shall comply with the appropriate system (TR008 or TR303) testing requirements. The maximum dc voltage allowed on the test pair is 120 Vdc, with a maximum resulting current of 15 mA. The maximum allowable ac voltage is 60 Vac. This test circuit will be emulated with Tollgrade channel units using two channels of the concentrated carrier system.

15. Electrical Disturbances

15.1 General

Unbundled Local Loops may be exposed to electrical surges from lightning and commercial power system disturbances. Despite protective devices on the MDF, some of these disturbances are likely to reach CLEC equipment. CLEC equipment shall be designed to withstand certain surges without being damaged, and shall fail in a safe manner under infrequent high stress.

The prevalent voltage-limiting device available for CO use is the 3-mil carbon block. The performance of these devices can best be characterized by a normal distribution function. The upper 3ó firing voltage is 1000 volts peak under surge conditions. The protector may also limit - to about 350 mA over extended periods - the current that is permitted to flow to equipment. In addition, a protective fuse cable located outside the CO incorporating 24 or 26 AWG conductors to coordinate with the protector, serves to limit current to safe levels in the event of prolonged operation of the protector during power fault conditions.

16. ANNEX A - Characteristics of Tie Cable(s) and/or Wiring Component

16.1 General

The cabling and/or wire between the MDF interface and the collocated CLEC equipment (if any) is not a component of the Unbundled Local Loop. It is an unbundled element. The following specifications apply:

- The total length should be less than 1500 feet.
- The dc resistance should be less than 80 Ω.
- The insertion loss, measured between 900 Ω terminations at 1 kHz, should be 0.5 dB or less.
- The noise shall be 15 dBrnC or less.

DSX-1 Cross-connect

- The total length of all DSX-1 cross-connect wiring should be less than 85 feet of 22-gauge cable.
- The cabling between the equipment and the DSX-1 panels shall be built-out in each direction of transmission such that the overall cabling and build-out is the equivalent of 655 feet of 22-gauge ABAM cable.

17. ANNEX B - NC/NCI Codes

17.1 General

Network Channel (NC) and Network Channel Interface (NCI) codes are used to supplement ordering. These codes provide a shorthand notation of the interface and performance characteristics described in this document. This section may be used as a reference for NC and NCI codes to be used when ordering the services described in this document, which are services covered under the BellSouth Special Access Tariff.

17.2 Network Channel (NC) Codes

The Network Channel code is a representation used to identify non-switched channel services and to designate the channel parameters. Table 17.1 shows the format of the NC code. It is a four-character code that consists of a Channel Service Code and an Optional Feature Code. The Channel Service Code is a two-character code that indicates the channel service. This code is always filled in. The Optional Feature Code is a two-character code that indicates service options available for each channel service code. A hyphen (-) is used in positions 3 and 4 of the NC code to indicate the absence of features or options.

Table 17.1 Network Channel (NC) code format

Field Identity	Channel Service Code		Optional Feature Code	
Character Position	1	2	3	4
Character Type	Alpha	Alpha	Alphanumeric	Alphanumeric

17.3 Network Channel Interface (NCI) Codes

The Network Channel Interface (NCI) code designates five interface elements located at the Point of Termination (POT) or customer location. The interface elements are described below:

- **Total Conductors** is a two character numeric code (the first two characters of the NCI) that represents the total number of physical conductors required at the interface. This field is always filled.
- **Protocol** is a two character alpha code (positions 3 & 4) that indicates the transmission requirements. The protocols specified at either end of a circuit do not have to be the same, but they do have to be technically compatible. This field is always filled.
- **Impedance** is a one character alpha code (position 5) indicating the nominal impedance that terminates the channel. This field is always filled.
- **Delimiter** is either a period (.) or virgule (/) in position 6 that indicates the start of the protocol option code. If the option field is not coded, a double delimiter will be placed in character positions 6 and 7.
- **Protocol Options** is a one-to three-character alphanumeric code (positions 7 to 9) that indicates additional features of the protocol to be used. Protocol option codes are left justified in the field when fewer than three characters are used.

- **Delimiter** is either a period (.) or virgule (/) in position 10 if a three character protocol option code is used, or position 9 if a two character protocol option code is used, or position 8 if a single character protocol option code is used.
- **Transmission Level Point (TLP)** last two positions after the second delimiter) is not used for unbundled loops at this time but may be used to indicate direction of service by some Local Transport Providers.

The following table illustrates the NCI code format:

Table 17.2 Network Channel Interface Code Format

Field Identifier	Total Conductors	Protocol	Impedance	Delimiter	Protocol Options	Delimiter	TLP Level TX/RX
Character Position	1&2	3&4	5	6	7 to 9, left justified	8 or 9 or 10	last two positions
Code Type	Numeric	Alpha	Alpha	. or /	AlphaNumeric	. or /	AlphaNumeric

The following table provides the NC and NCI codes that apply to the services covered in this document.

Table 17.3 Network Channel/Network Channel Interface Code Format

Service	**NC**	**NCI At CLEC**	**SEC NCI at End User**	**Related TR73600 Section(s)**
UVL-2W/SL1 (Loop Start)	TY- -	N/A	N/A	4.1, 5.1, 6
UVL-2W/SL2 (Loop Start)	LY- -	02QC3.OOD	02LS2	4.2, 5.2, 6
UVL-4W (Loop Start)	LY- -	04QC2.OOD	04LS2	4.2, 5.2, 6
UVL-2W/SL2 (Grnd Start)	LY- -	02QC3.OOB	02GS2	4.2, 5.3, 6
UVL-4W (Ground Start)	LY- -	04QC2.OOB	04GS2	4.2, 5.3, 6
UVL-2W (Rev Batt)	LY- -	02QC3.RVO	02RV2.T	4.2, 5.4, 6
UDL-4W/D0 (2.4 Kbs)	LY- -	04QC5.OOJ	04DU5.24	7.2
UDL-4W/D0 (4.8 Kbs)	LY- -	04QC5.OOK	04DU5.48	7.2
UDL-4W/D0 (9.6 Kbs)	LY- -	04QC5.OOL	04DU5.96	7.2
UDL-4W/D0 (19.2Kbs)	LY- -	04QC5.OOM	04DU5.19	7.2
UDL-4W/D0 (56 Kbs)	LY- -	04QC5.OOP	04DU5.56	7.2
UDL-4W/D0 (64 Kbs)	LY- -	04QC5.OOQ	04DU5.64	7.2
UDL-2W/I (BR ISDN)	LY- -	02QC5.OOS	02IS5	7.3
UDL-2W/UDC	LXT-	02QC5.OOS	02IS5	7.4
UDL-2W HDSL	LXC-	02QB9.00H	02DU9.00H	7.5

- continued -

(continued)

Service	NC	NCI At CLEC	SEC NCI at End User	Related TR73600 Section(s)
UDL-2W HDSL (optional)	LXC-	02QB9.004	02DU9.004	7.5
UDL-4W HDSL	LXC-	04QB9.00H	04DU9.00H	7.5
UDL-2W ADSL	LXR-	02QB9.00A	02DU9.00A	7.6
4 Wire DS1 Loop	HC- - (AMI-SF) HCD- (AMI-ESF) HCZ- (B8ZS-SF) HCE- (B8ZS-ESF)	04QB9.11 04QB9.11 04QB9.11 04QB9.11	04DU9.BN (AMI-SF) 04DU9.1KN (AMI-ESF) 04DU9.DN (B8ZS-SF) 04DU9.1SN (B8ZS-ESF)	7.7
UCL/S-2W	LX-N	02QC3.OOF	02NO2	8
UCL/S-4W	LX-N	04QC3.OOF	04NO2	8
UCL/L-2W	LX- -	02QC3.OOF	02NO2	8
UCL/L-4W	LX- -	04QC3.OOF	04NO2	8
UCL-ND	TXT-	N/A	N/A	9
USL-2W (Distribution)	TX- -	N/A	N/A	10
USL-4W (Distribution)	TX- -	N/A	N/A	10
USL-INC 2W (Riser)	TX- -	N/A	N/A	10
USL-INC 4W (Riser)	TX- -	N/A	N/A	10
UCSL 2W	TXCT	N/A	N/A	10
UCSL 4W	TXCF	N/A	N/A	10
USLF-2W - UCL	LXT -	02QC3.OOF	02NO2	10
USLF-4W - UCL	LXT -	04QC3.OOF	04NO2	10
USLF-4W (2.4 Kbs) UDL	LYT -	04QC5.OOJ	04DU5.24	10
USLF-4W (4.8 Kbs) UDL	LYT -	04QC5.OOK	04DU5.48	10
USLF-4W (9.6 Kbs) UDL	LYT -	04QC5.OOL	04DU5.96	10
USLF-4W (19.2 Kbs) UDL	LYT -	04QC5.OOM	04DU5.19	10
USLF-4W (56 Kbs) UDL	LYT -	04QC5.OOP	04DU5.56	10
USLF-4W (64 Kbs) UDL	LYT -	04QC5.OOQ	04DU5.64	10
USLF-UDC	LXT -	02QC5.OOS	02IS5	10
USLF-2W - ISDN	LYT -	02QC5.OOS	O2IS5	10
USLF-4W - DS1	HC- - (AMI-SF)	04QB9.11	04DU9.BN	10
	HCD - (AMI - ESF)	04QB9.11	04DU9.1KN	10
	HCZ - (B8ZS - SF)	04QB9.11	04DU9.DN	10

- continued -

(continued)

Service	NC	NCI At CLEC	SEC NCI at End User	Related TR73600 Section(s)
	HCE - (B8ZS - ESF)	04QB9.11	04DU9.1SN	10
USLF-2W - Loop Start	LYT-	02QC3.OOD	02LS2	10
USLF-4W - Loop Start	LYT-	04QC2.OOD	04LS2	10
USLF-2W - Ground Start	LYT-	02QC3.OOB	02GS2	10
USLF-4W - Ground Start	LYT-	04QC2.OOB	04GS2	10
USLF-2W - Reverse Battery	LYT-	02QC3.RVO	02RV2.T	10
UNTW-2W	TX- -	N/A	N/A	11
ULC/USLC Test Ckt	LY- -	04QB9.11	02DC2	13,14
ULC				
TR303 System A and B B8ZS-ESF	HCLA (System A with 2 DS1s)	04QB9.11	NA	13,14
	HCLA (System A with 3 DS1s)	04QB9.11	NA	13,14
	HCLA (System A with 4 DS1s)	04QB9.11	NA	13,14
	HCLA (Protection System A)	04QB9.11	NA	13,14
	HCLA (System B with 2 DS1s)	04QB9.11	NA	13,14
	HCLA (System B with 3 DS1s)	04QB9.11	NA	13,14
	HCLA (System B with 4 DS1s)	04QB9.11	NA	13,14
	HCLA (Protection System B)	04QB9.11	NA	13,14
TR008 Concentrated System A and B	HCKD (AMI/SF) System A with 2 DS1s	04QB9.11	NA	13,14
	HCKD (Protection System A)	04QB9.11	NA	13,14
	HCKD (AMI/SF) System B with 2 DS1s	04QB9.11	NA	13,14
	HCKD (Protection System B)	04QB9.11	NA	13,14
	HCKE (B8ZS/SF) System A with 2 DS1s	04QB9.11	NA	13,14
	HCKE (Protection System A)	04QB9.11	NA	13,14
	HCKE (B8ZS/SF) System B with 2 DS1s	04QB9.11	NA	13,14
	HCKE (Protection System B)	04QB9.11	NA	13,14
TR008 Non-Concentrated System A and B	HCKA (AMI/SF) System A with 4 DS1s	04QB9.11	NA	13,14
	HCKA (Protection System A)	04QB9.11	NA	13,14

- continued -

(continued)

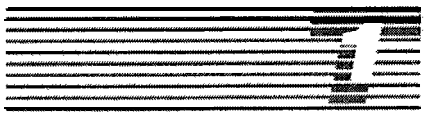
Service	NC	NCI At CLEC	SEC NCI at End User	Related TR73600 Section(s)
	HCKA (AMI/SF) System B with 4 DS1s	04QB9.11	NA	13,14
	HCKA (Protection System B)	04QB9.11	NA	13,14
	HCKB (B8ZS/SF) System A with 4 DS1s	04QB9.11	NA	13,14
	HCKB (Protection System A)	04QB9.11	NA	13,14
	HCKB (B8ZS/SF) System B with 4 DS1s	04QB9.11	NA	13,14
	HCKB (Protection System B)	04QB9.11	NA	13,14
ULC/USLC Test Ckt	LY- -	04QB9.11	02DC2	13,14
2W - Loop Start	LY- -	04QB9.11	02LS2	13,14
4W - Loop Start	LY- -	04QB9.11	04LS2	13,14
2W - Ground Start	LY- -	04QB9.11	02GS2	13,14
4W - Ground Start	LY- -	04QB9.11	04GS2	13,14
2W - Reverse Battery	LY- -	04QB9.11	02RV2.T	13,14
2W ISDN	LY- -	04QB9.11	02IS5	13,14
4W - UDL				13,14
2.4 Kbs - UDL	LY- -	04QB9.11	04DU5.24	13,14
4.8 Kbs - UDL	LY- -	04QB9.11	04DU5.48	13,14
9.6 Kbs - UDL	LY- -	04QB9.11	04DU5.96	13,14
19.2 Kbs - UDL	LY- -	04QB9.11	04DU5.19	13,14
56 Kbs - UDL	LY- -	04QB9.11	04DU9.56	13,14
64 Kbs - UDL	LY- -	04QB9.11	04DU9.64	13,14
2W - UDC	LXT-	04QB9.11	021S5	13,14

BellSouth Telecommunications, Inc.

MCI/WorldCom's 1st Request for Production of Documents

Item No. 1

Attachment to Interrogatory Item No. 116



Standards Committee T1
Telecommunications

TECHNICAL REQUIREMENT

T1. TRQ. 7-2002

Technical Requirement for

Non-Loaded Metallic Loops Supporting Basic Voicegrade Services

Prepared by

T1E1.3

Working Group on
Optical and Electrical Access

A Word from ATIS and Committee T1

Established in February 1984, Committee T1 develops technical standards, reports and requirements regarding interoperability of telecommunications networks at interfaces with end-user systems, carriers, information and enhanced-service providers, and customer premises equipment (CPE). Committee T1 is sponsored by ATIS and is accredited by ANSI.

T1.TRQ.7-2002

Published by

Alliance for Telecommunications Industry Solutions
1200 G Street, NW, Suite 500
Washington, DC 20005

Committee T1 is sponsored by the Alliance for Telecommunications Industry Solutions (ATIS) and accredited by the American National Standards Institute (ANSI).

Printed in the United States of America.

T1.TRQ.7-2002

Technical Requirements for

Non-Loaded Metallic Loops Supporting Basic Voicegrade Services

Approved April 2002

Prepared by
T1E1.3
Working Group on Optical and Electrical Access

Foreword (This foreword is not part of T1.TRQ.7-2002.)

This document is one of a series of standards and technical requirements documents developed by Technical Subcommittee T1 El of Accredited Standards Committee T1, Telecommunications. Committee T1 serves the public through improved understanding between carriers, customers, and manufacturers.

In August, 2001, the Wireline Network Spectral integrity Focus Group (FG3) of the Fifth Network Reliability and Interoperability Council (NRIC V) asked the Optical and Electrical Access Working Group (T1E1.3) to develop pass/fail performance criteria for non-loaded voicegrade metallic loops. NRIC was in the process of developing recommendations to the FCC concerning the sharing of information between service providers, loop providers, and equipment vendors regarding spectral compatibility. One of their fundamental assumptions was that xDSL services could typically be deployed on non-loaded metallic loops that meet the minimum requirements for the support of basic voicegrade analog services like Plain Old Telephone Services (POTS). Prior to initiating the spectral interference dispute resolution process envisioned by NRIC, the service provider with the "victim" service has the responsibility of verifying that the associated non-loaded metallic loop meets the minimum requirements for the support of basic voicegrade analog services. With respect to these basic voicegrade analog pass/fail parameters, NRIC was unable to find a suitable industry standard, so they asked the T1E1.3 Optical and Electrical Access Working Group to make recommendations. This technical requirements document was developed by T1E1.3 in response to that request.

This Technical Requirement specifies end-to-end performance tests as well as single-ended performance tests. The document defines the methods, procedures, and equipment to be used for each test and it establishes the pass/fail criteria for each parameter being tested. Compliance with this technical requirements document should provide adequate support for basic voicegrade analog services, but this technical requirements document does not guarantee compatibility or acceptable performance for other types of services and technologies under all operating conditions.

This technical requirements document will be useful to those engaged in the provisioning or operation of telecommunications equipment or services that utilize non-loaded metallic cables that have been designed and maintained to primarily support basic voicegrade analog services.

Normative annexes are considered part of Committee T1 Technical Requirements. Informative annexes of Committee T1 Technical Requirements provide useful information but do not contain requirements. Similarly, footnotes are informative.

This technical requirements document was developed by T1 El in accordance with ANSI and Committee T1 procedural guidelines and represents the consensus position of the formulating group. This document was processed and approved for submittal to ATIS by the Accredited Standards Committee on Telecommunications, T1. Committee approval of this technical requirements document does not necessarily imply that all committee members voted for its approval.

Future control of this technical requirements document will reside with Alliance for Telecommunications Industry Solutions (ATIS). Suggestions for improvement of this document are welcome. These should be sent to the Alliance for Telecommunications Industry Solutions, T1 Secretariat, 1200 G Street, NW, Suite 500, Washington DC 20005.

These requirements were developed in Technical Subcommittee T1 El Interfaces, Power, *and Protection of Networks.*

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Technical Requirements for Non-Loaded Metallic Loops Supporting Basic Voicegrade Services

1 Scope

This document provides a minimal set of pass/fail performance parameters for non-loaded metallic loops that have been designed and maintained to primarily support basic voicegrade analog services such as Plain Old Telephone Services (POTS).

The document specifies end-to-end performance tests as well as single-ended performance tests. The document defines the methods, procedures, and equipment to be used for each test, and establishes the pass/fail criteria for each parameter being tested.

Compliance with this technical requirements document should provide compatibility for basic voicegrade analog services in most cases, but this document does not guarantee compatibility or acceptable performance for all services and technologies under all operating conditions.

Tariffs, contracts, or regulatory acts in various jurisdictions may contain additional or more stringent requirements than those specified in this technical requirements document.

In accordance with ANSI guidelines, two categories of specifications are used in this document, mandatory requirements and recommendations. Mandatory requirements are designated by the word "shall" and recommendations by the word "should."

2 Normative References

The following standard contains provisions that, through reference in this text, constitute provisions of this technical requirements document. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this document are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Informative references are provided in Annex A.

743-I 995, IEEE Standard Equipment Requirements and Measurement Techniques for Analog Transmission Parameters for Telecommunications.'

3 Definitions

3.1 **customer installation** (CI) – All telecommunication equipment and wiring on the customer side of the network demarcation point.

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[1] This document is available from the Institute of Electrical and Electronics Engineers (IEEE).
< http://standards.ieee.org/catalog/olis/index.html >

3.2 network interface (NI) – demarcation point: The point of connection between network facilities and the CI.

3.3 splitter – A network comprised of frequency-domain filters that separate high-frequency xDSL (e.g., ADSL) signals from voicegrade signals to facilitate the deployment of xDSL and voicegrade services over the same non-loaded metallic facility.

3.4 terminal equipment – Communications equipment located on customer premises at the end of a communications link that is used to permit the stations involved to accomplish the provision of telecommunications or information services.

3.5 voicegrade -- A term used to qualify a channel, facility, or service that is suitable for the transmission of speech, data, or facsimile signals; generally with a frequency range of about 300 to 3000 Hz. The term is also used to describe a signal with a frequency range of about 300 to **3000** Hz.

4 Abbreviations, Acronyms, and Symbols

ac	alternating current
ADSL	Asymmetrical Digital Subscriber Line
ANSI	American National Standards Institute
ATIS	Alliance for Telecommunications Industry Solutions
CI	Customer Installation
c o	Central Office
dB	decibel (i.e., one tenth of a bel)
dBm	decibels referenced to one milliwatt
dBrnC	decibels referenced to noise with C-message weighting
dc	directc urrent
DDS	Digital Data Service
DSL	Digital Subscriber Line
FCC	Federal Communications Commission
FG3	Wireline Network Spectral Integrity Focus Group
Hz	hertz
IEEE	Institute of Electrical and Electronics Engineers, Inc.
mA	Milliamperes
NI	Network Interface
NRIC V	Fifth Network Reliability and Interoperability Council
POTS	Plain Old (analog) Telephone Service
REG	Range Extender with Gain
T1	Committee T1
V	volts
xDSL	any Digital Subscriber Line technology

5 Technical Criteria

A fundamental assumption in the telecommunications industry is that basic voice services and xDSL services can be deployed on non-loaded metallic loops that meet the minimum requirements for the support of basic voicegrade analog services like POTS. This document defines the applicable end-to-end and single-ended performance tests for the support of basic voicegrade analog services. It also defines the methods, procedures, and measurement equipment to be used for each test and the pass/fail criteria for each parameter being tested. A summary of the pass/fail criteria for each parameter is provided in Table 1.

5.1 End-to-End Test Parameters

Most POTS installer/repairman in the United States carry a test set that allows them to measure loop current, 1004 Hz transducer loss, and C-message metallic noise. If a metallic loop passes those three tests, then it is considered qualified for basic voice services like POTS, and further tests are not ordinarily necessary.

5.1.1 Loop Current/Loop Resistance.

To measure loop current, a battery feed needs to be connected to the loop. On shared loops (i.e., a loop that is used simultaneously for a voice service and an above-the-voiceband data service), the Central Office (CO) switching system (or other network element) provides a battery feed that will facilitate loop current testing.

If a loop used for xDSL is not shared with a voice service, then a battery feed may not be present to facilitate loop current testing. In cases where a battery feed is present for sealing current or line powering purposes, in all likelihood it will not meet the voltage versus current characteristics for loop-start and ground-start access lines in T1.401-2000. For these reasons, if a non-loaded metallic loop used for xDSL does not share the loop with a loop-start or ground-start service, then a dc loop current measurement may not be feasible. In such cases, a loop resistance test should be made instead of the loop current test.

5.1.1.1 Loop Current

Loop current on loop-start and ground-start lines shall be measured with a 430-ohm load substituted for the Customer Installation (CI) at the Network Interface (NI). In accordance with T1.401-2000, the minimum loop current requirement under normal commercial power conditions shall be 20 mA. (This is equivalent to 8.6 V dc across a 430-ohm load at the NI.)

5.1.1.2 Loop Resistance

Loop resistance is measured with an ohmmeter connected between the tip and ring conductors at one end of the loop with the conductors at the far end of the loop shorted. To obtain an accurate reading, customer premises wiring and series equipment (e.g., CO or CI splitters) should not be included when making loop resistance measurements. The maximum expected loop resistance varies depending upon the original design of the loop. If the loop was originally designed using non-loaded resistance design criteria, then the loop resistance should not exceed 1300 ohms.

If a loop was originally designed using some other type of loop design guidelines, then the loop resistance could be greater than 1300 ohms. For example, if the metallic loop was designed according to loaded resistance design criteria and the load coils were then subsequently removed to facilitate xDSL service, then the loop resistance could be as much as 1500 ohms. Likewise, if load coils were not placed on long loops to facilitate other types of digital services, then the resistance could be as much as 1500 ohms or even more. In the extreme case, if a metallic loop was designed according to loaded Long Route Design criteria with a Range Extender with Gain (REG) and the load coils and REG were subsequently removed, the resistance could be as much as 3600 ohms.

5.1.2 C-Message Metallic Noise

For voicegrade services, metallic (i.e., tip-to-ring) noise is a primary performance parameter since it is the metallic (differential mode) noise not the longitudinal (common mode) noise that people hear. Noise-to-ground measurements and noise balance calculations are considered to be diagnostic in nature and thus are pertinent only when a loop fails the metallic noise limit.

The industry standard for voiceband metallic noise test procedures is IEEE 743. That standard defines the C-Message weighting filter, appropriate terminations, and testing methodology. C-Message metallic noise is measured at the NI with a noise measuring set that provides a 600 ohm resistive termination. The CO end of the loop must be terminated in a 900-ohm resistive termination.

The C-Message metallic noise measured on a metallic loop shall be 30 dBrnC or less.

5.1.3 1004 Hz Transducer Loss

IEEE 743 contains transducer loss test methods. The appropriate test impedances are 900 ohms resistive at the CO and 600 ohms resistive at the NI. The transmitted signal should not exceed 0 dBm and should not be less than -20 dBm.

The maximum transducer loss of a metallic loop will vary depending upon the original design of the loop. Loops designed according to non-loaded resistance design criteria shall have a transducer loss of 10.5 dB or less.

The 1004 Hz transducer loss of a metallic loop that has been conditioned in the following ways could be much greater than 10.5 dB however:

- Load coils removed.
- REG removed.
- Both load coils and REG removed.

For example, the 17 dB transducer loss limit in T1.TR.60-1999 is based on a loaded loop that has had the REG removed. Thus, the formulating group for this document declined to specify a maximum 1004 Hz transducer loss for any loop other than a loop designed and maintained to non-loaded resistance design criteria.

5.1.4 Other End-to-End Test Parameters

The formulating group discussed the possibility of specifying several other end-to-end test parameters but agreed not to do so for the reasons described below.

5.1.4.1 Attenuation Distortion

The formulating group discussed the possibility of specifying a parameter to confirm that the metallic loop actually provides the necessary voicegrade bandwidth (i.e., 300 to 3000 Hz). Such confirmation is ordinarily accomplished by making a Slope or an Attenuation Distortion test. A Slope test compares the results of transducer loss measurements at 404 Hz and 2804 Hz with the 1004 Hz transducer loss result. An Attenuation Distortion test is very similar however measurements are made at many more frequencies (e.g., 200 to 3400 in steps of 200 Hz).

The formulating group agreed that Slope and Attenuation Distortion tests are not normally done on basic voice services like POTS. Such tests are typically part of a suite of additional tests that are applicable to voicegrade special services. Voicegrade special services are designed on an individual circuit basis to meet tighter parameters than those applicable to basic voice services. For basic voicegrade services like POTS, an adequate voiceband is guaranteed on a global basis when the loop cable is designed by conforming to the appropriate loop design criteria.

The difficulties of making Slope and Attenuation Distortion tests were also a factor that was considered. Special test sets would be required and POTS technicians would require special training. In addition, automated test lines may not be available thus two technicians would have to be dispatched -- one to the CO and one to the Cl.

While it is possible that some defects (e.g., loaded bridged tap) could affect bandwidth, the formulating group felt that the likelihood of encountering such a problem is very small. Thus, the formulating group felt that there was little benefit to be derived from making such tests on every loop. It agreed not to adopt Slope or Attenuation Distortion tests as part of the basic voicegrade test suite.

5.1.4.2 Return Loss, Impulse Noise, and Envelope Delay Distortion

Return Loss, Impulse Noise, and Envelope Delay Distortion were also considered as candidates for the basic voicegrade test suite. The formulating group agreed that such tests are not normally done on basic voice services like POTS but are typically part of a suite of additional tests that are applicable to voicegrade special services.

As a practical matter, return loss and envelope delay distortion are not problematic for non-loaded metallic loops used for basic voice services. It was also recognized that additional tests, beyond those specified in this document, could always be made for diagnostic purposes if customer complaints or service degradation persisted after a loop passed all of the basic pass/fail criteria.

5.2 Single-Ended Test Parameters

The formulating committee determined that four single-ended tests are usually feasible. These tests are: insulation resistance, foreign dc voltage, foreign ac voltage, and capacitive balance.

For accuracy, single-ended measurements made from the CO should be made with the loop opened at the NI to remove the effects of customer premises equipment and wiring. At the CO, remove the battery feed and any other equipment (e.g., splitters). In general however, if the single-ended parameters are met when CO equipment is not removed and the NI is not opened, then the loop will meet those parameters when CO equipment is removed and the NI is opened. However, the inverse is not true. A loop failing a single-ended test parameter when the CO equipment is not removed or the NI is not opened will not necessarily fail that parameter when the CO equipment is removed or the NI is opened.

For example, assume a 10,000 ohm leak between the ring conductor of the customer's inside wiring and ground. If the NI is not opened prior to making an insulation resistance measurement from the CO, the 10,000 ohm leakage will cause the metallic loop to fail the insulation resistance test. If the same test were made with the NI opened the 10,000 ohm leak to ground would be removed and the metallic pair would presumably pass the test.

5.2.1 Insulation **Resistance**

Insulation resistance (dc) measurements are single ended measurements that are normally made tip-to-ring, tip-to-ground, and ring-to-ground.

Mechanized loop test systems ordinarily test this parameter with at least 70 V dc but some systems may use a lower voltage. After some discussion, the formulating group agreed not to specify a minimum ohmmeter voltage at this time.

It is well known that loop-start signaling can operate with a leakage resistance of 20,000 ohms and the additional loss of such a leakage is insignificant. However, if a pair had a 500,000 ohm leakage from one conductor to ground and a 25,000 ohm leakage from the other conductor to ground it would unbalance the loop.

The formulating committee considered several different pass/fail values. It was found that Local Exchange Carriers use various threshold values for insulation resistance tests (i.e., 100,000 ohms, 200,000 ohms, etc). Digital Data Service (DDS) practices mention 300,000 ohms however DDS is clearly not a voice service. GR-844-CORE specifies a default threshold of 150,000 ohms.

The consensus of the formulating group was to establish 100,000 ohms as the pass/fail threshold value. Cable owners may apply a more stringent requirement.

The dc insulation resistance tip-to-ring, tip-to-ground, and ring-to-ground shall be equal to or greater than 100,000 ohms.

5.2.2 Foreign dc Voltage

Foreign dc voltage measurements are single ended measurements that are normally made tip-to-ring, tip-to-ground, and ring-to-ground.

Foreign voltage readings vary substantially depending upon the internal resistance of the voltmeter used to make the measurements. The formulating group recognized this as a significant issue affecting incumbent and competitive local exchange carriers. It is not unusual for an incumbent carrier to measure a foreign voltage of 1 V dc and declare the loop as "good" and a

competitive carrier to measure 11 V dc on the same loop and say that the loop is defective. The reason for the discrepancy in readings is usually different voltmeter resistances.

To avoid this problem, the maximum permissible foreign dc voltage is specified across an internal voltmeter resistance of 100.000 ohms.

100,000 ohms was originally the internal resistance of the local test desk voltmeter. Mechanized loop test systems used by incumbent local exchange carriers have historically been designed with that particular resistance as well so that the same foreign voltage readings would result regardless of which system (local test desk or mechanized loop testing) was used for testing. Thus, traditional metallic loop test systems employ voltmeters with an internal resistance of 100,000 ohms, or alternatively, they convert readings made with voltmeters having a higher resistance to the equivalent values that would be obtained if a 100,000 ohms voltmeter had been used for the measurements.

There is a finite resistance from a single conductor in a metallic loop cable to many of the other conductors in that same cable. The foreign voltage measured to ground on that single conductor is the result of the lattice formed by all of the high impedance leakages, both to conductors with voltage applied and to conductors with ground applied. The ideal voltmeter (i.e., one with an infinite internal resistance) would measure, even with no significant faults, some meaningless value of foreign voltage that results from the lattice resistances. Thus, voltmeters with an extremely high internal resistance are inappropriate in this application.

The objective of the foreign dc voltage test is to find leakage conditions that have the potential to affect service. Such leaks tend to be on the order of 100,000 ohms or less. To detect leakages of this magnitude, a voltmeter with an internal resistance of 100,000 ohms provides the best resolution. With a 1,000,000 ohm leak to a 50 V dc source, the 100,000 ohm voltmeter would read 4.5 V dc whereas a 10,000 ohm leak to that same voltage source would give a reading of 45.5 V dc. Thus, an internal voltmeter resistance of 100,000 ohms gives good resolution whereas a voltmeter with a much higher resistance would not provide such resolution.

The formulating group agreed that 6 V dc or less measured with a 100,000 ohm voltmeter was the appropriate pass/fail criteria. This value is also the recommended pass/fail default threshold value for foreign dc voltage in GR-844-CORE.

The foreign dc voltage measured with a 100,000 ohm voltmeter shall be 6 V dc or less tip-to-ring, tip-to-ground, and ring-to-ground.

5.2.3 Foreign ac Voltage

The formulating group agreed that foreign ac voltage is ordinarily measured tip-to-ground and ring-to-ground but not tip-to-ring. Unwanted metallic (tip-to-ring) ac signals are considered to be noise and noise measurements are always made end-to-end, that is, with terminations at both ends of the loop.

For consistency, a voltmeter with an internal resistance of 100,000 ohms shall be used for foreign ac voltage measurements.

The formulating group initially discussed using a pass/fail threshold of 50 V ac since voltages in excess of 50 V ac are considered to be hazardous. GR-1089-CORE however specifies that CO equipment needs to be able to function with only 23.5 V ac on a metallic loop when the far end of

the loop is not grounded. Likewise, GR-1089-CORE establishes 27.5 V ac as the limit for trunk equipment when the far end of the loop is not grounded.

Based on these requirements in GR-1089-CORE, the formulating group decided to establish 25 V ac as the pass/fail threshold value when foreign ac voltage is measured at the CO end of loop without the far-end terminated.* Besides being a round number, 25 V ac happens to be the default threshold value for foreign ac voltage that is recommended in GR-844-CORE.

The foreign ac voltage measured tip-to-ground and ring-to-ground from the CO with a 100,000 ohm voltmeter shall be 25 V ac or less.

5.2.4 Capacitive Balance

The capacitive balance test compares the capacitance to ground of each conductor with the far end open. Capacitive balance shall be expressed as the percentage that results when the larger capacitance value is in the denominator and the smaller capacitance value is placed in the numerator.

The formulating group acknowledged that GR-844-CORE specifies a default pass/fail threshold of 99% for capacitive balance. However, some carriers reported using a 95% threshold in metallic loop test systems. The consensus of the formulating group was to establish 95% as the pass/fail threshold value for capacitive balance.

The capacitive balance of a non-loaded metallic pair shall be equal to or greater than 95% when the larger capacitance value measured between the tip conductor and ground and the ring conductor and ground is in the denominator and the smaller capacitance value is placed in the numerator.

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2 When measured tip-to-ground or ring-to-ground at the NI without the CO end terminated, the foreign ac voltage is expected to be 50 V ac or less.

Table 1 ▪ Summary of Technical Requirements for Non-Loaded Metallic Loops Supporting Bask- Voicegrade Services

Test Type	Loop Parameter	Pass/Fail Criteria
End-to-End (Note 1)	LS/GS dc Loop Current Or dc Loop Resistance (Note 2)	≥ 20 mA ≤ 1300 ohms (Note 3)
	C-Message Metallic Noise	≤ 30 dBrnC
	1004 Hz Transducer Loss	≤ 10.5 dB (Note 3)
Single-Ended (Note 4)	dc Insulation Resistance	≥ 100k ohms T-G, R-G, or T-R
	Foreign dc Voltage	≤ 6 V dc T-G, R-G, or T-R with 100k ohm voltmeter
	Foreign Longitudinal ac Voltage	≤ 25 Vrms T-G or R-G with 100k ohm voltmeter
	Capacitive Balance T-G and R-G	≥ 95%

1) End-to-end tests are measurements at the NI with a specified condition or termination at the CO end of the loop.

2) The dc Loop Current test is applicable to loops that are used in connection with loop-start or ground-start voice service as in the case of Line Sharing. The dc Loop Resistance test is applicable to all other loops. For more information, see 5.1 .1.

3) The dc Loop Resistance and 1004 Hz Transducer Loss criteria are based on Non-Loaded Resistance Design guidelines. If a loop was originally designed using other design guidelines such as Unigauge Design, Loaded Resistance Design, or Long Route Design and the load coils were removed to support an advanced service, then the values shown in the table for the dc Loop Resistance and 1004 Hz Transducer Loss criteria would not be applicable. For more information, see 5.1 .1 .2 and 51.3.

4) Single-ended tests are measurements made from the CO with the far-end (i.e., the NI) open. If an open termination is not provided at the NI, measurement results could be affected by customer premises equipment and wiring.

Annex A
(informative)

A Bibliography

T1.401-2000, *American National Standard for Telecommunications - Network to Customer Installation Interfaces - Analog Voicegrade Switched Access Lines Using Loop-Start and Ground-Start Signaling.*[3]

T1 .TR.60-1999; *Unbundled Voicegrade Analog Loops.*

GR-844-CORE, Issue 2, November 1995; *Network Maintenance: Access and Testing-TSC/RTU Generic Requirements for Metallic Loop Testing;* Telcordia, 1 995.[4]

GR-1089-CORE, Issue 1, November *1994; Electromagnetic Compatibility and Electrical Safety - Generic Criteria for network Telecommunications Equipment;* Telcordia, 1994.

[3] This document is available from the Alliance for Telecommunications Industry Solutions, 1200 G Street N.W., Suite 500, Washington, DC 20005. <http://www.atis.org>

[4] Telcordia documents are available from Industry Direct Sales, Telcordia, 8 Corporate Place, PYA 3A-184, Piscataway, NJ, 08854-4156, or: < http://telecom-info.telcordia.com >.

Proprietary Bates Pages:

BST000821 – BST001531

BellSouth Telecommunications, Inc.

MCI/WorldCom's 1st Request for Production of Documents

Item No. 1

Attachment to Interrogatory Item No. 138

Tennessee Collocation Space
Still Assigned to Carriers No Longer in Business

No.	CLLI Code	Wire Center Name	Wirecenter City	Physical Collo Space	Virtual Collo Space
1	CHTGTNBR	CHTG - BRAINERD	CHATTANOOGA	4	0
2	CHTGTNDT	CHTG - DODDS	CHATTANOOGA	4	0
3	CHTGTNMV	CHTG - MIDDLE VALLEY	HIXSON	1	0
4	CHTGTNNS	CHTG - NINTH STREET	CHATTANOOGA	5	0
5	CHTGTNRB	CHTG - RED BANK	CHATTANOOGA	4	0
6	CHTGTNRO	CHTG - ROSSVILLE	ROSSVILLE	3	0
7	CHTGTNSE	CHTG - ST. ELMO	CHATTANOOGA	1	0
8	CLVLTNMA	CLARKSVILLE	CLARKSVILLE	2	0
9	CLEVTNMA	CLEVELAND	CLEVELAND	2	0
10	CRVLTNMA	COLLIERVILLE	COLLIERVILLE	4	0
11	CLMATNMA	COLUMBIA	COLUMBIA	1	0
12	FKLNTNMA	FRANKLIN	FRANKLIN	4	0
13	GALLTNMA	GALLATIN	GALLATIN	2	0
14	GDVLTNMA	GOODLETTSVILLE	GOODLETTSVILLE	3	0
15	HDVLTNMA	HENDERSONVILLE	HENDERSONVILLE	4	0
16	JCSNTNMA	JACKSON - MAIN	JACKSON	2	0
17	JCSNTNNS	JACKSON - NORTHSIDE	JACKSON	2	0
18	KNVLTNBE	KNVL - BEARDEN	KNOXVILLE	4	0
19	KNVLTNFC	KNVL - FOUNTAIN CITY	KNOXVILLE	4	0
20	KNVLTNMA	KNVL - MAIN	KNOXVILLE	5	0
21	KNVLTNWH	KNVL - WEST HILLS	KNOXVILLE	4	0
22	KNVLTNYH	KNVL - YOUNG HIGH	KNOXVILLE	4	0
23	LBNNTNMA	LEBANON	LEBANON	1	0
24	MAVLTNMA	MARYVILLE	ALCOA	4	0
25	MMPHTNBA	MMPH - BARTLETT	MEMPHIS	4	0
26	MMPHTNCK	MMPH - CHEROKEE	MEMPHIS	1	0
27	MMPHTNCT	MMPH - CHICKASAW	MEMPHIS	4	0
28	MMPHTNEL	MMPH - EASTLAND	MEMPHIS	4	0
29	MMPHTNFR	MMPH - FRAYSER	MEMPHIS	1	0

Tennessee Collocation Space
Still Assigned to Carriers No Longer in Business

No.	CLLI Code	Wire Center Name	Wirecenter City	Physical Collo Space	Virtual Collo Space
30	MMPHTNGT	MMPH - GERMANTOWN	GERMANTOWN	4	0
31	MMPHTNHP	MMPH - HUMPHREYS	MEMPHIS	1	0
32	MMPHTNMA	MMPH - MAIN	MEMPHIS	5	0
33	MMPHTNMT	MMPH - MIDTOWN	MEMPHIS	4	0
34	MMPHTNOA	MMPH - OAKVILLE	MEMPHIS	4	0
35	MMPHTNSL	MMPH - SOUTHLAND	MEMPHIS	4	0
36	MMPHTNST	MMPH - SOUTHSIDE	MEMPHIS	2	0
37	GTWSTNSW	MMPH - SOUTHWIND	MEMPHIS	1	0
38	MMPHTNWW	MMPH - WESTWOOD	MEMPHIS	1	0
39	MRTWTNMA	MORRISTOWN	MORRISTOWN	1	0
40	MRBOTNMA	MURFREESBORO	MURFREESBORO	4	0
41	NSVLTNAP	NSVL - AIRPORT	NASHVILLE	3	0
42	NSVLTNBW	NSVL - BRENTWOOD	BRENTWOOD	3	2
43	NSVLTNBH	NSVL - BURTON HILLS	NASHVILLE	1	0
44	NSVLTNCD	NSVL - COCKRILL BD	NASHVILLE	1	0
45	NSVLTNCH	NSVL - CRIEVE HALL	NASHVILLE	4	0
46	NSVLTNDO	NSVL - DONELSON	NASHVILLE	4	1
47	NSVLTNHH	NSVL - HICKORY HOLLOW	ANTIOCH	1	0
48	NSVLTNIN	NSVL - INGLEWOOD	NASHVILLE	4	0
49	NSVLTNMC	NSVL - MADISON	MADISON	4	0
50	NSVLTNMT	NSVL - MAIN	NASHVILLE	8	1
51	NSVLTNST	NSVL - SHARONDALE	NASHVILLE	4	0
52	NSVLTNUN	NSVL - UNIVERSITY	NASHVILLE	4	0
53	NSVLTNWM	NSVL - WEST MEADE	NASHVILLE	3	0
54	OKRGTNMT	OAK RIDGE	OAK RIDGE	4	0
55	SVVLTNMT	SEVIERVILLE	SEVIERVILLE	3	0
56	SMYRTNMA	SMYRNA	SMYRNA	1	0
57	TLLHTNMA	TULLAHOMA	TULLAHOMA	1	0
				172	**4**

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