STATE OF GEORGIA

COUNTY OF FULTON

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Ronald M. Pate, BellSouth Telecommunications, Inc., being by me first duly sworn deposed and said that:

He is appearing as a witness before the Kentucky Public Service Commission in "Investigation Concerning the Propriety of InterLATA Services by BellSouth Telecommunications, Inc. Pursuant to the Telecommunications Act of 1996," KY PSC Case No. 2001-105, and if present before the Commission and duly sworn, his direct testimony would be set forth in the annexed transcript consisting of 191 pages and 74 exhibit(s).

Ronald M. Pate

SWORN TO AND SUBSCRIBED BEFORE ME this
15th day of May, 2001.

NOTARY PUBLIC

MICHEALE F. HOLCOMB
Notary Public, Douglas County, Georgia
My Commission Expires November 3, 2001

BELLSOUTH TELECOMMUNICATIONS, INC.

DIRECT TESTIMONY OF RONALD M. PATE

BEFORE THE KENTUCKY PUBLIC SERVICE COMMISSION

CASE NO. 2001-105

MAY 18, 2001

Q. PLEASE STATE YOUR NAME, YOUR POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC. AND YOUR BUSINESS ADDRESS.

A. My name is Ronald M. Pate. I am employed by BellSouth Telecommunications, Inc. ("BellSouth") as a Director, Interconnection Services. In this position, I handle certain issues related to local interconnection matters, primarily operations support systems ("OSS"). My business address is 675 West Peachtree Street, Atlanta, Georgia 30375.

Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.

A. I graduated from Georgia Institute of Technology in Atlanta, Georgia, in 1973, with a Bachelor of Science Degree. In 1984, I received a Masters of Business Administration from Georgia State University. My professional career spans over twenty-five years of general management experience in operations, logistics management, human resources, sales and marketing. I joined BellSouth in 1987, and have held various positions of increasing responsibility since that time.

Q. HAVE YOU TESTIFIED PREVIOUSLY?

A. Yes. I have testified before the Public Service Commissions in Alabama, Florida, Georgia, Louisiana, South Carolina, Kentucky, the Tennessee Regulatory Authority and the North Carolina Public Utilities Commission.

Q. IN WHAT CONTEXT SHOULD YOUR TESTIMONY BE READ?

A. My testimony should be read in conjunction with other testimony supporting BellSouth's 271 application. Although applicable performance measurements for electronic interfaces are mentioned in this testimony, the testimony of Al Varner fully describes BellSouth's performance measurements and performance data. Manual processes and functions for the CLECs are described in the testimony of Ken Ainsworth. Unbundled xDSL-compatible loops, and unbundled copper loops ("UCLs"), including the methods for ordering them, are described in the testimony of Jerry Latham.

Exhibit OSS-1 provides a detailed list of all exhibits referenced in this testimony, and includes the Web addresses for the exhibits, if applicable. Further, for the convenience of this Commission, a list of acronyms has been provided as Exhibit OSS-72.

Q. HOW IS YOUR TESTIMONY ARRANGED?

A. My testimony is divided into the following sections:

PART A: EXECUTIVE SUMMARY OF THE TESTIMONY

PART B: COMPREHENSIVE DISCUSSION OF THE ISSUES

PART C: SUMMARY AND RECOMMENDATIONS FOR THE COMMISSION

PART A: EXECUTIVE SUMMARY OF THE TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A In Section I of my testimony I will show this Commission that BellSouth provides nondiscriminatory access to BellSouth's OSS in compliance with the Federal Communications Commission's "(FCC's") requirement that a Bell Operating Company ("BOC") offer access to competing carriers that is analogous to the OSS functions that a BOC provides to itself, and in substantially the same time and manner.

I will demonstrate that BellSouth meets the FCC's two-step standard to establish nondiscriminatory access to BellSouth's OSS that requires:

1. The BOC to deploy the necessary systems and personnel to provide sufficient access to each of the necessary OSS functions, and that the BOC is adequately assisting competing carriers to understand, implement, and use the OSS functions available to them; and,
2. That the OSS functions that are deployed by the BOC are operationally ready, as a practical matter.

As to the first step, BellSouth provides CLECs nondiscriminatory access to its OSS for pre-ordering, ordering, provisioning, maintenance and repair, and billing through robust and reliable manual and electronic interfaces such as TAG, LENS, RoboTAG™, EDI, TAFI, ECTA, ODUF, EODUF, and ADUF. These interfaces will be defined and discussed in detail in the following testimony. BellSouth provides CLECs with all the specifications necessary for integrating the BellSouth interfaces, as required by the FCC. BellSouth makes the human-to-machine interface Local Exchange Navigation System ("LENS") available to CLECs that have made the business decision not to integrate the machine-to-machine interfaces with their own internal OSS, and do not want to expend the necessary resources to use RoboTAG™. For requests that are designed to fall out for manual handling, as well as those that can not be submitted electronically, BellSouth provides sufficient personnel and processes for the handling of such requests, as more fully described herein and in Ken Ainsworth's testimony. Accordingly, BellSouth provides the necessary systems and personnel for nondiscriminatory access to BellSouth's OSS functions.

As to the second part of this first step, understanding, implementation and use of the functions available, BellSouth has created a four-phase turn up process for the provisioning of facilities and services to CLECs. This process ensures that new CLECS are properly informed and trained on BellSouth's full range of wholesale products, and the rules and interfaces for obtaining these products. As referenced later, the four phases are described in the testimony of Ken Ainsworth. All guides and manuals discussed in my testimony are available to CLECs on the Interconnection Web site referenced herein. I will also provide substantial

evidence of the comprehensive training regimen that BellSouth offers to CLECS. In sum, BellSouth asserts that the comprehensive training, significant number of users of TAG and EDI, combined with the substantial usage and integration of the pre-ordering and ordering interfaces, clearly demonstrate the adequacy of BellSouth's support and documentation for CLECS.

In further support of this position, I will discuss the Change Control Process ("CCP") that evolved from the Electronic Interface Change Control Process ("EICCP"). The EICCP was established by BellSouth to secure input from the CLECS regarding future enhancements to existing electronic CLEC interfaces, and to have an organized means of securing, understanding, and ranking such input. This change management process was designed to function on a region-wide basis so that the CLECS in any of the nine states in BellSouth's region may participate. The CCP documentation attached as Exhibit OSS-39 describes details on the types of changes that are handled, how change requests are classified, the escalation process, the dispute resolution process, and the testing environment. BellSouth also makes access to this information clear and easily accessible by providing the CLECs with a CCP website which contains extensive documentation of the processes, forms, status information, and other relevant information.

BellSouth believes that compliance with the second step of the standard is easily met based upon the evidence that BellSouth's interfaces have been used commercially for years. In the year 2000, CLECS sent 2,886,673 local service requests via BellSouth's electronic interfaces. As a practical matter, the level of

commercial usage alone clearly demonstrates the operational readiness of these interfaces. Additionally, as provided in the testimony of Al Varner, BellSouth is providing the Commission with performance measurements which will show the Commission that BellSouth's OSS functions are operationally ready.

Thus, as confirmed by BellSouth's evidence of actual commercial usage (the FCC's most probative standard to establish nondiscriminatory access), BellSouth's interfaces, processes, and procedure provide CLECS with access to the required OSS information and functions in substantially the same time and manner as BellSouth's access for its retail customer, and therefore conform to the FCC's definition of nondiscriminatory access.

In Section II of my testimony I will show this Commission that:

The recently completed Independent Third-Party OSS Test ("Test") in Georgia conducted by KPMG Consulting, Inc. ("KPMG") verifies that BellSouth provides nondiscriminatory access to its OSS. The Georgia Public Service Commission ("GPSC") specified that the Test would focus on normal- and peak- volume testing of unbundled network element ("UNE") and resale service requests on:

- UNE analog loops – with and without number portability (both Interim Number Portability [INP] and Local Number Portability [LNP]);
- UNE switch ports; and,
- UNE loop/port combinations.

Under the Master Test Plan ('MTP") that was submitted by BellSouth, these categories were each evaluated based upon the following five OSS functions:

Pre-ordering; Ordering; Provisioning; Maintenance and Repair; and, Billing. Additionally, BellSouth's Percent Flow-Through Service Request Report ('FT") was reviewed.

Under the Supplemental Test Plan ("STP") that was developed by KPMG the following items were added as areas of evaluation:

- Electronic Interface Change Control Process ("CCP" which was formerly known as EICCP) as applied to the implementation of OSS '99;
- Pre-ordering, ordering and provisioning of various types of Digital Subscriber Loop- ("xDSL") capable loops;
- Pre-ordering, ordering, provisioning, maintenance and repair, and billing of resale services; and,
- Processes and procedures supporting the collection and calculation of performance data.

As in the test developed by KPMG for Bell Atlantic – New York's OSS, KPMG utilized transaction-based and operational-based tests for evaluation of BellSouth's provisioning of wholesale services to CLECS.

KPMG's final opinion was favorable. After evaluating BellSouth across 1,173 test points in the MTP/STP/FT categories and finding over 96% of the test criteria satisfied, KPMG concluded that "no deficiencies creating potentially material adverse impacts on competition currently exist in the Test categories of Pre-Ordering, Billing, Maintenance and Repair, Capacity Management, Change Management and Flow-Through." The small remaining exception percentage fell into the Ordering and Provisioning categories regarding: timeliness of responses

to fully mechanized orders; timeliness and accuracy of clarifications to partially-mechanized orders; and, accuracy of translation from external (CLEC) to internal (BellSouth) service orders resulting in switch translations and directory listing errors. As provided in detail herein and in the testimony of Alphonso Varner, BellSouth has proactively addressed and/or resolved all material issues raised by the "not satisfied" criteria. KPMG noted that the GPSC would be able to monitor these exceptions on an ongoing basis through performance measures and/or penalty plans that are in place to address such issues.

BellSouth believes that KPMG's evaluation and report to the GPSC validates its assertions that BellSouth's interfaces, processes, and procedures provide nondiscriminatory access to its OSS by providing CLECs access to the required OSS information and functions in substantially the same time and manner as BellSouth's access for its retail customers, and therefore, conform to the FCC's requirements. Further, the KPMG report verifies that there are no barriers to CLECs entering the local market in the nine-state BellSouth region.

Next, my testimony will show that BellSouth's interfaces to its OSS are the same in Kentucky, Georgia, or any of the other seven states in BellSouth's region. I will demonstrate that BellSouth's OSS provides CLECs with region-wide:

- electronic and manual ordering interfaces that provide uniform functionality;
- comprehensive set of user guides, procedures, information, and job aids for the use of the electronic and manual ordering interfaces; and
- region-wide business rules with extensive training.

Additionally, BellSouth's OSS are designed, developed, modified, and measured for performance on a region-wide basis to operate in an undistinguishable manner whether a CLEC is in Kentucky, Georgia or any of the other seven states in the BellSouth region. BellSouth engaged PriceWaterhouseCoopers ("PWC") to evaluate and confirm its assertion that its OSS is regional in nature. PWC affirmed BellSouth's assertions as "…fairly stated, in all material respects" in its report, entitled "Report on the Region-wide Comparability of BellSouth's Pre-Order and Order Operational Support Systems as of May 3, 2001" (the "Comparability Report") which is attached as Exhibit OSS-74.

Finally, my testimony will show that the Commission can use the results of the Independent Third-Party OSS Test, combined with evidence of actual commercial usage to determine that BellSouth provides nondiscriminatory access to its OSS in Kentucky. The Federal Communications Commission ("FCC") recognized in its Order approving the Kansas and Oklahoma applications of SWBT that "[c]ommissions may conduct successful section 271 reviews without overwhelming their regulatory resources by building on the work of other states," [1] (SWBT-KA/OK, at ¶ 2). Thus, BellSouth respectfully submits that because BellSouth's OSS are region-wide as confirmed by PWC, the Commission can rely on the independent third-party test performed in Georgia, in addition to the evidence of actual commercial usage, to determine that BellSouth provides nondiscriminatory access to its OSS in Kentucky.

[1] Joint Application by SBC Communications, Inc., d/b/a Southwestern Bell Long Distance for Provision of In-Region, InterLATA Services in Kansas and Oklahoma, CC Docket No. 00-217, Memorandum Report and Order (Released January 22, 2001) ("SWBT Order-KS/OK").

PART B: COMPREHENSIVE DISCUSSION OF THE ISSUES

I. NONDISCRIMINATORY ACCESS

Q. DOES BELLSOUTH PROVIDE CLECS WITH NONDISCRIMINATORY ACCESS TO ITS OSS?

A. Yes. BellSouth provides CLECs with nondiscriminatory access to its OSS. The Telecommunications Act of 1996 ("Act"), together with FCC interpretations of the Act, require an incumbent local exchange carrier ("ILEC") to:

- provide nondiscriminatory access to its OSS on appropriate terms and conditions;
- provide the documentation and support necessary for CLECs to access and use these systems; and
- demonstrate that the ILEC's systems are operationally ready and provide an appropriate level of performance.

Compliance with the requirements should allow competitors to obtain pre-ordering information, execute service requests for resold services and unbundled network elements ("UNEs"), report and manage troubles, and obtain billing information. The level of access for all criteria should be nondiscriminatory when compared to that of the ILEC's retail operations.

Q. WITH RESPECT TO OSS, WHAT IS BELLSOUTH OBLIGATED TO PROVIDE CLECS?

A. In paragraph 87 of its Order on BellSouth's second 271 application for Louisiana, the FCC reiterated its requirement stated in the Ameritech Michigan Order and in the Local Competition First Report and Order "that a BOC must offer access to competing carriers that is analogous to OSS functions that a BOC provides to itself. Access to OSS functions must be offered in 'substantially the same time and manner' as the BOC. For those OSS functions that have no retail analogue . . . a BOC must offer access sufficient to allow an efficient competitor a meaningful opportunity to compete." The FCC reaffirmed this requirement in its orders granting long distance relief to Bell Atlantic in New York (New York Order, paragraphs 85-86) and Southwestern Bell in Texas (Texas Order, paragraphs 94-95).[2]

The FCC follows a two-step approach to determine if the BOC has met the nondiscrimination standard for each OSS function. First the FCC will determine, "whether the BOC has deployed the necessary systems and personnel to provide sufficient access to each of the necessary OSS functions and whether the BOC is adequately assisting competing carriers to understand how to implement and use all of the OSS functions available to them." Next, the FCC will determine "whether the OSS functions that the BOC has deployed are operationally ready,

[2] *Application by Bell Atlantic New York for authorization under Section 271 of the Communications Act to provide In-Region, InterLATA Service in the State of New York,* Memorandum Opinion and Order and *Application by SBC Communications, Inc., Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell Long Distance. Pursuant to Section 271 of the Telecommunications Act of 1996 to Provide In-Region, InterLATA Services in Texas,* Memorandum and Opinion.

as a practical matter." This includes an examination of "performance measurements and other evidence of commercial readiness." *See Second Louisiana Order,* ¶ 85.

TESTING

Q. UPON WHAT TYPES OF EVIDENCE WILL THE FCC RELY TO ASSESS AN RBOC'S PROVISION OF NONDISCRIMINATORY ACCESS TO OSS?

A. The FCC emphasized that commercial or operational readiness can be evidenced in several ways: actual commercial usage, carrier-to-carrier testing, independent third-party testing and internal testing. The FCC has repeatedly stated that actual commercial usage is the most probative evidence that OSS functions are operationally ready. *Bell Atlantic New York Order*, ¶89. BellSouth's interfaces have been used commercially for years. As will be shown more fully in the discussion of each interface, the levels of commercial usage alone clearly demonstrate the operational readiness of these interfaces. However, these interfaces, have also been subjected to extensive third-party testing and carrier-to-carrier testing, as will be described below.

Q. WHAT HAS THE FCC SAID ABOUT INDEPENDENT THIRD-PARTY OSS TESTING?

A. In its *Bell Atlantic New York Order*, the FCC stated that "the persuasiveness of a third-party review is dependent on the conditions and scope of the review." In

addition to scope, depth, and surrounding conditions, the following qualities led the FCC " . . . to treat the conclusions in the KPMG Final Report as persuasive evidence of Bell Atlantic's OSS readiness." These qualities are: independence, military-style testing philosophy, efforts to place themselves in the position of an actual market entrant, and efforts to maintain blindness when possible. *Bell Atlantic New York Order*, ¶ 100. The independent third-party test ordered by the GPSC has all of these qualities.

Carrier-to-Carrier Testing

Q. HAS BELLSOUTH CONDUCTED CARRIER-TO-CARRIER TESTING OF ITS ACCESS TO OSS?

A. Yes. Six CLECs participated in a carrier-to-carrier Beta test of LENS Release 6.0 from September 13 through September 24, 1999. The CLECs tested pre-ordering, the new "fast-path" ordering, the new screen design and activity flows, the view function for LSR order information, the changes to the main menu, the options for user administration (such as the ability to change the company code and passwords), and the new bulk ordering function. Because LENS Release 6.0 is dependent on TAG Release 3.0 which was still in development in September, not all the functionality of LENS was tested.

During the test, the six CLECs successfully submitted 8,184 LSRs through LENS Release 6.0. During the first nine days, BellSouth limited each CLEC to 50 LSRs

per day (a total of 300 per day). On the final day, BellSouth lifted the limit, and the CLECs submitted 2,591 LSRs.

Based on the success of the LENS Release 6.0 Beta test, the CLECs asked BellSouth to put the Beta version of Release 6.0 into production before the scheduled implementation on January 14, 2000. BellSouth complied with that request, and on October 25, 1999, the Beta version of LENS Release 6.0 went into production.

Q. DID BELLSOUTH CONDUCT BETA TESTING OF ITS OSS99 EDI INTERFACE?

A. Yes. BellSouth and AT&T successfully conducted a Non-LNP Beta Test of OSS99. Connectivity testing was conducted from October 25, 1999 to October 26, 1999. Syntax testing was conducted from October 27, 1999 to October 29, 1999. Carrier testing was conducted from November 1, 1999 to December 1, 1999. Approximately 25 LSRs were tested. BellSouth and AT&T also successfully conducted a LNP Beta Test of OSS99. Syntax testing was conducted from December 13, 1999 to December 15, 1999. Carrier testing was conducted from December 20, 1999 to January 14, 2000. Approximately 10 LSRs were tested. A variety of test case scenarios were used during both the Non-LNP and LNP beta testing. Further, BellSouth provides an open and stable testing environment for the CLECs as discussed herein in the Change Management Section.

SUMMARY OF THE INTERFACES

Entry Methods for CLECs

Q. BRIEFLY DESCRIBE THE ENTRY METHODS BELLSOUTH MAKES AVAILABLE TO CLECS.

A. BellSouth provides CLECs nondiscriminatory access to its OSS for pre-ordering, ordering, provisioning, maintenance and repair, and billing through robust and reliable manual and electronic interfaces. The electronic interfaces are: LENS, TAG, RoboTAG™, EDI, TAFI, ECTA, ODUF, EODUF, and ADUF. BellSouth's OSS interfaces for CLECs are operated and available on a regional basis. Below, I will discuss the entry methods for resale, UNEs, and interconnection. I will describe the interfaces for each required function, and will show how the CLEC interfaces provide nondiscriminatory access to the required information and functions. For each function, I also will describe how the interfaces comport with any applicable industry standards.

Q. PLEASE GENERALLY DESCRIBE THE INTERFACES AVAILABLE TO CLECS.

A. BellSouth has designed and implemented a variety of electronic interfaces to suit the varied business plans and entry methods of the CLECs in BellSouth's region. A CLEC’s selection of an interface depends on its business plan and entry strategy. CLECs can select from among the interfaces described below to match

their particular mix of services, volume of orders, technical expertise, resources, and future plans. The following chart depicts the entry methods and the nondiscriminatory interfaces from which a CLEC may choose. Each interface will be described in detail later in my testimony (including definitions of the acronyms).

	Resale	**UNEs**	**Facility-Based**	**Data**
Pre-Ordering	TAG	TAG	TAG	TAG
	LENS	LENS	LENS	LENS
	RoboTAG™	RoboTAG™	RoboTAG™	RoboTAG™
Ordering & Provisioning	EDI	EDI	EDI	EDI
	TAG	TAG	TAG	TAG
	LENS	LENS	LENS	LENS
	RoboTAG™	RoboTAG™	RoboTAG™	RoboTAG™
Maintenance & Repair	TAFI	TAFI (TN-based)	TAFI	TAFI
	ECTA	ECTA	ECTA	ECTA
Billing	EODUF	ADUF	ODUF	N/A
	ODUF	EODUF		
		ODUF		

Q. DOES BELLSOUTH ALLOW CLECS TO SUBMIT LSRS MANUALLY AS WELL AS ELECTRONICALLY?

A. Yes. BellSouth does not require CLECs to transmit requests for resale and UNE POTS-type services only by electronic interfaces, but instead allows transmittal through manual interfaces for those CLECs that have made the business decision to use only manual entry methods. As mentioned earlier, manual interfaces and procedures are discussed in the testimony of Ken Ainsworth.

Summary of Integrateable Electronic Pre-Ordering, Ordering, and Provisioning Interfaces

Q. HOW DOES BELLSOUTH PROVIDE CLECS WITH ACCESS TO ITS PRE-ORDERING AND ORDERING OSS?

A. BellSouth provides CLECs with access to the same pre-ordering, ordering, and provisioning OSS accessed by BellSouth's retail units through the machine-to-machine Telecommunications Access Gateway ("TAG") interface. TAG, which was developed in response to specific requests from mid-sized and large CLECs, provides a standard Application Programming Interface ("API") to BellSouth's pre-ordering, ordering, and provisioning OSS. TAG is based on Common Object Request Broker Architecture ("CORBA"), which is one of the industry protocols for pre-ordering. TAG follows the Ordering and Billing Forum ("OBF") guidelines for LSRs. TAG pre-ordering has been available since August 31, 1998; TAG ordering has been available since November 1, 1998. There are two ways for CLECs to connect to TAG: LAN-to-LAN and the Internet.

For its retail basic exchange service customers, BellSouth uses two retail marketing and sales support systems to access pre-ordering, ordering, and provisioning information from BellSouth's downstream OSS. BellSouth uses the Regional Negotiation System ("RNS") for most types of residential service requests. For business customers, BellSouth uses the Regional Ordering System ("ROS").

In addition to TAG, BellSouth provides CLECs with access to the same ordering and provisioning OSS accessed by the BellSouth retail units through the machine-to- machine Electronic Data Interchange ("EDI") interface for CLECs. EDI is not used to access pre-ordering OSS. EDI follows the protocol (EDI) that was established for ordering and the OBF guidelines for LSRs. EDI has been available to any interested CLEC since December 1996. There are several EDI connectivity options available: dedicated point-to-point connections; dial-up connections; and Value-Added Network ("VAN") connections. BellSouth is targeted to add Internet access as a method of connectivity for EDI during the second quarter of 2001. The diagram attached as Exhibit OSS-2 depicts how BellSouth's and CLECs' systems interact with the pre-ordering and ordering OSS.

Q. PLEASE DISCUSS INTEGRATION WITH RESPECT TO TAG AND EDI.

A. In accordance with the FCC's requirements, BellSouth provides CLECs with all the specifications necessary for integrating the BellSouth interfaces. A CLEC may integrate ordering and pre-ordering functions by integrating the TAG pre-ordering interface with the EDI ordering interface, or by integrating TAG pre-ordering with TAG ordering.

CLECs have taken the specifications provided by BellSouth, and have successfully integrated the TAG pre-ordering interface with the EDI and TAG ordering interfaces. Because integration takes place on the CLECs' side, BellSouth cannot specify exactly how many CLECs have integrated the

interfaces. However, BellSouth believes that at least 6 CLECs have integrated the TAG pre-ordering interface with the EDI interface and at least 43 CLECs have integrated TAG pre-ordering with TAG ordering. Four CLECS, Cox Communications, Network Telephone Corporation, CenturyTel, and NewSouth Communications have purchased and integrated TAG pre-ordering and EDI ordering gateways built by DSET.[3] Exhibit OSS-3 shows the usage of the pre-ordering and ordering interfaces by CLECs, and indicating those CLECs that BellSouth believes have successfully integrated pre-ordering and ordering interfaces.

Summary of Other Electronic Pre-Ordering, Ordering, and Provisioning Interfaces

Q. DOES BELLSOUTH OFFER CLECS INTERFACES OTHER THAN TAG AND EDI?

A. Yes. BellSouth recognizes that some CLECs have decided not to make the investment necessary to develop the integrateable machine-to-machine TAG and EDI interfaces. BellSouth, therefore, offers the CLECs other interfaces to suit their needs and business plans.

Some CLECs may wish to use TAG for pre-ordering and ordering, so that they have the ability to use their own databases, without the necessity of making the investment in programmers to develop and maintain their own TAG interface. For these CLECs, BellSouth sells a software package called "RoboTAG™." This software was developed by Science Applications International Corporation

[3] Please see DSET's Web site, www.dset.com for the press releases naming these CLECs.

(SAIC), under contract with BellSouth. RoboTAG™ provides a standardized, browser-based interface to the TAG gateway that resides on a CLEC's LAN server, and integrates pre-ordering and ordering with up-front editing. RoboTAG™ became available in November 1999. The first CLEC that purchased RoboTAG™ completed testing and was ready for production on November 24, 1999. Five CLECs are using RoboTAG™. A sixth CLEC (Cox Communications) is in the process of establishing RoboTAG™.

BellSouth provides substantial support to CLECs using RoboTAG™. This support includes: performing a site survey before installation of RoboTAG™; developing a detailed project plan for installation; performing installation of RoboTAG™ (including training the CLEC's system administrator); providing the initial training for end users; providing a help desk; and providing fixes. BellSouth also is responsible for providing CLECs with updated versions of RoboTAG™. In other words, as TAG evolves with new releases, CLECs using RoboTAG™ will automatically receive upgrades of TAG.

CLECs using RoboTAG™ need a separate server or one with adequate space to store all of its TAG transactions. This server allows the CLEC to integrate the information obtained through TAG with its own internal OSS, and eliminates the need for CLECs to perform any dual entry of information. The CLEC must maintain licenses for certain third-party software (NT Server, Cold Fusion, Sequel Server, and Orbix). The CLEC is also responsible for participating in the RoboTAG™ User Group.

Q. CAN CLECS USE A THIRD-PARTY VENDOR TO ACCESS BELLSOUTH'S OSS?

A. Yes. As yet another option available, CLECs may choose to use solutions developed by third-party vendors. Albion International, Inc., Telcordia Technologies, Exceleron Software, Inc., DSET Corporation, Mantiss, Nightfire Software, Quintessent, and Eftia, for example, have developed electronic interfaces to connect and integrate CLECs' systems with BellSouth's OSS. In addition to the CLECs (mentioned earlier) that have purchased DSET's gateway solution, various press releases noteCLECs such as Sprint, Now Communications, Teleconex, Rhythms, Covad, DSLNet, and Adelphia Business Solutions as using third-party solutions.

Q. DOES BELLSOUTH OFFER CLECS A HUMAN-TO-MACHINE INTERFACE?

A. Yes. For CLECs that have made the business decision not to integrate pre-ordering, ordering and provisioning interfaces with their own internal OSS, and do not want to expend the resources necessary to use RoboTAG™, BellSouth makes available the human-to-machine Local Exchange Navigation System ("LENS") interface. LENS is a Web-based graphical user interface ("GUI"). LENS requires software development only on BellSouth's side of the interface. BellSouth therefore is responsible for implementing any changes or new version of the interface. With the implementations of Release 6.0 of LENS on January 14, 2000, LENS became a GUI to the TAG gateway. LENS uses TAG's

architecture and gateway, and therefore has TAG's pre-ordering functionality for resale services and UNEs, and TAG's ordering functionality for resale services. With Release 6.2 on April 15, 2000, LENS began using TAG's ordering functionality for designed and non-designed unbundled analog loops, unbundled digital loops, and for CLECs with contracts, unbundled two-wire analog port plus two-wire analog loop combinations (the "UNE Platform"). LENS provides integrated pre-ordering and ordering in its firm order mode. In order to use LENS, a CLEC must have, at a minimum, a personal computer, Web browser software, and an internet connection (of course, the CLEC must also test with BellSouth, attend training, and obtain a password). LENS has been available since April 1997.

Q. DESCRIBE FOR THE COMMISSION SOME OF THE BENEFITS OF LENS.

A. Certainly. LENS reduces the input requirements for CLEC service representatives by providing CLECs with shortcuts for commonly used functions, such as disconnects, suspends, and restores. CLECs need only to complete one input screen and one verification screen to process these types of LSRs.

Another shortcut function specially tailored to CLECs' practices is the addition on January 14, 2000, of a new feature in LENS called "bulk ordering". This feature allows CLECs to send up to 500 LSRs for conversions/switch as is, disconnects, suspends, restores, and cancellations to BellSouth in a single order. There are also two methods for bulk ordering in LENS. One method allows the CLEC user to type up to 100 LSRs directly on a single LENS screen. Using the other

method, a CLEC user types up to 500 LSRs using any program that allows a file to be saved as "*.txt" (tab delimited), such as Microsoft's Excel®. That file can be uploaded into LENS and then sent to BellSouth. CLECs can check the status of each LSR sent in a bulk order, just as they can for LSRs sent individually.

Q. DO CLECS HAVE A MEANS TO TRACK THEIR SERVICE ORDERS?

A. Yes. In December 1999, the CLEC Service Order Tracking System ("CSOTS") became available to CLECs. This region-wide Web-based electronic interface allows CLECs to view service orders on-line, track service orders, and determine the status of their service orders. Region-wide, 320 CLECs are using CSOTS.

Q. WHAT ARE THE INDUSTRY STANDARD PRE-ORDERING PROTOCOLS?

A. In September 1997, the industry voted to approve two standard protocols for pre-ordering interfaces: CORBA and EDI TCP/IP/SSL3. The industry anticipated that CORBA "would emerge as the preferred long-term solution."[4] BellSouth, therefore, began building the TAG pre-ordering interface to the CORBA standard. However, BellSouth is now working with the CLECs via the Change Control Process (discussed below) to add an EDI pre-ordering interface. The Change Control Process will be discussed in depth later in my testimony.

[4] Memorandum from Melson to Sirles of 10/31/1997, at 1.

Summary of Electronic Maintenance and Repair Interfaces

Q. DESCRIBE THE ELECTRONIC MAINTENANCE AND REPAIR INTERFACES BELLSOUTH MAKES AVAILABLE TO CLECS.

A. For BellSouth's retail customers with basic local exchange service, BellSouth's business and residence repair center attendants use *either* a business or residence version of the human-to-machine Trouble Analysis Facilitation Interface ("TAFI"). BellSouth offers to CLECs a *single* TAFI system that combines the complete functionality of the separate business and residence versions of TAFI used by BellSouth's repair attendants. Accordingly, the CLEC-TAFI functionality is superior to BellSouth's TAFI since it can process both residence and business trouble reports on the same processor. Therefore, CLEC-TAFI provides better than nondiscriminatory access to BellSouth's maintenance OSS. Since TAFI became available to CLECs in March 1997, 69 CLECs have used TAFI to enter trouble reports. In 2000, 251,900 reports were submitted by CLECs via TAFI.

BellSouth also offers CLECs the machine-to-machine Electronic Communications Trouble Administration ("ECTA") Gateway which provides access to BellSouth's maintenance OSS supporting both telephone-number and circuit-identified services (i.e., designed and non-designed services). It supports both resold services and UNEs. To date, BellSouth has built five ECTA interfaces for CLECS. Two of those five are currently conducting various levels of testing, and one is actively using the ECTA interface. The other two still have

the capability to access ECTA, but apparently have chosen not to do so for their own internal business reasons.

Summary of Electronic Billing Interfaces

Q. DESCRIBE THE ELECTRONIC BILLING INTERFACES BELLSOUTH MAKES AVAILABLE TO CLECS.

A. BellSouth offers CLECs interfaces that provide billing information: the Optional Daily Usage File ("ODUF"), the Enhanced Optional Daily Usage File ("EODUF"), and the Access Daily Usage File ("ADUF"). ODUF has been available since March 1996, EODUF since December 31, 1998, and ADUF since December 31, 1997. Currently, 200 CLECs are using ODUF, two are using EODUF, and 38 are using ADUF. As I stated earlier, the testimony of David Scollard describes the nondiscriminatory billing processes for BellSouth and the CLECs.

SUPPORT FOR CLECs

Documentation

Q. DESCRIBE THE DOCUMENTATION AVAILABLE TO CLECS FROM BELLSOUTH.

A. In the Georgia Test, KPMG tested the content and accuracy of preordering

documentation for TAG (MTP, at IV-C-9 - IV-C-15), ordering documentation for EDI and TAG (MTP, at V-H-12 - V-H-19), and maintenance and repair documentation for TAFI and ECTA (MTP, at VII-H-5 – VII-H-22; VII-I-5 - VII-I-8), and found all the test criteria satisfied.

BellSouth has created a four-phase turn up process for providing facilities and services to CLECs. This process ensures that new CLECs are properly informed about and trained on BellSouth's full range of wholesale products, and the rules and interfaces for obtaining those products. The four steps are described in the testimony of Ken Ainsworth.

The guides and manuals discussed below and elsewhere in this testimony are available to CLECs on the Interconnection Web site.[5] Most are available to CLECs at the Interconnection Web site in two versions, the HTML format and the Portable Document Format ("PDF"). Using the PDF format, CLEC representatives can copy the guides and manuals to their computers' hard-drives. BellSouth provides CLECs with information that affords a general overview of the requirements necessary to activate an account and to work with BellSouth. This information is contained in the *BellSouth Start-Up Guide*, attached to this testimony as Exhibit OSS-4. Because this guide provides CLEC readers with general information about how to do business with BellSouth, the guide also refers to more detailed documentation when appropriate. This guide is designed to be used by both resale and facilities-based CLECs. Included in the *BellSouth Start-Up Guide* are topics such as: BellSouth and CLEC roles and responsibilities; activation for resale and facilities-based CLECs; electronic interfaces and

[5] http://www.interconnection.bellsouth.com/index.html

gateways; and, CLEC training.

In order to provide CLECs with a high-level understanding of the current procedures and processes used to acquire products and services from BellSouth, BellSouth has developed the *BellSouth Pre-Ordering and Ordering Overview Guide* (Exhibit OSS-5). Included in this guide is an overview of the pre-ordering and ordering processes with references to more detailed documentation and resources. The guide also contains a list of manual and electronic options for submitting pre-ordering and ordering transactions.

BellSouth business rules for pre-ordering are contained in the *BellSouth Pre-Order Business Rules*, the *BellSouth Pre-Order Business Rules Appendix*, and the *BellSouth Pre-Order Business Rules Data Dictionary*. They are attached to this testimony as Exhibits OSS-6, OSS-7, and OSS-8. These documents outline the pre-ordering query and response transactions.

By adhering to the pre-ordering and ordering business rules recognized by BellSouth's systems, CLECs can avoid errors and rejected LSRs.

BellSouth's business rules for placing electronic and manual LSRs are contained in the *BellSouth Business Rules for Local Ordering* ("BBR") document. The BBR provides the Business Rules for electronic or manual ordering for CLECs that have converted to TCIF 9 (Release 6.0 of the electronic interfaces, a/k/a OSS99, or higher) and/or LSOG 4 (manual standards). The BBR is attached to this testimony as Exhibit OSS-9.

Q. WHERE CAN CLECS FIND SPECIFICATIONS FOR EDI?

A. The specifications for EDI are contained in a set of documents that comprise the *BellSouth EDI Specifications*. The chart below lists the specification documents.

BellSouth EDI Specifications	**Exhibit Number**
Administration	OSS-10
850 Purchase Order Transaction Set	OSS-11
855 Purchase Order Acknowledgment Transaction Set	OSS-12
860 Purchase Order Change Request Transaction Set	OSS-13
865 Purchase Order Change Ack/Req Transaction Set	OSS-14
997 Functional Acknowledgment Transaction Set	OSS-15
EDI Testing Guidelines for CLECs	OSS-16

Q. WHERE CAN CLECS FIND INFORMATION ABOUT LOCAL EXCHANGE ORDERING?

A. The *Local Exchange Ordering Implementation Guide* ("LEO Guide") provides the Business Rules for electronic ordering following the OBF's TCIF 7 guidelines. It is available in the HTML and PDF formats on the Interconnection Web site and is labeled Volumes 1-4.[6] Volumes 2 and 3 of the LEO Guide include the required Universal Service Order Codes ("USOCs") and valid combinations. Specifically, Volume 2 lists the products and services available to the CLECs for ordering and the associated requirements for ordering. Volume 3 lists the UNEs available for ordering and the associated requirements for ordering.

[6] The LEO Guide is available for CLECs that have chosen not to upgrade their machine-to-machine electronic interfaces to TCIF 9. The equivalent rules for TCIF 9 are contained in the BBR and the EDI Specifications, as described above.

Volume 4 provides the specifications for users of EDI TCIF 7.0. Volumes 1-4 of the LEO Guide are attached as Exhibits OSS-17, OSS-18, OSS-19, and OSS-20.

Q. CAN CLECS ACCESS THE USOC MANUAL ON THE WEB?

A. Yes. BellSouth has made the USOCs and FIDs (Field Identifiers) available in the USOC Manual in several formats at the BellSouth Interconnection Web site, including a format that allows CLECs to download and import the manual into commonly-used database programs. Once the CLEC decides which services it will offer, it need only find the USOCs that correspond with the services in the USOC Manual, and refer to the LEO Guide or the BBR to determine what modifications or restrictions exist for the service. The *CLEC USOC Manual-Listed Alphanumerically* is attached as Exhibit OSS-21.[7] The Interconnection USOC Manual-Listed Alphanumerically is attached as Exhibit OSS-22.[8] Also, BellSouth has published a document on the FIDs. The *BellSouth FID Glossary for CLECs* provides a comprehensive alphabetical listing of FIDs and their associated descriptions. This glossary is attached as Exhibit OSS-23.

Q. WHAT INFORMATION DOES BELLSOUTH PROVIDE TO CLECS ABOUT ERROR CODES?

[7] The CLEC USOC Manual-Listed by Service Category and the Common Spaced Value (.csv) version of the USOC manual (which may be downloaded and imported into commonly-used database programs) are available athttp://www.interconnection.bellsouth.com/guides/html/usoc.html.

[8] Interconnection USOC Manual-Listed by Service Category and the Common Spaced Value (.csv) version of the USOC manual (which may be downloaded and imported into commonly-used database programs) are available athttp://www.interconnection.bellsouth.com/guides/html/usoc.html.

A. BellSouth provides CLECs with a document called *Local Service Request Error Messages* that lists the error codes and the associated messages that are returned to the CLECs when an LSR contains a CLEC error. This document is attached as Exhibit OSS-24.[9] A CLEC may use this information to correct its error(s) and submit a supplemental LSR.

Q. WHAT OTHER DOCUMENTS ARE AVAILABLE TO ASSIST CLECS?

A. There are several other documents available on the BellSouth Interconnection Services – Customer Guides and Documentation Web to assist CLECs with the interfaces and the OSS. These documents include: the *LENS User Guide*; *the CLEC TAFI End-User Training Manual*; the *CLEC TAFI User Guide*; the *Products and Services Interval Guide*; the *ECTA Start-up Guide;* and the *LNP Reference Guide*. I discuss these documents in more detail below and in the section on training.

In addition, BellSouth has established a CLEC "OSS Information Center" Web page at the Interconnection Web site.[10] This page provides access to information such as the Change Control Process and the Performance Measurements Web site. The OSS Information Center page also contains a password-protected link to documentation for TAG.

[9] This exhibit provides the error messages for TCIF 9 (OSS99 or Release 6.0). Error messages for TCIF 7.0 are also available on the Interconnection Web site (http://www.interconnection.bellsouth.com/guides/statusing/pdf/w72tcif7.pdf) for those CLECs that have chosen not to upgrade their systems. Additional error information is available through the LENS User Guide: http://www.interconnection.bellsouth.com/guides/html/LENS_TAFI.html and the Service Order Edit Routine (SOER) error messages: http://www.interconnection.bellsouth.com/soeredits/soer_doc.html.

[10] http://www.interconnection.bellsouth.com/carriertypes/lec/html/oss_info.html

The specifications for TAG are found in the TAG API Reference Guide Exhibit OSS-25.[11] For some releases, BellSouth occasionally provides CLECs with release notes, compatibility matrices, or programmer's job aids. BellSouth makes the actual API available for download at a password-protected page on the Interconnection Web site.[12]

Q. DOES BELLSOUTH PROVIDE CLECS WITH INFORMATION ABOUT LOCAL NUMBER PORTABILITY ("LNP")?

A. Yes. BellSouth Business Rules for LNP are provided in the BBR and the LEO Guide. These documents have been available to CLECs since LNP's implementation in August 1998. In order to assist CLECs with ordering LNP, BellSouth developed the *LNP Reference Guide*, which is attached as Exhibit OSS-27. The *LNP Reference Guide* is intended to supplement the business rules contained in the BBR, and the LEO Guide. The *LNP Reference Guide* contains detailed diagrams and narratives showing process flows for LNP.

The processes and procedures that are used to implement LNP were developed by the North American Numbering Council ("NANC") and the Southeast Region LNP Operations Team, which is comprised of CLECs and BellSouth. All parties may obtain the documentation on the industry processes and procedures directly from the Number Portability Administration Center ("NPAC"), which is operated

[11] This documentation is for the TCIF 9 version of TAG. BellSouth also posts documentation for the TCIF 7 version of TAG on the same password-protected Web page.
[12] This documentation is for the TCIF 9 version of TAG. BellSouth also posts documentation for the TCIF 7 version of TAG on the same Web page.

by Neustar, Inc., the independent organization that oversees the porting of telephone numbers.[13]

Q. DESCRIBE THE INFORMATION AVAILABLE ON CSOTS.

A. The *CLEC Service Order Tracking System User's Guide* is available at the Interconnection Web site and at the CSOTS Web site. A copy of the guide is attached as Exhibit OSS-28. A computer-based tutorial for new users is also available at the CSOTS site.

Q. HOW DOES BELLSOUTH PROVIDE CLECS WITH INFORMATION ABOUT RETAIL PROMOTIONS?

A. Information about BellSouth's retail promotions is made available to CLECs via written notice. Additionally, BellSouth sends information about retail promotions to certain CLECs by e-mail, as specified in their interconnection agreements. CLECs may incorporate this information into their own internal pre-order/order negotiation systems, as BellSouth has incorporated this information into its own internal pre-order/order negotiation systems.

Q. IS BELLSOUTH'S DOCUMENTATION ADEQUATE TO ALLOW CLECS NONDISCRIMINATORY ACCESS TO BELLSOUTH'S OSS?

A. Yes. The significant number of users of TAG and EDI, combined with the substantial usage and integration of the pre-ordering and ordering interfaces that I

[13] NPAC's Web site is http://www.npac.com

described earlier, clearly demonstrate the adequacy of BellSouth's documentation for CLECs. As the FCC has noted, the adequacy of an interface's documentation is demonstrated by the fact that CLECs are using the interfaces in a commercial environment.[14] Based upon information contained in BellSouth's Percent Flow-through Requests Report, in January, 2001, 26 OCNs[15] used EDI and 71 OCNs used TAG. In February 2001, 36 OCNs used EDI and 65 OCNs used TAG In March, 2001, 32 OCNs used EDI and 59 OCNs used TAG.

KPMG also performed integration testing "to evaluate the degree to which a CLEC could develop automated integrated transactions and to highlight any inconsistencies in field name(s) and format between pre-order and order forms."[16] All evaluation criteria associated with the pre-order/order integration test were satisfied.

[14] "As an initial matter, we agree with SWBT and the Texas Commission that the adequacy of SWBT's documentation is demonstrated by the fact that several competing carriers have constructed and are using EDI interfaces in a commercial environment." SWBT Texas Order, paragraph 120.

[15] Here the term Operating Carrier Number ("OCN") is used instead of CLEC when making reference to a horizontal line of data represented on the flow-through report. This is because each line of data represents an OCN and some CLECs have multiple OCNs. Thus, on the flow-through report two or more OCNs may represent a CLEC's total data.

[16] See KPMG MTP Final Report, page V-13 (March 20, 2001).

Training for CLECs on the Electronic Interfaces

Q. DOES BELLSOUTH OFFER CLECS TRAINING ON ELECTRONIC INTERFACES?

A. Yes. BellSouth has developed extensive training for CLEC employees. Currently, BellSouth offers a wide variety of training courses specifically for CLECs. The following chart provides information on the training classes held since 1998.

Training Information	**1998**	**1999**	**2000**	**1Q2001**
# of Classes offered	130	87	78	15
# of Suitcased[17] classes offered	11	36	29	16
# of CLEC Companies	38	395	152	44
# of Students	1095	1156	1162	375

BellSouth offers CLECs training courses to help them work efficiently with BellSouth. The courses are designed to aid the CLECs' understanding of the CLEC-BellSouth relationship and the procedures and services involved. They are taught by instructors experienced in BellSouth's procedures and telecommunications industry processes. The courses are held in Atlanta, Georgia and Birmingham, Alabama, and are available on a first come, first seated basis. CLECs also can arrange to have training at their premises ("suitcased" classes).

Information about the training offered to CLECs, including course descriptions, schedules, and registration forms, is posted at BellSouth's Interconnection Web site.[18]

[17] "Suitcased" means that the training is provided at the CLEC's premises.

Q. WHAT ARE SOME OF THE COURSES OFFERED TO CLECS BY BELLSOUTH?

A. The courses currently offered to CLECs are: CLEC Basic; CLEC Basic Service Ordering; Basic Unbundled Network Elements; TAFI; LENS; Customer Service Record Understanding; Complex Products Service Ordering; Collocation; Data Unbundled Network Elements; Directory Listings Forms; Switched Port/Loop Combinations; and, Tariff.[19]

In October 1998, BellSouth began offering a training course for the CLECs' TAG programmers. This course provides the CLECs' programmers with information and instruction to prepare them to design and develop client applications for the BellSouth TAG gateway. The CLECs' programmers are required to know the C++ programming language in order to attend this course. The agenda for this course is attached as Exhibit OSS-29.

BellSouth offers two courses to CLECs that provide fundamental information on the BellSouth-CLEC relationship. "CLEC Basic" is a five-day course that covers pre-ordering, ordering, provisioning, maintenance and repair. The two-day "CLEC Basic Service Ordering" course is a condensed version of the CLEC Basic course. Documents containing the course description, the objectives, and the agenda for CLEC Basic and CLEC Basic Service Ordering are attached as Exhibits OSS-30 and OSS-31.

[18] /http://www.interconnection.bellsouth.com/training/index.html.

[19] Descriptions for all courses are located athttp://www.interconnection.bellsouth.com/training/html/clec_class_info.html.

Since May 1997, BellSouth has conducted regularly-scheduled training classes in LENS for CLEC representatives. Before taking the three-day LENS course, the CLEC representative is required to have completed CLEC Basic or CLEC Basic Service Ordering or have current knowledge of how to submit local service requests correctly. During this class BellSouth provides the CLEC representatives with hands-on training in LENS. This course is designed to acquaint attendees with LENS and to enable them to successfully utilize LENS in a live production environment. The Business Rules are used as reference tools during the class. A document containing the course description, performance objectives, and course agenda is attached as Exhibit OSS-32.

For additional information about LENS, including examples and screen shots, CLECs may refer to the *Local Exchange Navigation System (LENS) User Guide*. This guide is attached as Exhibit OSS-33.

BellSouth provides regularly-scheduled, two-day training classes in TAFI for CLEC representatives. This class provides attendees with a high level of simulation and hands-on interactions with the TAFI training databases. Before taking the TAFI course, the CLEC representative is required to have completed CLEC Basic or CLEC Basic Service Ordering, or to have experience in either provisioning or maintenance of local exchange service.

The *CLEC TAFI End-User Training Manual* is used during the class as a training text and the attendees become acquainted with the *CLEC TAFI User Guide* as a reference. Both are attached as Exhibits OSS-34 and Exhibit OSS-35. A

document containing the course description, performance objectives, and course agenda is attached as Exhibit OSS-36.

Q. DOES BELLSOUTH OFFER OTHER COURSES TO CLECS?

A. Yes. A composite exhibit of agendas for these courses that are offered to the CLECs is attached as Exhibit OSS-37.

Below is a description of the other courses offered to CLECs:

Course Name	General Description	Length
Customer Service Record ("CSR") Understanding	Provides attendees a very broad overview of the BellSouth business procedures; focuses on how to read a CSR and how to complete LSR forms.	2 days
Complex Products Service Ordering	Provides information on BellSouth's voice and data communication products and services targeted at the Business market; includes the service description of each product, tariff reference, technical functionality, features and service order procedures.	3 days
Basic UNE Overview	Introduces the concept of UNEs; provides general descriptions of the more common UNEs with instructions for ordering as well as a brief description of the billing elements involved.	3 days
Collocation	Introduces physical and virtual collocation; provides general descriptions of the collocation processes with instructions for completing the applications as well as a brief description of the billing elements involved.	2 days
Data UNEs	Introduces UNEs with focus on CLECs, and provides instructions for ordering manually and electronically; provides information about billing elements.	3 days
Directory Listings Forms	Provides instructions for completing directory listing forms and caption request forms; provides basic listing terminology, introduces Yellow Page Headings, and provides instructions on necessary forms for specific requests.	1 day

Switched Port/Loop Combinations	Provides descriptions of the products with instructions for ordering including a brief description of the billing elements involved.	2 days
Tariff	Familiarizes attendees with the four types of tariffs used by BellSouth; introduces the various products and services contained in tariffs; instructs about jurisdictional differences.	2 days

Q. DOES BELLSOUTH OFFER ANY SELF-DIRECTED TRAINING FOR CLECS?

A. Yes. BellSouth also has developed Web-based training for CLECs, so that representatives of CLECs can train whenever their schedules allow.[20] Three courses are currently available: the CLEC Basic Course, the Resale LENS Course, and the TAFI course. Attached as Exhibit OSS-38 are descriptions of the Web-based training courses.

Q. HOW DOES BELLSOUTH ENCOURAGE CLEC TRAINING?

A. From February 1 to July 1, 2001, BellSouth is offering a rebate of up to $300.00 for each participant who attends the courses for CLEC Basic Service Order, Basic UNE Overview, Data UNEs, Switched Port/Loop Combinations, and Collocation. The total credit is based on the number of days that the course is scheduled ($100.00 per day) and the completion of both the pre- and post-test forms and the evaluation work sheet by the participant. The average cost of a course is $325.00 per day. Most courses are 2-3 days in length.

[20] https://CLECu.learn.net/

In addition, in 2001, BellSouth began offering free workshops for CLECs. The purpose of these workshops is to address topics related to the provisioning and completion of the CLECs' orders. BellSouth has scheduled six workshops for 2001, in addition to the two that were held in February and April.[21]

Q. DOES BELLSOUTH OFFER ANY OTHER MEANS OF CONVEYING INFORMATION TO CLECS?

A. When the occasion warrants, BellSouth hosts periodic conferences for CLECs. For example, on October 26, 1999, BellSouth hosted a day-long forum to inform CLECs about the interface enhancements scheduled for January 2000. Other topics discussed at this forum included change management, LNP, UNEs, training, and education. Again, on May 2-3, 2000, and on November 1-3, 2000, BellSouth held forums to bring CLECs up-to-date on the services and products offered by BellSouth. Some of the topics included OSS enhancements, loop makeup, line sharing and xDSL matters, updates on the UNE Remand Order, the Change Control Process, training, and new product development.

Q. DO CLECS FIND BELLSOUTH'S TRAINING COURSES HELPFUL?

A. Yes, based upon input from class participants. To monitor and improve the training offered to the CLECs, the trainers provide a course evaluation form to each attendee at the end of each course. The evaluations are submitted anonymously. The evaluation focuses on the effectiveness and efficiency of each

[21] The remaining workshops are scheduled for June, August, October, and December.

class. On a scale of 1 to 5, with 5 being the highest, the overall average for 2000 was 4.6.

Help Desk

Q. DOES BELLSOUTH PROVIDE HELP DESK CAPABILITY TO CLECS?

A. Yes. For technical problems with the electronic interfaces, such as connectivity and password problems, CLECs may call the Electronic Communications Support ("ECS") Group. This help desk is staffed from 8:00 a.m. until 5:00 p.m. Central Time, and CLECs may contact it using a toll free number (888-462-8030). BellSouth provides a toll free pager number for help during nights, weekends, and holidays.

The Change Control Process document contains instructions for reporting outages (Type 1 change requests) to the ECS Group. Both the document and change requests are discussed below in "Change Management."

Other Support

Q. DOES BELLSOUTH PROVIDE CLECS WITH SUPPORT IN ADDITION TO THAT DISCUSSED IN YOUR TESTIMONY?

A. Yes. Please see the testimony of Ken Ainsworth for descriptions of the BellSouth groups and centers that support CLECs, including their use of the electronic interfaces.

CHANGE MANAGEMENT

Third-Party Test of Change Management

Q. DID KPMG TEST THE CHANGE MANAGEMENT PROCESS IN GEORGIA?

A. Yes. Both the Master Test Plan and the Supplemental Test Plan of the third-party test in Georgia included a test of change management. KPMG issued three exceptions related to change management: Exceptions 2, 17, and 30. Exceptions 2 and 17 were closed on July 21, 2000. Exception 30 was closed on June 26, 2000. Consequently, all evaluation criteria related to these exceptions are now satisfied. (MTP, at VIII-A-15 – VIII-A-23).

The Change Control Process

Q. PLEASE DESCRIBE THE ORIGINATION OF THE CHANGE CONTROL PROCESS.

A. BellSouth's original Electronic Interface Change Control Process ("EICCP") was established because of BellSouth's need to secure input from the CLECs regarding

future enhancements to existing electronic CLEC interfaces, and to have an organized means of securing, understanding, and ranking such input. From the beginning of the EICCP's development, BellSouth sought the participation of the CLECs. BellSouth began discussions with CLECs about change control in October 1997. BellSouth held further meetings with the CLECs in early 1998. A steering committee comprised of representatives of BellSouth, AT&T, MCI, Sprint, e.spire, LCI, and Intermedia, developed, approved, and signed the original EICCP document. The EICCP document described the process by which BellSouth and CLECs managed requested changes to the electronic interfaces for CLECs. On May 15, 1998, the EICCP became effective, by agreement of all representatives of the steering committee. The EICCP was used throughout BellSouth's region.

Q. WAS THE EICCP REGIONAL OR STATE-SPECIFIC?

A. The development of the EICCP was accomplished on a regional basis. Since its inception, the EICCP has been purposefully designed to work on a regional basis, and to involve CLECs operating in all BellSouth states. Because of the regional nature of the implementation effort, no single public service commission reviewed or approved the EICCP. The GPSC recommended the implementation of a change control process for the electronic interfaces in its Order of April 21, 1998 in Docket No. 8354-U. Since that time BellSouth's change management processes have functioned on a region-wide basis so that the CLECs in any of the nine states in BellSouth's region may participate.

Q. WHAT CHANGES DID THE ORIGINAL EICCP COVER?

A. The original EICCP handled the following categories of changes: software; hardware; industry standards; products and services; new or revised edits; process; regulatory; and documentation. In accordance with the process developed by the CLECs and BellSouth, the scope of the ElCCP did not include the following: Defect Change Requests (requests to correct defects in electronic interfaces); Bona Fide Requests; Production Support; and contractual agreements. Change requests of this nature were handled through other processes. For example, CLECs contacted the BellSouth “single point of contact” ("SPOC") when they discovered a defect in an electronic interface.

Q. DID THE ORIGINAL EICCP EVOLVE OVER TIME?

A. Yes. As a result of the *Bell Atlantic New York Order* and the independent third-party test in Georgia, BellSouth identified certain areas of the EICCP that needed enhancement. On January 26, 2000, during an EICCP Steering Committee meeting, BellSouth discussed enhancements of the EICCP with the CLECs. Pursuant to the EICCP, a workshop for all participating CLECs was held on February 16-17, 2000, so BellSouth and the CLECs could properly propose changes to the process. After the workshop, BellSouth distributed a draft revised Change Control Process document to the CLECs. In February and March 2000, BellSouth and the participating CLECs held follow-up conferences on issues raised during the workshop and the proposed changes.

At the workshop of February 16 –17, 2000, BellSouth proposed that the EICCP be expanded to include: BellSouth- and CLEC-initiated defect change requests, both documentation and software changes that are CLEC-affecting; BellSouth-initiated enhancements requests that are CLEC-affecting (CLEC-initiated enhancement requests are already included in the existing process); oversight of BellSouth's escalation and defect notification processes; formalized escalation and defect notification processes; as well as, definition of how the new processes will be incorporated into the existing change control structure. BellSouth also proposed renaming the EICCP to the Change Control Process ("CCP"), because the revised process encompasses change control for the electronic interfaces and manual processes. The newly revised process included the addition of monthly status update meetings that were open to all CLECs, and a formalized escalation process. BellSouth and the participating CLECs have been responsible for working together to develop the EICCP, to revise the EICCP, and to approve and revise the resulting process.

Q. HOW MANY CLECS PARTICIPATE IN THE CCP?

A. There are approximately 115 registered members with the CCP (as of May 1, 2001), consisting of 105 CLECs and 10 vendors. However, not all of them participate in any given meeting. As additional information, there are approximately 1,700 Commission- or Authority-approved CLECs in the nine-state BellSouth region, and approximately 286 are actually doing business in the local telecommunications market (as of March, 2001). In Kentucky, those numbers are approximately 154 and 82 respectively.

BellSouth has made a proactive effort to inform all CLECs region-wide about the CCP, and has encouraged their membership and active involvement. A meeting agenda is prepared and distributed prior to each meeting, a review of our records for recent months indicate an average of ten CLECs participate in the CCP meetings.

Q. WHAT STEPS DID BELLSOUTH TAKE TO OBTAIN CONSENSUS FROM THE CLECS ON THE NEW CCP?

A. BellSouth attempted to obtain consensus for the new CCP from the participating CLECs. Although the CLECs had substantial input into the design of the new CCP, and the CLECs agreed with the items in the new CCP, a few CLECs, including AT&T, wanted additional items added to the new CCP before granting their approval. BellSouth was concerned that these CLECs were attempting to game this process by withholding their consent to a plan that the other CLECs and BellSouth had agreed on, because they were aware of the importance of the CCP to the completion of the Georgia third-party test and the approval of the FCC. BellSouth was faced with the possibility that these CLECs would hold out indefinitely, which would, among other things, delay BellSouth's ability to satisfy issues raised by the third-party testing. As a result, on April 14, 2000, BellSouth notified the CLECs that the revised process would become effective on April 17, 2000, and that it would be considered an interim process ("interim CCP"). In

addition, this notice directed CLECs to the new CCP Web site, and explained the new email notification for System Outages and defects. On April 17, 2000, at a meeting of BellSouth and the Interim CCP Steering Committee (ITC^DeltaCom, WorldCom, AT&T, and Sprint), BellSouth proposed a three month trial for the interim process. BellSouth informed the Steering Committee that, at the end of the trial, BellSouth would ask the CLECs again to approve a final base-line CCP document. WorldCom and ITC Deltacom verbally agreed to this plan.

During the three month trial of the interim CCP, all participants agreed to add procedures. These changes were incorporated in the "final" CCP document. For example, the participants decided to include requests for changes to the testing process for the CLEC interfaces. AT&T has already submitted a change request of this nature (discussed below in the section on the testing environment).

Q. WHAT HAPPENED AT THE END OF THE TRIAL PERIOD OF THE INTERIM CCP?

A. The three-month trial for the interim CCP ended in July, 2000. BellSouth told the CLECs during the monthly status meeting on June 26, 2000, that a vote would be taken during the July meeting. On July 26, 2000, the participants met for their monthly status meeting. One item on the agenda was the future of the interim CCP and the interim CCP document. Because the meeting lasted three hours, which was well over its allotted time, no vote was taken. The vote was postponed until the next monthly status meeting. The vote occurred on August 23, 2000, at the regular monthly status meeting. The vote was preceded by an introduction by

the BellSouth Change Control Manager. The introduction described the joint efforts by BellSouth and the CLECs to develop the CCP and the major improvements that had been accomplished since the meeting in February, 2000. Six participants voted to approve the base-line CCP document. Three participants, including Sprint and AT&T, voted "no." One participant abstained. BellSouth did not vote, although the interim CCP entitled it to one vote. As a result the CCP document of August 23, 2000, became the baseline for the process.

Q. DID THE CLECS HAVE ADEQUATE OPPORTUNITY TO PROVIDE INPUT INTO THE CCP?

A. Absolutely. As required by the FCC in its Texas decision, the CLECs have "had substantial input in the design and continued operation of the change management process." *SWBT Texas Order*, ¶108. Indeed, in the Georgia Third-Party Test, KPMG found that BellSouth's "change management process includes procedures for allowing input from all interested parties."(MTP, at CM-1-1-4, p. VIII-A-20).

Changes to the Change Control Process

Q. HOW ARE CHANGES TO THE CCP BEING HANDLED ON A GOING-FORWARD BASIS?

A. Changes to the CCP have also been incorporated in the process. Participants use the change request form that is used for all change requests to submit changes to the CCP. The CCP allows the BellSouth Change Control Manager to make

cosmetic changes to the CCP document and then publish the document. All other change requests are discussed during monthly change review status meetings. Not long after it went into effect on August 23, 2000, BellSouth initiated a series of special meetings to discuss changes to the CCP.

Q. WHAT PROCESS CHANGES TO THE CCP HAVE BEEN ADDRESSED SINCE ITS IMPLEMENTATION?

A. On September 8, 2000, AT&T submitted a change request, CR0171, requesting that the then current CCP document (August 23, 2000) be modified to include the changes outlined in AT&T's annotated version of that CCP document. AT&T attached their annotated version of the CCP document to its change request.

The CCP formed a subteam to study the "process improvement" of the CCP. The subteam has held several meetings to discuss revising the CCP, and therefore, the CCP document as well. Among the items discussed during the meetings were:

- the revision history on Carrier Notifications related to documentation updates/upgrades;
- the process for defects/expedites;
- the BellSouth Release Management milestones (a schedule or calendar for future releases);
- coding changes;
- BellSouth's internal process for scheduling prioritized change requests;
- AT&T's suggested changes to the CCP document (provided by AT&T in an annotated version of the CCP document Version 2.0);

- a process for appealing BellSouth's release schedules;
- timeframes for providing the draft and final user requirements that are associated with releases; and
- a process for including requests for changes that are non-OBF standard.

During the meeting on January 10, 2001, CLECS agreed to vote on the proposed changes to the CCP using a written ballot, which AT&T helped to prepare. The results of the vote were announced at the regularly scheduled monthly status meeting on January 31, 2001. A new CCP document incorporating the changes was issued on February 9, 2001 as Version 2.1. To correct documentation errors in Version 2.1, Version 2.1a was issued on February 16, 2001. The CCP participants continued to discuss further proposed changes to the CCP document. Another vote on a second group of proposed changes was taken in March, and as a result, a new "baseline" CCP document was issued on March 26, 2001. The current CCP document, including an overview of the CCP's voting process, is attached as Exhibit OSS-39.

Features of the Current Change Control Process

Q. PLEASE DISCUSS THE FEATURES OF THE CURRENT CCP DOCUMENT.

A. The FCC has specified that a CCP document should be "clearly organized and readily accessible to CLECs."[22] BellSouth's CCP document (Exhibit OSS-39) meets these criteria. It describes details on the types of changes that are handled, how change requests are classified, the escalation process, the dispute resolution

[22] BellAtlantic New York Order, ¶107.

process, and the testing environment. In the Georgia Third-Party Test, KPMG found that CCP documents clearly defined change management process responsibilities. (MTP, at CM-1-1-1, p. VIII-A-15; STP, at CM 2-1-2, p. VII-A-19).

In addition to the CCP document, BellSouth provides CLECs with a CCP Web site.[23] At this site, BellSouth posts information about the processes, including documents, such as the CCP document and forms; status information, including the change control logs, submitted change requests, implemented change requests, and cancelled change requests; and meeting information, including minutes and notices.

Q. WHAT ARE THE OBJECTIVES OF THE CCP?

A. The objectives of the CCP are to:

- Support the industry guidelines that impact electronic interfaces and manual processes related to order, pre-order, maintenance, and billing as appropriate;
- Ensure continuity of business processes and systems operations;
- Establish processes for communicating and managing changes;
- Allow for mutual impact assessment and resource planning to manage and schedule changes; and
- Provide the capability to prioritize requested changes.

Q. WHAT INTERFACES ARE COVERED BY THE CCP?

[23] http://www.interconnection.bellsouth.com/markets/lec/ccp_live/index.html

A. Currently the interfaces included in-scope for CCP are LENS, TAG, EDI, TAFI, ECTA, and CSOTS. The manual processes related to order, pre-order, maintenance, and testing are also included.

Q. WHAT TYPES OF CHANGES DOES THE CURRENT CCP HANDLE?

A. For the in-scope interfaces listed in the previous answer, the CCP handles the following types of changes:

- Software
- Hardware
- Industry standards
- Products and services (that is, new services available via the in-scope interfaces)
- New or revised edits
- Process (that is, electronic interfaces and manual processes related to order, pre-order, maintenance, and testing)
- Regulatory
- Documentation (that is, business rules for electronic and manual processes related to order, pre-order, and maintenance, including user guides that support OSS Systems currently within the scope of the CCP)
- Defects

Q. ARE THERE REQUESTS OR ISSUES THAT THE CURRENT CCP DOES NOT HANDLE?

A. Yes. The CCP does not cover the following: Bona Fide or New Business Requests; production support; contractual agreements; and, collocation. Change requests of this nature will be handled through BellSouth's existing processes. BellSouth's Interconnection Account Teams for CLECs handle contractual agreement issues, Bona Fide Requests, and collocation. The CLECs' Account Teams support the coordination of test agreements. BellSouth's Customer Support Managers for CLECs or Account Teams handle issues related to production support and issue resolution. CLECs should direct questions about existing documentation to their Account Teams. If, however, the documentation needs to be changed, then a defect change request should be submitted to the CCP.

Q. PLEASE BRIEFLY DESCRIBE HOW A CHANGE PROCEEDS THROUGH THE CCP.

A. The process by which a proposed change proceeds through the CCP is detailed in the CCP document (Exhibit OSS-39). Under the CCP, all change requests are classified by type. The definitions for each type and the dates and timelines (intervals) associated with each type of change, including the distribution of documentation and business rules, are detailed in the CCP document. The following table summarizes the six types of changes accommodated by the CCP.

Type	Name
Type 1	System Outage
Type 2	Regulatory Change
Type 3	Industry Standard Change
Type 4	BellSouth-initiated Change
Type 5	CLEC-initiated Change
Type 6	CLEC-impacting Defects

Although they are not categorized specifically in the CCP documents, the six types of changes can be divided into three distinct categories. There are three separate processes that are followed for each category. The following table summarizes the categories.

Category	Type	Description
Category 1	Type 1	System totally unusable or degradation in existing feature or functionality
Category 2	Types 2- 5	Change requests for system enhancements, manual and/or business processes, can also include issues for pre-order, orders, maintenance/repair
Category 3	Type 6	CLEC impacting defect in production – system not operating as specified in baseline business requirements or published business rules, includes documentation defects

Q. WHAT IS BELLSOUTH'S NOTIFICATION POLICY?

A. BellSouth's notification policy is stated on page 25 in the CCP document (Exhibit OSS-39). Notifications for software releases are provided 30 days or more in advance of implementation date. Under the CCP, documentation changes for Business Rules are provided 30 days or more in advance of the implementation date.[24] Under the current CCP, notifications to the CLECs of documentation

[24] On November 1, 2000, BellSouth began stating whether a change was related to a system release or a documentation defect in carrier notification letters. A few carrier notification letters posted after November

updates (non-system changes) are posted five business days in advance of the documentation posting date.[25] In the Georgia Test, KPMG found that BellSouth "showed significant improvement in BellSouth's record Web posting" of CLEC notification during 2000. (MTP, at CM 1-1-6, p. VII-A-21; STP, at CM 2-1-1, p. VII-A-17, 18 (OSS99 "provided reasonable intervals for considering and notifying customers about proposed changes.")).

Q. ARE BELLSOUTH'S NOTIFICATION POLICIES CURRENTLY UNDER DISCUSSION IN THE CCP?

A. Yes. As part of the CCP "process improvement," BellSouth and the CLECs have continued to discuss the deadlines for the distribution of requirements and documentation related to releases of the interfaces. Within the context of proposing a comprehensive release management program, BellSouth has included proposed schedules for industry releases (new industry standard(s) that may require the CLECs to make changes to their interfaces), major releases (changes that may require CLECs to make changes to their interfaces), minor releases (changes that may not require CLECs to make changes to their interfaces), and maintenance releases (scheduled maintenance of a BellSouth system). For example, upon reaching the 9th week after a change request for a new industry standard was opened and accepted, BellSouth would distribute draft user requirements. BellSouth would then distribute the final user requirements in the

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1, 2000, may not have contained this information because BellSouth was preparing the letters close to, but before November 1.

[25]All notification letters for 1997-2001 may be reviewed at the Interconnection Web site. The address for the CLEC Notification Letters posted in 2001 is http://www.interconnection.bellsouth.com/notifications/carrier/carrier_lett_01.html. The address for the archive for 1997-2000, is http://www.interconnection.bellsouth.com/notifications/carrier/carrier_lett_archives.html.

14th week. Upon reaching the 41st week (four weeks before the testing of the release by CLECs would begin and eight weeks before putting the release into production), BellSouth would publish updates to the Business Rules. Next, at the 45th week, the release would be loaded in the test bed (discussed below) for CLEC testing and the carrier notification letter regarding the production date would be distributed to the CLECs. The proposed schedules for major and minor releases are similar, although they have shorter timeframes between the submission of the change request and the release into production.[26]

Q. WHAT OTHER TYPES OF NOTIFICATION DOES BELLSOUTH PROVIDE TO CLECS?

A. BellSouth posts Type 1 System Outages and Type 6 defect notices at the CCP Web site, in addition to the items mentioned in the description of the Web site above.[27] On May 1, 2000, BellSouth also began using a "list manager" to send CCP documentation to CLECs by e-mail. After a CLEC's representative subscribes to the list, the system automatically will send an e-mail containing correspondence related to the CCP to that representative. The e-mail correspondence includes notification and acknowledgement of change requests, notification of System Outages, and notification of defects.

Q. IS THE FORMAL NOTIFICATION PROCESS A CLEC'S FIRST NOTICE OF A SOFTWARE CHANGE?

[26] There are no user requirements for maintenance releases.
[27] Type 1 System Outages are posted at http://www.interconnection.bellsouth.com/markets/lec/ccp_live/ccp_so.html. Type 6 defect notices are posted at http://www.interconnection.bellsouth.com/markets/lec/ccp/ccp_t6dn.html.

A. No, not at all. Long before CLECs are formally notified about changes to the interfaces, the potential changes are first discussed with the participating CLECs during the CCP meetings. Once a change has been approved by the CCP, BellSouth provides the requirements and the technical references to the CLECs. Face-to-face meetings, conference calls, or both, are held by BellSouth and the CLECs to discuss the programming and coding details for the changes. A change to an electronic interface is usually "packaged" with other changes or enhancements to be implemented together in a major or minor release. Minor releases generally require little or no programming on the part of the CLECs, and the changes are generally performed on BellSouth's side of the interface. Major releases generally require programming by both the CLECs and BellSouth, and are larger in scope.

Q. WHO IS QUALIFIED TO PROPOSE CHANGES TO THE CCP?

A. CLECs registered to participate in the CCP may propose changes to the electronic interfaces. A CLEC must either use an interface or have filed a “letter of intent” to use an interface in order to submit change requests, and to vote and rank potential change(s) for that particular interface. The specific rules for voting are detailed in the CCP document.

Q. HOW IS INFORMATION TRACKED IN THE CCP?

A. BellSouth tracks change information using the Change Control Log, which was recently expanded to include fields for “target date” and “actual date.”[28] The

[28] http://www.interconnection.bellsouth.com/markets/lec/ccp_live/ccp_ccs_ccl.html

"target date" reflects the date based on the cycle time for each milestone that the request must meet in the CCP. The "actual date" reflects the date when BellSouth completed the milestone.

Q. PLEASE DESCRIBE THE NOTIFICATION PROCESS FOR DEFECTS.

A. The CCP also defines a notification process for defects.A defect is any non-Type 1 (System Outage) change that occurs when an interface is not working according to BellSouth's baseline business user requirements or Business Rules, and impacts a CLEC's ability to exchange transactions with BellSouth. This includes defects in the documentation. BellSouth or CLECs may start this defect process by submitting a Type 6 change request. A Type 6 change request is submitted with one of three impact levels. "High Impact" should be used whenever the failure causes impairment to critical system functions and no electronic workaround solution exits. "Medium Impact" is used whenever the failure causes impairment of critical system functions, and a workaround exists. "Low Impact" means that the failure causes inconvenience or annoyance.

During the internal validation step for a Type 6 defect, the defect is validated and a clarification notice is sent to the CLEC, if required. The defect notification will be provided to the CLEC via email and web posting. For High Impact defects, a status is provided to the originator via email within 24 hours.
In the Georgia Test, KPMG reviewed criteria for the prioritization system and severity coding and found them to be satisfactory. (MTP, at CM-1-1-8, p. VIII-A-22).

Q. WHAT IS BELLSOUTH'S PROCESS FOR THE HANDLING OF EXPEDITED FEATURES?

A. An expedited feature is worked as the result of the inability for a CLEC to process certain types of LSRs based on the existing functionality of BellSouth's OSS that are in the scope of CCP. The change request for an expedite must provide details of the business impact and will fall into one of two categories:

- A submitted defect that has been re-classified (from a Type 6 request) as a feature that the CLEC/BellSouth has determined should be expedited due to impact; or
- An ordering enhancement to an existing interface that the CLEC/BellSouth has determined should be expedited due to impact.

Q. DOES THE CCP HAVE A DISPUTE RESOLUTION MECHANISM?

A. Yes. The CCP includes "a procedure for the timely resolution of change management disputes." *SWBT Texas Order*, ¶ 108. The escalation and dispute processes are described in the CCP document. The ability to escalate is left to the discretion of the CLEC, and is determined by the severity of the missed or unaccepted response or resolution. In the case of change requests, escalations should only occur after normal change control procedures have been completed. There are three levels of escalation, depending on how the issue has been characterized (Types 1-6, as described above). Escalations also can involve issues related to the CCP itself. The levels of escalation, the turnaround times,

and the contacts at BellSouth are described in detail in the CCP document on pages 49-53 of Exhibit OSS-39.

In the event that an issue is not resolved through the escalation process, including (1) escalation within each company to the person with ultimate authority for change control operations, and (2) the services of a joint investigative team, when appropriate, comprised of representatives from BellSouth and the affected CLECs, then resolution of the dispute shall be accomplished by the following means:

- Either BellSouth or any CLEC affected by the dispute may request mediation through the State Public Service Commission, if available. If mediation is requested, the parties shall participate in good faith. If the mediation results in the resolution of the dispute, that resolution shall apply to all CLECs affected by the dispute.
- Without the necessity for prior mediation, either BellSouth or any CLEC affected by the dispute may file a formal complaint with the appropriate state regulatory agency, requesting resolution of the issue.

The Introduction of New Interfaces and the Retirement of Old Interfaces

Q. DOES THE CCP INCLUDE INTRODUCTION OF NEW INTERFACES?

A. Yes. The CCP incorporates the *introduction* to the CLECs of new electronic interfaces. This process is described on page 46 of the CCP document. The procedure calls for BellSouth to introduce a proposed interface to CLECs during

one of the monthly status meetings of the CCP. During the meeting, BellSouth will provide a 30-45 minute presentation about the proposed interface. If more time is needed, BellSouth will schedule a separate meeting. The objective of the presentation will be to identify interested CLECs and to obtain input from the CLECs. When the new interface is deployed, it will be added to the scope of the CCP, based on use by the CLECs, and any requested changes to it will be managed by the CCP.

Q. DOES THE CCP INCLUDE THE DEVELOPMENT OF NEW INTERFACES?

A. No. The *development* of new electronic interfaces does not come under the CCP because BellSouth must have the flexibility to develop interfaces to meet industry standards and guidelines, and regulatory requirements. The process allows and encourages the CLECs' input, but to ensure efficient and timely deployment of new interfaces, BellSouth retains the responsibility for the development and deployment of them. Thus, the CCP provides BellSouth and CLECs with a meaningful opportunity to discuss new interfaces.

Q. WHAT IS BELLSOUTH'S POLICY ON THE RETIREMENT OF OLD INTERFACES?

A. BellSouth will only retire interfaces that CLECs do not use, or useing very little, and for which BellSouth has a replacement that provides equal or better functionality than the retiring interface. Information about the retirement of interfaces is contained in the CCP document (page 46 of Exhibit OSS-39). When

BellSouth decides to retire an active interface, it will notify CLECs through the CCP and post a carrier notification letter six months before the retirement date.[29] BellSouth will ensure that CLECs are able to transition to another interface before the retirement, and that the transition does not negatively impact a CLEC's business.

BellSouth's "Versioning" Policy

Q. PLEASE DESCRIBE BELLSOUTH'S VERSIONING POLICY FOR ELECTRONIC INTERFACES.

A. BellSouth's "versioning" policy enables CLECs to transition to newer versions of the EDI or TAG interfaces on a schedule that is convenient for them. The "versioning" policy is contained in Appendix D of the CCP document (Exhibit OSS-39).

Since August 1998, BellSouth's policy, which is stated in its Statement of Generally Available Terms ("SGAT") and standard interconnection agreement, has been to support two industry standard versions of the applicable electronic interfaces at all times. Currently, the EDI and TAG electronic interfaces are maintained this way, because they are the interfaces that require the CLEC to "build" its side of the interface to use the new standard. Periodically, one of the organizations for industry standards will issue a new or updated set of standards. After submitting the new standards to the CCP to determine how and when they

[29] The CCP gives BellSouth the discretion to provide shorter notification (30-60 days) for inactive interfaces or those that are used very little.

will be implemented, BellSouth will introduce a new version of that interface based on the new standards. BellSouth will keep the "old" version of the interface functioning based on the old industry standards for those CLECs that have not had enough time to build their side of the interface to the new industry standards. BellSouth gives CLECs six (6) months advance notice of the implementation of new versions to the electronic interfaces based on new industry standards.

The two industry standard versions of an interface are maintained when BellSouth is implementing an entirely new version of an interface based on new industry standards, not when BellSouth is simply enhancing an existing interface (except the fixing of defects, if any). When a new industry standard for the interface is issued, the most recent prior industry standard version of the interface will be frozen - no changes will be made to the old version of the interface. BellSouth will support both the new industry standard version and the old industry standard version until the next set of industry standards is issued. Then, BellSouth will support the two most recent industry standard versions of the interface. For example, in March 1998, BellSouth released a new industry standard version of EDI based on TCIF version 7.0. Between March 1998 and January 2000, BellSouth implemented a series of major releases (4.0 and 5.0) and a series of “point releases” (4.1, 4.2, etc. and 5.1, 5.2, etc.). The final “point release” of EDI was Release 5.8. In January 2000, BellSouth implemented Release 6.0 of EDI (OSS99) based on TCIF 9.0. When this occurred, BellSouth began maintaining Release 5.8 alongside of Release 6.0 of EDI.

Whenever BellSouth retires a *version* of these interfaces, BellSouth will notify the CLECs 120 days in advance. A CLEC may seek an extension through the CCP by explaining how the retirement date affects its business. This policy is stated on pages 46–47 of the CCP document (Exhibit OSS-39).

Q. IS LENS COVERED BY BELLSOUTH'S VERSIONING POLICY?

A. No. Because CLECs do not have to do any programming to use LENS, LENS is not covered under the versioning policy. BellSouth nevertheless attempts to make the transition to a new major release as easy as possible for the CLECs using LENS.

BellSouth's Original Testing Environment for CLECs

Q. DESCRIBE BELLSOUTH'S CURRENT TESTING ENVIRONMENT FOR CLECS.

A. BellSouth provides CLECs with an open and stable testing environment for the machine-to-machine EDI and TAG interfaces. The testing environment is discussed on page 56 of the CCP document (Exhibit OSS-39). Three CLECs used the testing environment in 1999. As of the end of December 2000, 20 CLECs have used it to test EDI. As of December 2000, 27 CLECs have used it to test TAG. In the Georgia Test, KPMG found that in connection with OSS99, BellSouth satisfactorily provided functional testing environments to CLECs for all supported interfaces. (STP, at CM-2-1-6, p. VII-A-22).

Before making the release of an interface available to CLECs, BellSouth completes internal testing of the release using the same testing environment that the CLECs will use.

Q. DOES BELLSOUTH OFFER BETA TESTING TO CLECS?

A. Yes. Beta testing is offered to the CLECs that are interested in assisting BellSouth in validating a Telecommunications Industry Forum ("TCIF") change to the affected interfaces. The CLEC submits its requests to participate to its BellSouth Account Team, and negotiates the parameters with the Carrier Testing Group. BellSouth opens the test environment for beta testing for "major releases," such as Release 6.0 (a/k/a., OSS99). If a CLEC is interested in beta testing, it may sign up for testing with the Carrier Testing Group. CLECs test on a first come, first served basis. In the Georgia Test, KPMG found in connection with OSS99 that "carrier-to carrier test environments were stable and segregated from BellSouth production and development environments." (STP, at CM 2-1-7, p. VII-A-24).

Q. DOES BELLSOUTH OFFER NEW CARRIER TESTING?

A. Yes. New carrier testing is offered to CLECs that are shifting from a manual to an electronic environment. BellSouth also offers testing to CLECs that are changing from one OBF version of EDI or TAG to another (for example, from Release 5.8 (TCIF 7.0) to Release 6.0 (TCIF 9.0) of EDI). New carrier testing is

available to all CLECs and is scheduled with the BellSouth Account Team and the Carrier Testing Group.

Q. WHO PROVIDES THE TEST SCENARIOS IN BELLSOUTH'S TESTING ENVIRONMENT?

A. BellSouth provides the test scenarios. However, when BellSouth's scenarios do not match a CLEC's business plan, the CLEC may provide the scenarios. After the CLEC has submitted information about the scenarios, BellSouth will supply the data to be used in the test scenarios. Although BellSouth does not monitor the CLECs' test LSRs as they flow through the ordering process, BellSouth can see what the CLECs input and the final results.

Q. PLEASE DESCRIBE THE TYPES OF TESTING APPLICABLE TO THE DIFFERENT ELECTRONIC INTERFACES.

A. Three types of testing are used for CLECs' EDI interfaces. First, CLECs perform connectivity testing to verify that CLECs and BellSouth can send and receive transactions using EDI. Second, CLECs perform syntax testing to confirm CLEC compliance with ANSI ASCX12 and TCIF standards. Third, CLECs perform end-to-end testing (ETET) to establish that the data content provided by the CLEC is meaningful to the LEO system. Service Readiness Testing (SRT) is an optional fourth test for EDI interfaces. SRT occurs in BellSouth's production environment.

TAG is tested in three stages. First, CLECs perform application testing using an application simulator. Second, CLECs perform validity testing in BellSouth's test environment. SRT is an optional third test for TAG.

RoboTAG™ is not one of the interfaces tested in the testing environment. BellSouth offers user acceptance testing (UAT) for RoboTAG™. UAT allows the CLECs to submit a defined number of LSRs into production that are tracked through the BellSouth systems and validated.

BellSouth provides standard test agreements for EDI, TAG, and RoboTAG™ during the testing negotiations with CLECs. These test agreements describe the types of data to be exchange, the number of transactions, and the responsibilities of each party during the test. The agreements can be modified based on the needs of a specific CLEC at the time of negotiations.

Testing exhibits	**Exhibit numbers**
EDI Testing Agreement	OSS-57
TAG Testing Agreement	OSS-58
RoboTAG™ Testing Agreement	OSS-59
CLEC Testing Plan and Guidelines (for EDI)	OSS-60
Testing Plan and Guidelines for TAG and CLECs	OSS-61

The CLEC Application Verification Environment ("CAVE")

Q. DOES BELLSOUTH HAVE A NEW TESTING ENVIRONMENT FOR CLECS?

A. Yes. In addition to the testing environment described above, BellSouth has introduced a new test environment called the CLEC Application Verification Environment ("CAVE"). BellSouth announced the general availability of CAVE to the CLECs on April 23, 2001.CAVE mirrors BellSouth's production environment to ensure that new hardware and software releases facilitate successful order flow before the new releases are introduced to the production environment. Testing focuses on system functionality. The CAVE environment is comprised of the CLEC interfaces, TAG and EDI , and LEO, LESOG, and the LNP Gateway that mirror the same interfaces and systems in production. In order to simulate the production environment, CAVE also accesses BellSouth's production legacy systems, including the databases for address validation, telephone number selection, service order generation, and product and services selection. Because of this access, CLECs will receive firm order confirmations (FOCs), reject notifications, completion notifications (simulated), clarifications, jeopardy notifications, and functional acknowledgements during the testing of ordering functionality.

Q. HAS BELLSOUTH BETA TESTED CAVE WITH A THIRD-PARTY VENDOR FOR THE CLECS?

A. BellSouth began beta testing with a vendor[30] on April 7, 2001. The vendor successfully completed application connectivity testing on April 9, 2001, and began sending test LSRs on April 10, 2001. The test LSRs included TAG requests for LNP. In addition, BellSouth and a CLEC that uses EDI have agreed

[30] Some CLECs have contracted third parties (vendors) to build their machine-to-machine interfaces. These vendors, therefore, will test the interfaces with CAVE on behalf of the CLECs that contracted them. The vendor that is beta testing CAVE with BellSouth provides interfaces for five CLECs.

to beta test CAVE. Because that CLEC is currently updating its EDI interface, it does not expect to start testing CAVE until mid-May, 2001.

CAVE will allow testing of all major releases. BellSouth will determine, based on the functional changes it will make, whether a minor release will be available for testing. BellSouth will announce the testing of minor releases and the timeframes for testing through the CCP's notification process.

BellSouth has implemented guidelines to support the CLEC's use of CAVE. The BellSouth Electronic Interface Testing Guidelines Document, which is attached as Exhibit OSS-69, contains the criteria and procedures for testing the EDI and TAG interfaces with CAVE.

Q. PLEASE DESCRIBE THE DEVELOPMENT OF CAVE.

A. As I mentioned earlier, the scope of the CCP also includes changes to the testing process for the CLEC interfaces. In March 2000, AT&T submitted a change request (CR EDI1030300 001) to the CCP to modify the existing testing environment from one that operated in production to an environment that would mirror production. As a result, BellSouth began investigating and pricing a wholly separate, non-production testing environment. On June 28, 2000, the participants at the CCP's prioritization meeting considered AT&T's change request and ranked it as the number one item for ordering that they would like to have in a future release. Through the CCP, the CLECs and BellSouth have collaborated to establish the new testing environment. Because the development

of CAVE fell under the CCP, any recommendations, complaints, or questions that the CLECs might have about CAVE during its development would have been submitted through the CCP. The escalation process of the CCP also was available to the CLECs if they had had any disputes with BellSouth responses.

The testing environment was discussed frequently during the regularly scheduled monthly status meetings of the CCP. The CCP also sponsored meetings on October 31, 2000, and January 17 and 18, 2001, to discuss CAVE and to review the user requirements.

Q. IF A CLEC WISHES TO USE CAVE, WHAT STEPS MUST IT FOLLOW?

A. In order to participate in CAVE Testing, the CLEC must sign the BellSouth Electronic Interface Test Agreement (test agreement), which is attached as Exhibit OSS-70. The test agreement outlines the guidelines and assistance that BellSouth will provide to the CLEC during the test phase. In addition, the CLEC must have profiles to use CAVE. BellSouth will create and assign a CAVE profile to each participating CLEC. The CAVE profile is a test account that contains address, telephone number and other billing information.

The CLEC must schedule testing with BellSouth through the CCP. The start and end dates are incorporated into the test agreement.

The CLEC must also provide BellSouth with a list of pre-ordering and ordering scenarios that the CLEC wishes to test in the CAVE environment. CAVE will

support all valid requisition and activity combinations that are identified in the BellSouth Business Rules for Local Ordering[31] ("BBR") for the application release that the CLEC is testing. Using the CLEC's scenarios, BellSouth will prepare the test deck and provide the test deck to CLECs before the commencement of testing.

Q. HOW MANY CLECS MAY TEST SIMULTANEOUSLY?

A. CAVE has the capacity to allow a maximum of ten CLECs to simultaneously access the CLEC test bed. The CLECs will be allocated slots across all applications.

Q. HOW LONG WILL CLECS BE ABLE TO TEST EACH NEW RELEASE IN CAVE?

A. CAVE provides a 4-week window for testing prior to all major releases, and a 4-week window following the production release.

Q. PLEASE DESCRIBE THE CAVE HELP DESK.

A. The CAVE Help Desk is the CLECs' primary interface for testing with CAVE. The CAVE Help Desk is available from 8:00 a.m. to 5:00 p.m., Eastern time, Monday through Friday, excluding BellSouth holidays. Although the CAVE Help Desk is not available outside of the normal hours of operation, CLECs may

[31] The BBR is described above in the "Documentation" section and is attached as Exhibit OSS-9.

use CAVE 24 hours a day. The CAVE Help Desk is responsible for the following functions:

- Test schedules
- Application connectivity testing
- EDI/TAG user IDs and passwords
- Release management
- Telephone-based technical support
- Defect management

Q. ARE LENS AND ROBOTAG™ INCLUDED IN CAVE?

A. No. CAVE tests the application of new software releases for EDI and TAG, which the CLECs must program on their sides of the interfaces. BellSouth performs all of the programming for LENS and RoboTAG™. LENS and RoboTAG™, therefore, were not included in the new test environment.

Change Management in Practice

Q. PLEASE DESCRIBE THE COMMERCIAL USE OF THE CCP.

A. The first changes to the EDI and TAG interfaces under the EICCP occurred on November 14, 1998 with Release 4.0 and continued with Release 4.1 on December 19, 1998 and Release 4.2 on February 27, 1999. The addition of due date calculation capability to LENS (Release 4.0), the addition of pending order status notification to EDI, including service jeopardies (Release 4.1), the addition

of Presubscribed Interexchange Carrier (PIC) search capability to LENS (Release 4.1), the addition of automatic telephone number assignment to LENS (Release 4.2), the addition of change order capability to LENS (Release 4.2), and the addition of fields to EDI and LENS for partial migrations (released on March 28, 1999) were part of the EICCP. In July 1998, the CLECs participating in the EICCP began determining which functionality and features from the Telecommunications Industry Forum ("TCIF") versions 8.0 and 9.0 of the Ordering and Billing Forum ("OBF") standards would be included in the next major release (sometimes called "OSS99") of EDI (EDI Release 6.0) and LENS (LENS Release 6.0 or "LENS99"). The first major release under the interim CCP was Release 7.0 on July 29, 2000.

Attached as Exhibit OSS-40 is a list of the change requests that have been processed through BellSouth's change management system, starting with the EICCP and continuing to the present under the CCP. As of May 4, 2001, 85 CLEC initiated change requests (Type 5 change requests) have either been implemented or are in progress. BellSouth has either implemented, or is in the process of implementing, 48 BellSouth change requests (Type 4 change requests).

In addition to EDI and LENS, the EICCP began handling changes to the TAG interface on August 1, 1999. Although changes to TAG were not handled by the EICCP at the time, on March 28, 1999, BellSouth added the fields for partial migrations to TAG at the same time it added them to EDI and LENS (see above). All the changes and enhancements that the EICCP selected for Release 6.0 for EDI and LENS were also implemented in Releases 3.0 and 3.1 of TAG at the

same time. New interfaces did not become part of the old EICCP until they had been built and used in production by CLECs. This remains the case under the new CCP. This gives CLECs the time to accustom themselves to the new interface and its current functionality before requesting changes to it.

Performance Measurements for Change Management

Q. HAS BELLSOUTH IMPLEMENTED PERFORMANCE MEASUREMENTS TO ALLOW THE COMMISSION TO ASSESS BELLSOUTH'S PERFORMANCE IN THIS AREA?

A. Yes. As will be further described in the testimony of Alphonso Varner, BellSouth has implemented performance measurements for change management.

PRE-ORDERING

Q. HOW DOES THE FCC DEFINE "PRE-ORDERING"?

A. The FCC's Interconnection Rules (at §51.5) define pre-ordering and ordering collectively as including "the exchange of information between telecommunications carriers about current or proposed customer products and services, or unbundled network elements, or some combination thereof." As the FCC's definition implies, there is no strict delineation between pre-ordering and ordering, as many pre-ordering activities generally occur in the context of negotiating a service request. Nevertheless, pre-ordering typically consists of obtaining access to the following information and functions that a CLEC or

BellSouth representative will need while negotiating an order with an end-user customer:

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

In the Georgia Test, KPMG tested all of these pre-ordering functions with the exception of loop makeup. KPMG found all of the test criteria satisfied. (MTP, at IV-A-10 - IV-A-21). In addition, KPMG conducted functional testing on manual loop makeup and found the test criteria satisfied. (STP, at PO&P 12-2-2; 12-3-1; 12-3-2; 12-4-1, p. IV-B-8 - IV-B-13).

Q. DOES BELLSOUTH PROVIDE CLECS WITH NONDISCRIMINATORY ACCESS TO THE SAME PRE-ORDERING OSS USED BY BELLSOUTH'S RETAIL REPRESENTATIVES?

A. Yes. BellSouth provides CLECs with real-time nondiscriminatory access to the same pre-ordering OSS used by BellSouth's retail representatives through the industry-standard, machine-to-machine TAG pre-ordering interface. TAG allows the CLEC to enter a pre-ordering transaction interactively, using prompts and screen displays. The interface converts the CLEC's inputs into support system commands and database queries to obtain the information from the necessary BellSouth OSS, and to return that information to the CLEC on a real-time basis.

For each function, TAG accesses exactly the same data as BellSouth's retail marketing and sales support systems. RoboTAG™ has the same functionality as TAG. Unless otherwise noted, all future references to TAG incorporate RoboTAG™.

Q. DOES BELLSOUTH PROVIDE CLECS WITH A HUMAN-TO-MACHINE PRE-ORDERING INTERFACE?

A. Yes. BellSouth offers the human-to-machine LENS interface for pre-ordering to CLECs that have chosen not to integrate data obtained from BellSouth with their own internal OSS. LENS gives CLECs the same real-time access to pre-ordering OSS as TAG does for CLECs and as BellSouth's systems do for BellSouth. As discussed earlier, LENS now uses TAG's architecture and gateway. Because LENS is a graphical user interface ("GUI") to TAG, it has essentially the same pre-ordering functionality for resale services and UNEs as TAG does.[32]

Q. ARE CLECS USING BELLSOUTH'S PRE-ORDERING INTERFACES?

A. Yes. CLECs submitted 688,930 region-wide pre-ordering transactions in January, 2001, 933,308 region-wide pre-ordering transactions in February, 2001, and 1,140,909 region-wide pre-ordering transactions in March 2001 via LENS and TAG.

[32] Using TAG, CLECs can reserve telephone numbers up to 365 days, and LENS users can reserve telephone numbers up to 30 days. The only other differences are demonstrated in the charts herein entitled "Resale Services and UNEs that Flow-Through EDI, TAG, LENS," and "Resale Services and UNE Transactions electronically, manually handled."

Exhibit OSS-41 demonstrates how TAG pre-ordering integrated with EDI ordering and with TAG ordering interact with the pre-ordering and ordering OSS.

Address Validation

Q. DESCRIBE THE ADDRESS VALIDATION PROCESS.

A. In order to validate the address, the CLEC service representative, using TAG or LENS, sends an inquiry to, and receives a response from, the Regional Street Address Guide (RSAG) database. RSAG returns address information without regard to whether the request originated from a CLEC or from BellSouth.

BellSouth provides the end user's address in separate fields during the address validation process in pre-ordering. During address validation, TAG accesses the Regional Street Address Guide ("RSAG") database. The resulting validated address is separated, or parsed, into fields for "675" and "Peachtree" and "Street", rather than "675 Peachtree Street". The fielded address follows the format required by the LSR. The CLEC can populate (or have its integrated pre-ordering and ordering interfaces automatically populate) this information directly in the LSR, and in its own internal OSS, if it chooses.

If the CLEC has integrated TAG pre-ordering with TAG or EDI ordering, the address obtained from RSAG will be automatically populated on the order forms contained in TAG or EDI ordering.

BellSouth has one regional master address database only, the RSAG database. When processing an order, BellSouth's OSS uses RSAG to validate the address on the order. There is no possibility of orders falling out or being "disassociated" because of "address mismatches."

Telephone Number Selection

Q. DESCRIBE THE TELEPHONE NUMBER SELECTION PROCESS.

A. In order to select a telephone number, the CLEC service representative, using TAG or LENS, sends an inquiry to, and receives a response from, the Application for Telephone Number Load Administration and Selection (ATLAS) database. That system provides telephone number information without regard to whether the request originates from a CLEC or from BellSouth.

CLECs may reserve up to 25 numbers in a single session via TAG. TAG allows CLECs to reserve telephone numbers without associating them with an LSR. BellSouth service representatives may reserve up to 25 telephone numbers with RNS and ROS, but those numbers must be associated with a service request.

Using TAG, CLECs can select special telephone numbers, such as contiguous numbers, vanity numbers, and easy-to-remember numbers, just as BellSouth retail does. All telephone number inventory management functions are done by ATLAS, whether the telephone numbers are selected by BellSouth or a CLEC.

Availability of Switch-Based Features and Services

Q. CAN CLECS OBTAIN INFORMATION ON THE AVAILABILITY OF SWITCH-BASED FEATURES AND SERVICES?

A. Yes. In order to obtain information on the availability of switch-based features and services for the end user's location (central office), the CLEC service representative, using TAG or LENS, sends an inquiry to, and receives a response from, the BellSouth OSS containing switch-based features and services information. The OSS are the Product/Services Inventory Management System (P/SIMS) and the Central Office Features File Interface (COFFI) system. P/SIMS contains feature availability information based on software and hardware capabilities of the central office switches. . COFFI provides information on services or features and carrier data, including all tariffed services..

Obtaining Due Date Information for Installation of Services

Q. HOW DO CLECS OBTAIN DUE DATE CALCULATIONS?

A. CLEC's obtain due date calculations in response to a pre-order or a firm order request submitted by the CLEC service representative through LENS or TAG. During 2000 through the first quarter of 2001, BellSouth added due date calculation to TAG. LENS uses TAG's due date calculation functionality. The CLEC representative initiates a due date calculation request by populating the required fields in LENS or TAG during pre-ordering or firm order. The required fields are the request type, service type, activity type, and desired due date. TAG sends the due date calculation request to the Distributed Support Application

("DSAP"). DSAP responds with a due date calculation based upon established timelines governing the specific central office serving the end user customer's telephone number.

CLECs may also request an appointment availability calendar while performing either a pre-order or firm order request. The appointment availability calendar provides CLECs with the days of the week that are open for installation for that central office, and which, if any, are closed; the appointment intervals currently offered by BellSouth for each type of service that requires field work; and the upcoming dates that have been restricted and the reason for the restriction.

Q. HOW ARE ORDER INTERVALS DETERMINED?

A. For orders, intervals are determined by standard "business rules" that have been provided to CLECs through industry letters and the BellSouth Products and Services Interval Guide ("Interval Guide"), which contains intervals for resale services, complex services, and UNEs, and is attached as Exhibit OSS-42. Standard intervals apply, for example, when an existing customer is switching from BellSouth to a CLEC, when the customer orders a new service where facilities are already connected through to the customer's premises, or when a customer requests changes such as adding or changing features to existing service. In these instances, CLECs do not need to obtain due dates, but should follow the standard intervals in the Interval Guide.

The intervals in the Interval Guide are the same intervals used for BellSouth retail customers, except those for UNEs, which BellSouth does not use in its retail operations.

Q. DOES BELLSOUTH GUARANTEE OR RESERVE DUE DATES FOR CLECS OR FOR ITS RETAIL UNITS?

A. No due date is ever “guaranteed” or “reserved” for CLECs or for BellSouth's retail units. BellSouth uses its best efforts to meet the due dates. Actual fulfillment of due dates can be affected by many things, including the availability of facilities, workforce, and weather. This is true for CLEC services, just as it is for BellSouth retail services.

Customer Service Record Information

Q. DESCRIBE THE MEANS BY WHICH CLECS OBTAIN CUSTOMER SERVICE RECORDS.

A. To obtain customer service records (CSRs), CLEC service representatives using TAG access BOCRIS. BOCRIS, which stands for Business Office Customer Records Information System, is a front-end presentation manager which presents customer service record information from CRIS (Customer Record Information System).

CSRs contain Customer Proprietary Network Information ("CPNI") and information that is proprietary to BellSouth. Access to credit information and other customer proprietary restricted data is controlled by each state's public service commission, Section 222 of the 1996 Act, and the FCC. The chart below lists the information available on the CSR.

- Telephone Number or other Account identification
- Listed Name
- Listed Address
- Directory Listing Information
- Directory Delivery Information
- Billing Name
- Billing Address
- Service Address
- Product and Service Information
- PIC
- LPIC
- BellSouth's retail rates
- Credit History for Alabama and Florida
- Local Service Itemization (LSI)

TAG provides CLECs with on-line access to view and print CSR information in substantially the same time and manner as BellSouth service representatives can view and print this information for BellSouth's own retail customers. Using this capability, the CLEC can obtain account information on-line for customers served by resale or by UNEs.

CSRs for CLECs and BellSouth are updated in the same time and manner - usually 24 hours after an order has been completed.

Q. DO CLECS HAVE THE ABILITY TO PARSE INFORMATION ON THE CSR?

A. Yes. BellSouth provides CLECs the ability to parse information on the CSR, using the integrateable machine-to-machine TAG pre-ordering interface. "To parse" is to break down the information contained in the CSR into certain fields from a stream of data received from BellSouth. The TAG gateway transmits the CSR information as a stream of data from BOCRIS, which a CLEC can parse to the same line level using the same unique section identifiers and delimiters that BellSouth does for itself. For example, BellSouth retains the customer's listed name as a complete field - my listed name is "Pate, Ronald M." CLECs have the option to parse CSR information beyond that level. For example, CLECs may want to parse "Pate, Ronald M." into three separate fields: last name ("Pate"), first name ("Ronald"), and middle initial ("M."). This level of parsing could be programmed by the CLECs on their side of the interface. The information for parsing CSRs is contained in the pre-ordering Business Rules for CLECs.[33] Thus, TAG allows CLECs to parse CSRs in the same way that BellSouth parses CSRs. Exhibit OSS-44 shows CSR data as they are received by the CLEC, and Exhibit OSS-43 shows CSR data as they are parsed by RoboTAG™.[34]

Q. WHAT HAS THE FCC SAID ON PARSING?

[33] See Exhibits OSS-6 through OSS-9.
[34] BellSouth uses RoboTAG™ to demonstrate TAG.

A. The FCC stated in paragraph 137 of the *Bell Atlantic New York Order* that "the BOC must enable competing carriers to transfer pre-ordering information electronically to the BOC's ordering interface or to the carriers' own back office systems, which may require "parsing" pre-ordering information into identifiable fields." In footnote 413 of the Texas Order, the FCC confirmed that this statement did not require BOCs' to perform parsing on their side of the interface. BellSouth goes beyond what SBC does by providing a fully-parsed address through RSAG.[35] BellSouth, as I described above in the section on address validation, provides CLECs with the information that enables CLECs to parse data to submit LSRs through the ordering interfaces, allows them to parse data into fields for purposes other than creating LSRs, and allows them to integrate the data into their own internal OSS in a nondiscriminatory manner.

Q. IS PARSING BEING CONSIDERED IN THE CCP?

A. Yes. As part of the Change Control Process, BellSouth is currently working with a sub-team that includes representatives from BellSouth and the CLECs in order to deliver further parsing of this information. The sub-team began meeting in October 2000 to develop the requirements and have continued to meet in 2001. The implementation of parsing is planned for the fourth quarter of 2001. In addition, BellSouth has developed a "CSR Job Aid" (Exhibit OSS-62) and a "Pre-Order to Firm Order Mapping Matrix" (Exhibit OSS-63). The CCP distributed these documents, in draft form, on February 19, 2001. The final versions were posted on the Interconnection Website on March 30, 2001.

[35]"… SWBT chose to implement the Concatenated Address Information field in DataGate and in the CSR function of EDI/CORBA. This method is also in accordance with industry standards and reflects the way SWBT provides address information to its retail operations." Ham Supplemental Testimony ¶ 17

Q. PLEASE SUMMARIZE YOUR TESTIMONY ON PRE-ORDERING.

A. In summary, BellSouth provides CLECs with CSR data that is parsed to the same extent as it is received by BellSouth's own interfaces. As I stated earlier, BellSouth has knowledge that 6 CLECs have integrated the TAG pre-ordering interface with the EDI interface and 43 CLECs have integrated TAG pre-ordering with TAG ordering. As I described above in the section on address validation, when a CLEC has integrated its TAG pre-ordering with TAG ordering or EDI ordering, the parsed address information obtained from RSAG will be seamlessly transferred from the pre-ordering to the ordering stage. BellSouth has enabled CLECs to transfer pre-ordering information electronically to the ordering interface, or to their back office systems as required by the FCC's New York and Texas Orders.

Loop Makeup Information

Q. WHAT HAS THE FCC HELD WITH RESPECT TO LOOP MAKEUP INFORMATION?

A. The FCC's Interconnection Rules (at §51.5) define pre-ordering and ordering collectively as including "the exchange of information between telecommunications carriers about current or proposed customer products and services, or unbundled network elements, or some combination thereof." In addition, the FCC's Interconnection Rules (at 51.319(g)) state that "[a]n

incumbent LEC, as part of its duty to provide access to the pre-ordering function, must provide the requesting carrier with nondiscriminatory access to the same detailed information about the loop that is available to the incumbent LEC." BellSouth provides CLECs with the same detailed information about the loop that is available to BellSouth.

Q. DOES BELLSOUTH PROVIDE ELECTRONIC ACCESS TO LOOP MAKEUP INFORMATION?

A. In the summer of 2000, BellSouth enhanced the TAG and LENS pre-ordering interfaces to provide CLECs with electronic access to the loop makeup information that is contained in the Loop Facility Assignment and Control System ("LFACS").[36] This access provides CLECs with the loop makeup information that they may use to qualify loops for the high speed services they choose to offer, including ADSL and HDSL.

Using this functionality in TAG, LENS, or RoboTAG™, CLECs can request loop makeup information on existing facilities that are owned by the requesting CLEC or BellSouth, on new or spare facilities that are owned by BellSouth, and create and cancel reservations for new or spare facilities owned by BellSouth. The BellSouth Loop Makeup CLEC Information Package (Exhibit OSS-26) provides CLECs with a general description of the manual and electronic processes for obtaining loop makeup information. More specific information about electronic loop makeup is contained in the *D/CLEC Pre-Ordering and Ordering Guide for*

[36] On February 12, 2000, BellSouth enhanced RoboTAG™ to provide CLECs with electronic access to loop makeup information.

Electronic Loop Makeup (Exhibit OSS-73).

Q. WHAT LOOP MAKEUP INFORMATION DOES BELLSOUTH MAKE AVAILABLE?

A. The following list of loop makeup information is currently available to CLECs through the TAG and LENS interfaces when populated in the LFACS database:

- Cable and Pair
- Loop Status (SP, WKG, CT, CF, etc.)
- Loop Length by Segment
- Length by Gauge
- 26 gauge equivalent loop length
- Quantity of load coils
- Location of load coils
- Quantity of bridge taps
- Location of bridged tap by occurrence
- Length of bridge taps by occurrence
- Location of pair gain/DLC – address of remote terminal
- System type of DLC
- Source of data - actual
- Presence of DAML (Single Subscriber Carrier Indicator)
- Loop medium (copper or fiber)
- Length that is copper or fiber
- Type of Plant (aerial, buried, or underground)
- Availability of spare facilities

- Number of gauge changes
- Assignable binding post
- Loop makeup status
- Build Out Capacity, Resistance, and Offset
- Resistance Zone (RZ)
- Carrier Zone (CZ)
- Remote Terminal CLLI Code
- Telemetry Indicator
- Line Terminal Status
- ONU Type (Optical Network Unit)
- Load coil type

Q. DID BELLSOUTH BETA TEST ELECTRONIC ACCESS TO LOOP MAKEUP INFORMATION?

A. On July 29, 2000, when BellSouth released the functionality for electronic access to loop makeup information, interested CLECs were contacted in order to beta test the functionality before the general release into the production environment. Five CLECs signed agreements to beta test the loop makeup functionality and the ordering of xDSL compatible loops and UCLs, but four actually participated in the test. Please see my discussion of the beta test in the section below on ordering xDSL compatible loops and UCLs. After correcting defects found during beta testing, BellSouth released the loop makeup inquiry functionality to all CLECs on November 18, 2000.

Q. ARE CLECS USING THE ELECTRONIC ACCESS TO LOOP MAKEUP?

A. Yes. In December 2000, BellSouth began tracking the usage by CLECs of access to electronic loop makeup information.

Month	Total queries for electronic LMU	% within 5 minutes
Dec-00	1368	99.78%
Jan-01	2572	99.92%
Feb-01	4556	99.93%
Mar-01	4841	100%

Q. WHAT IS BELLSOUTH'S LOOP QUALIFICATION SYSTEM?

A. In addition to electronic access to LFACS information, BellSouth also offers its Loop Qualification System ("LQS") to Network Service Providers ("NSPs") which they may use to determine if basic local exchange lines will carry BellSouth's industrial or business class ADSL service. CLECs also have electronic access to LQS, which they may use to obtain a qualified "yes/no" response based on defined technical parameters of BellSouth's industrial and business class ADSL offerings. The "yes/no" response allows the CLEC to determine if a telephone number(s) at a specific address is qualified (served by a loop that will support ADSL service) for BellSouth's ADSL service. For each telephone number or address entered, LQS will provide a number of positive responses and reason codes. A complete listing of the external and internal reason codes can be found in the "Loop Qualification System (LQS) DLEC/CLEC Job Aid,"[37] which is available on BellSouth's Interconnection Web site.[38] Among the responses are the following:

[37] DLECs are a subset of CLECs that offer products to the high speed data communications market segment
[38] Http://www.interconnection.bellsouth.com/guides/html/bpobr.html.

"A" (Available) - "Loop is currently qualified for ADSL".

"P" (Planned) - "Loop is currently not qualified, but is projected to support ADSL"; a projected service date is also provided with the "P" response.

"N" (Not Qualified for ADSL) - "Loop is not qualified for ADSL". Reason codes are also provided with the "N" response, including: E1 - "Syntax error in phone number"; E2 - "Service not available for this phone number"; E6 - "Loop is not found. Please try again 24 hours later"; The E2 code also applies when the entered number is not a basic local exchange Number (including an ISDN number or a number on which ADSL has already been implemented). The E6 code applies when the entered number is a newly-established BASIC LOCAL EXCHANGEservice. LQS then searches BellSouth records, overnight, for this number. If the new number is found, it is then included in the LQS database.

Upon written request to BellSouth, a registered CLEC will be provided access to LQS. CLECs may access LQS data either in bulk via a Web interface request or via a real-time CORBA (Common Object Request Broker Architecture) interface.

Q. DOES BELLSOUTH OFFER LOOP MAKEUP INFORMATION MANUALLY?

A. Yes. If a CLEC determines that it needs additional information that is not available electronically, the CLEC can request a manual loop makeup request.

Please refer to the testimony of Wiley (Jerry) G. Latham for a description of this process.

In addition, for the guaranteed-speed xDSL wholesale services that it offers to its wholesale customers (Network Service Providers or "NSPs"), BellSouth provides loop makeup information through a manual service inquiry process. BellSouth provides loop makeup information to CLECs through a manual service inquiry process in substantially the same time and manner as it does for NSPs. The testimony of Wiley (Jerry) G. Latham describes the processes for manual service inquiries for NSPs reselling the guaranteed xDSL services and CLECs purchasing unbundled xDSL-compatible loops.

Performance Measurements for Pre-Ordering

Q. HAS BELLSOUTH IMPLEMENTED PERFORMANCE MEASURES FOR PRE-ORDERING?

A. Yes, as will be further described in the testimony of Alphonso Varner, BellSouth has implemented pre-ordering performance measurements.

ORDERING

Q. HOW DOES THE FCC ADDRESS ORDERING FUNCTIONS?

A. As stated in the pre-ordering section, the FCC's Interconnection Rules (at §51.5)

define pre-ordering and ordering collectively as including "the exchange of information between telecommunications carriers about current or proposed customer products and services or unbundled network elements or some combination thereof."

Q. HOW DOES BELLSOUTH PROVIDE CLECS WITH NONDISCRIMINATORY ACCESS TO ORDERING OSS?

A. BellSouth provides CLECs with nondiscriminatory access to ordering OSS through three nondiscriminatory electronic interfaces: EDI, TAG (and RoboTAG™), and LENS. EDI follows the industry protocol (EDI) for ordering and the OBF guidelines for LSRs. The TAG and LENS interfaces also follow the same OBF guidelines for LSRs. The chart below shows the number of OCNs using the ordering interfaces.[39]

	EDI	TAG	LENS
Apr-00	17	29	203
May-00	15	24	225
Jun-00	18	39	224
Jul-00	22	43	221
Aug-00	21	39	224
Sep-00	18	39	224
Oct-00	20	46	236
Nov-00	20	49	225
Dec-00	26	65	280
Jan-01	26	71	295
Feb-01	36	65	287
Mar-01	32	59	281

[39] Again, the term Operating Carrier Number ("OCN") is used instead of CLEC when making reference to a horizontal line of data represented on the flow-through report. This is because each line of data represents an OCN and some CLECs have multiple OCNs. Thus, on the flow-through report two or more OCNs may represent a CLEC's total data.

In 2000, 2,886,673 LSRs were sent electronically by CLECs. The use of electronic interfaces over manual has increased steadily, as CLECs have realized the benefits of electronic submission of LSRs. BellSouth expects the usage of the electronic interfaces to continue to increase, although some services will continue to be ordered manually, just as they are for BellSouth. Attached is Exhibit OSS-45, which includes a graphical representation demonstrating the increased use of electronic interfaces for ordering, while below is a chart showing the number of LSRs sent through electronic interfaces.[40]

	EDI	TAG	LENS	TOTAL
Apr-00	4,440	45,510	119,439	169,389
May-00	6,337	75,418	147,903	229,658
Jun-00	7,872	109,009	154,489	271,370
Jul-00	7,587	96,406	148,932	252,925
Aug-00	11,740	95,900	184,103	291,743
Sep-00	9,786	77,647	168,948	256,381
Oct-00	12,335	125,914	186,785	325,034
Nov-00	14,887	97,622	170,128	282,637
Dec-00	12,838	91,643	168,305	272,786
Jan-01	19,036	58,854	194,224	272,114
Feb-01	27,535	39,381	188,546	255,162
Mar-01	33,697	56,451	200,929	291,083

Q. WHAT FUNCTIONS CAN CLECS PERFORM USING EDI, TAG OR LENS?

A. The EDI, TAG, and LENS interfaces enable CLECs to perform conversions, new connects, changes of service, disconnects, and suspends. CLECs can perform what are frequently referred to as "adds, moves, and changes." When a CLEC requests a new line at an address with existing service, that is considered to be an "add." A "move" occurs when a CLEC requests services for an end user, but at a

[40] These numbers do not include LNP.

different location. When a CLEC requests the addition or removal of features at an address with existing service, that is called a "change." CLECs may use EDI, TAG, or LENS to cancel an LSR in error without having to correct the LSR before canceling. A firm order confirmation ("FOC") will then be returned to the CLEC confirming the cancellation.

If a CLEC orders a resale service through EDI, TAG, or LENS (or manually), Directory Assistance and Operator Assistance are included as part of the resale service. No further ordering of these services is required.

Stand-alone directory listings may be ordered electronically through EDI, TAG, or LENS (Request Type J or "REQTYPE J"). CLECs using EDI and TAG may request listings with up to six (6) degrees of indention and captions. The business rules for ordering directory listings are located in the BellSouth Business Rules ("BBR").[41] The specifics about the production of White Pages directories and how this process is accomplished for both BellSouth's listings and CLEC's listings are described in the Affidavit of R. F. Barretto of BellSouth Advertising & Publishing Corporation ("BAPCO"), attached to the testimony of Keith Milner.

Partial Migrations

Q. CAN CLECS ORDER INITIAL AND SUBSEQUENT PARTIAL MIGRATIONS ELECTRONICALLY?

[41] For TCIF 7.0 interfaces, the Business Rules are contained in the Local Exchange Ordering Implementation Guide ("LEO Guide").

A. Yes. CLECs may order electronically both initial and subsequent partial migrations. Initial partial migrations, occasionally called "split accounts," occur when an end user customer chooses a CLEC to provide service for some of its lines, while keeping BellSouth as the carrier for other lines. CLECs have been able to send LSRs for resale or UNE initial partial migrations since BellSouth implemented EDI in December 1996. CLECs have been able to send LSRs for initial partial migrations via TAG since the TAG ordering interface was released on November 1, 1998.

Subsequent partial migrations occur when the end user customer later decides to transfer more or all of its lines to its existing CLEC carrier. Originally, all subsequent partial migrations had to be requested manually, rather than through an electronic interface. On March 28, 1999, as a result of requests by CLECs participating in the Electronic Interface Change Control Process ("EICCP"), BellSouth implemented four new telephone and account number fields (ATN, AN, EAN, and EATN) in EDI, TAG, and LENS. These fields were added to assist CLECs with the electronic ordering of initial partial migrations *and* subsequent partial migrations. The ATN, AN, EAN, and EATN fields allow CLECs to advise where telephone numbers are migrating to and from. ATN is the Account Telephone Number (dialable) to which lines are migrating. AN is the Account Number (non-dialable) to which the lines are migrating. EATN is the Existing Account Telephone Number (dialable) where the lines currently exist. EAN is the Existing Account Number (non-dialable) where the lines currently exist. The four fields are part of the OBF/TCIF Version 8 standards for ordering. These fields, however, were implemented by BellSouth on March 28, 1999, far in

advance of the implementation of the rest of Version 8, which occurred on January 14, 2000.

On January 14, 2000, BellSouth added two new activity types: "P" for initial partial migrations and "Q" for subsequent partial migrations. These new activity types allow CLECs to move one or more lines by initial or subsequent partial migration. CLECs also are able to issue an LSR for a partial migration "as specified."

Ordering UNEs, including UNE-P and other Combinations

Q. CAN CLECS ORDER UNES, INCLUDING COMBINATIONS, ELECTRONICALLY?

A. Yes. A loop-port combination, sometimes called the "UNE Platform" or "UNE-P," is a two-wire voice grade port and voice grade loop UNE combination. This offering combines a two-wire voice grade (measured) port, switching functionality, shared interoffice transport, tandem switching, and a voice grade loop (designed or non-designed) to create an end user-to-end user transmission path that provides basic local exchange service. The UNE-P first became available with flow-through for AT&T in Kentucky in March 1998. In February 1999, BellSouth implemented UNE-P with electronic ordering and flow-through for all CLECs. CLECs can use EDI, TAG, or LENS to order UNE-P.

The pre-ordering, ordering, and provisioning steps for UNE-P are demonstrated in Exhibit OSS-46. If the CLEC is ordering UNE-P for an end user customer with existing service, the only pre-ordering step required is validation of the address. If the CLEC is ordering UNE-P for a new end user customer, then the CLEC must validate the address and reserve a telephone number.

Exhibit OSS-46 also contains a detailed description of pre-ordering, ordering, and provisioning of unbundled loops (SL1, which are non-designed, and SL2, which are designed).

The testimony of Ken Ainsworth describes the ordering processes for other UNE combinations.

Ordering of ADSL-Compatible Loops, HDSL-Compatible Loops, and Unbundled Copper Loops

Q. DESCRIBE THE ORDERING PROCESS FOR XDSL COMPATIBLE LOOPS.

A. The processes for ordering unbundled xDSL-compatible loops and the high frequency portion of the loop (line sharing) are analogous to those for ordering other UNE loops. CLECs may order them using the standard LSR through the EDI, TAG, LENS and RoboTAG™ interfaces.

BellSouth enhanced the EDI, TAG, and LENS ordering interfaces for purposes of beta-testing on July 29, 2000 to enable CLECs to order electronically two-wire

ADSL-compatible loops, two- and four-wire HDSL-compatible loops, and two- and four-wire Unbundled Copper Loops ("UCLs") – short and long. As I stated earlier, four of the five CLECs that signed the beta test agreement participated in the test of the loop makeup and the ordering functionalities. The four beta testers used different combinations of the pre-ordering and ordering interfaces. The first CLEC to test used LENS for pre-ordering and EDI for ordering; the second used LENS for pre-ordering and ordering. The third CLEC used TAG for pre-ordering and EDI for ordering, while the fourth used TAG for both pre-ordering and ordering.

Q. PLEASE DESCRIBE THE BETA TESTING FOR THE LOOP MAKEUP INQUIRY.

A. The first two CLEC beta testers sent their first loop makeup inquiries on September 7 and 8, 2000. Their first test orders followed shortly thereafter. The third CLEC beta tester sent its first loop makeup inquiries and its first orders in mid-October 2000. Before releasing the loop makeup functionality in the production environment, BellSouth had to correct any defects that were found during the testing. The most significant defects were related to address validation and incomplete responses. After correcting these defects, BellSouth released the loop makeup functionality into production on November 18, 2000. The fourth tester, which did not sign its testing agreement until the end of October, sent its first loop makeup inquiries and orders in December 2000, after BellSouth had released the loop makeup functionality.

Q. PLEASE DESCRIBE THE BETA TESTING FOR THE LOOPS.

A. CLECs sent a variety of test cases and “live” LSRs during the beta test. The first CLEC, for example, sent ten test cases during the first few weeks of testing, and then sent over 40 “live” LSRs in October and November 2000. The second CLEC, for example, sent two test cases during its first week of testing, and then began submitting “live” LSRs whenever it obtained them from end users. During the beta testing in 2000, BellSouth identified defects, including defects related to the delivery of notifications and communication between the order management database and EDI, that required correction before BellSouth could release this functionality in the production environment. On January 27, 2001, BellSouth upgraded its systems and corrected the defects. The beta testers continued to submit LSRs, sending approximately 45 LSRs between January 27 and February 12, 2001. BellSouth's systems properly handled the LSRs and sent the appropriate notifications. For example, the testers received timely FOCs for the LSRs. For those orders that were allowed to process downstream, the beta testers received confirmation notifications (the beta testers canceled some orders before their due dates). The beta testers submitted approximately 137 LSRs throughout the entire test. On February 12, 2001, BellSouth released the electronic ordering of unbundled two-wire ADSL-compatible loops, unbundled two- and four-wire HDSL-compatible loops, and two- and four-wire UCLs (long and short) into production for all CLECs.

Q. IS THERE COMMERCIAL USAGE OF ELECTRONIC ORDERING FOR XDSL COMPATIBLE LOOPS?

A. Yes. Between February 12 and March 31, 2001, CLECs submitted 533 region-wide LSRs for these loops. The testimony of Jerry Latham describes the unbundled xDSL-compatible loops that are available to CLECs.

Q. CAN CLECS ORDER XDSL COMPATIBLE LOOPS MANUALLY?

A. Yes, as described in the testimony of Ken Ainsworth. In the Georgia Test, KPMG found that BellSouth provides adequate core ordering functionality in support of manual xDSL orders. (STP, at 12-2-3, p. IV-B-8).

Ordering Line Sharing

Q. DESCRIBE THE ORDERING PROCESS FOR LINE SHARING.

A. BellSouth provides CLECs with electronic ordering of the high frequency portion of two-wire copper loops for line sharing for central-office based and BellSouth-owned splitters. The capability to electronically order line sharing has been available to the DLECs and CLECs since September, 2000.

If a CLEC wishes to order line sharing that is central office-based and the splitter is owned by the CLEC, or remote terminal line sharing, it must submit a manual LSR to the LCSC. The mechanization of ordering line sharing for central-office based, DLEC-owned splitters is under development. Please refer to the testimony of Ken Ainsworth and Tommy Williams for details.

Q. DID BELLSOUTH BETA TEST LINE SHARING?

A. Yes. BellSouth offered beta testing of electronic ordering of line sharing to the CLECs participating in the line sharing collaborative. One CLEC signed a testing agreement. The CLEC completed the testing to establish and connect its ordering interface with BellSouth in September 2000. Because, however, the CLEC was already participating in the beta test for electronic loop makeup and electronic ordering of xDSL compatible loops and UCLs, it did not send any LSRs for line sharing until February 2001. The CLEC's first two LSRs were clarified for errors made by the CLEC. The rest of its LSRs, which tested a variety of scenarios, were successful and received notifications as expected. The final LSR was sent on March 2, 2001. The CLEC declined service readiness testing (testing in production), and therefore the test ended on March 2, 2001.

Flow-through

Q. HOW DID THE FCC DEFINE "FLOW-THROUGH"?

A. In its *Second Louisiana Order*, the FCC states, "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." *See Second Louisiana Order*, ¶ 107. Therefore, flow-through occurs when a CLEC or BellSouth representative 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.

Q. HOW DOES BELLSOUTH CALCULATE FLOW-THROUGH?

A. BellSouth calculates flow-through by dividing the total of the issued service orders for CLECs by the total mechanized LSRs, adjusting for the LSRs that are designated for manual handling (total manual fallout), the LSRs that are rejected and sent back automatically to the CLECs (auto clarifications), the LSRs that are pending supplements (Z status), and the LSRs with errors due to CLEC mistakes that fall out for manual handling (CLEC-caused fallout errors). Exhibit OSS-48 depicts flow-through and BellSouth's formula for calculating flow-through (the "CLEC Error Excluded Calculation"). The second page of Exhibit OSS-48 also shows two additional formulas for calculating flow-through: the "Base Calculation" and the "Achieved Flow-Through."

Q. PLEASE DISCUSS BELLSOUTH'S FLOW-THROUGH.

A. The chart below lists the UNEs and resale services for which there is fully mechanized order generation. When a CLEC sends a complete and correct LSR using EDI, TAG, or LENS, all aspects of order generation - including the return of firm order confirmations and completion notices - are fully mechanized for these services.

Resale Services & UNEs that flow through	**EDI**	**TAG**	**LENS**
UNEs			
Unbundled 2-wire analog loop (designed & non-	X	X	X

designed)			
Unbundled DS0 loop*	X	X	X
Unbundled DS1 loop*	X	X	X
Unbundled 2-wire ISDN digital loop	X	X	
4-wire analog voice grade loop*	X	X	
INP	X	X	
LNP	X	X	
INP plus unbundled 2-wire analog loop (designed & non-designed) combination	X	X	X
LNP plus Unbundled 2-wire analog loop (designed & non-designed) combination	X	X	
Unbundled 2-wire analog loop combination plus unbundled 2-wire analog port (designed & non-designed) (a.k.a., UNE-P)	X	X	X
Line Sharing, CO-based, BellSouth-owned splitter+	X	X	X
Unbundled ADSL-compatible loops (excluding INP)	X	X	X
Unbundled HDSL-compatible loop, 2-wire & 4-wire-** (excluding INP)	X	X	X
Unbundled Copper Loop (UCL), 2-wire & 4-wire, short & long**	X	X	X
LNP plus Unbundled 2-wire ADSL-compatible loops**	X	X	
LNP plus Unbundled 2-wire & 4-wire HDSL-compatible loops**	X		
LNP plus 2-wire & 4-wire UCLs, short & long**	X	X	
Unbundled Digital Circuit	X	X	
Resale			
Area Plus	X	X	X
Call Block	X	X	X
Call Forwarding – Variable	X	X	X
Call Return	X	X	X
Call Selector	X	X	X
Call Tracing	X	X	X
Call Waiting	X	X	X
Call Waiting Deluxe	X	X	X
Caller ID	X	X	X
Directory Listings (simple)*	X	X	X
Enhanced Caller ID	X	X	X
Flat Rate/Business	X	X	X
Flat Rate/Residence	X	X	X
Hunting Series Completion*	X	X	X
Georgia Community Calling	X	X	X
Measured Rate/Business	X	X	X

Measured Rate/Residential	X	X	X
Memory Call	X	X	X
Memory Call Answer Service	X	X	X
Message Telephone Service	X	X	X
Optional Calling Plan	X	X	X
Package/Complete Choice & Area Plus	X	X	X
Preferred Call Forward	X	X	X
Remote Access to Call Forwarding	X	X	X
Remote Call Forwarding	X	X	X
Repeat Dialing	X	X	X
Ringmaster	X	X	X
Speed Calling	X	X	X
Three-way calling	X	X	X
Touchtone	X	X	X
Visual Director	X	X	X

*Flow-through for these services was added with Release 6.0 ("OSS99").
** Flow-through for these services was added with Release 7.0.
+ Flow-through for these services was added with Release 7.1

Exhibit OSS-47, pages 1-2 contains a matrix that shows flow-through by requisition type and activity type. This information is available to CLECs in the BellSouth Business Rules for Local Ordering (Exhibit OSS-9)

After the January 14, 2000 implementation of Release 6.0 of EDI and Releases 3.0 and 3.1 of TAG, some CLECs chose not to upgrade their EDI and TAG ordering interfaces. As a result, the flow-through enhancements that occurred with these new releases and those subsequent will not be realized in these CLECs' flow-through percentages.

Q. PLEASE DISCUSS THOSE LSRS THAT "FALL OUT BY DESIGN."

A. LSRs for certain complex resale services and UNEs may be transmitted electronically via LENS, EDI, or TAG, but fall out for manual handling by

design. In order to enable CLECs to submit some complex LSRs electronically, rather than by fax, BellSouth designed the LENS, EDI, and TAG ordering interface to accept LSRs for these services. After these LSRs are transmitted to BellSouth electronically, they are handled as if they had been faxed to the LCSC. Because these LSRs must fall out for manual handling, BellSouth excludes them from its flow-through calculation. The chart below lists the services and UNEs that may be transmitted electronically, but must fall out for manual handling:

Resale Services & UNEs **Transmitted electronically, manually handled**	**EDI**	**TAG**	**LENS**
UNE			
LNP with Complex Listing	X	X	
LNP with partial migration	X	X	
INP to LNP conversions	X	X	
Loop-port PBX	X	X	
Unbundled 2-wire analog port	X	X	
Resale			
Basic Rate ISDN	X	X	
DID with PBX (switch as is)	X	X	
DID (switch as is)	X	X	
Directory Listing Indentations	X	X	X
Directory Listings Captions	X	X	X
Hunting MLH	X	X	
PBX standalone (add, change, delete)	X	X	
PBX trunks	X	X	
Synchronet	X	X	

Exhibit OSS-47, page 3 contains a list of requisition and activity types that can be submitted electronically, but must fall out for manual handling. In addition, LSRs for more than 25 lines will fall out for manual handling, even if the service is listed as flowing through. This also occurs when BellSouth retail submits a

service request for more than 25 lines.[42] LSRs with populated project or RPON fields, LSRs for which there are already pending service orders, LSRs expedited by the CLEC, and LSRs for special pricing plans for the specific CLEC will also fall out.[43]

Q. DOES BELLSOUTH INCLUDE LSRS FOR COMPLEX SERVICES IN ITS CALCULATION OF FLOW-THROUGH?

A. LSRs for complex services are not included in BellSouth's calculation of flow-through. For LSRs for complex services as requested by CLECs, or service orders for complex services requested by BellSouth's end users, there are systems designers and consultants involved in the work flow between the CLEC or BellSouth service representative who takes the request from the end user customer and the person who enters the request into the ordering interface. To prepare the service request for entry, these designers and consultants clarify and expand, if necessary, the information received from the end user customer. Service requests for complex services, therefore, cannot be said to flow through because there is significant manual handling. That manual handling varies from request to request, but is the same for CLEC and BellSouth retail orders, between the time the information is taken by the CLEC or BellSouth service representative and the time the request is input. Manual handling of complex resale services is discussed below.

[42] LSRs for 10 or more lines for unbundled ADSL, HDSL, or UCLs will fall out for manual handling. Requests by Network Service Providers ("NSPs"), including BellSouth Internet Services, for 10 or more lines of BellSouth's wholesale ADSL also fall out.

[43] The RPON (related purchase order number) field identifies the PON (purchase order number) of a related LSR. The RPON field may be used for relating connect and disconnect LSRs, multiple LSRs for the same location and due date, or multiple LSRs for directory listings.

Q. PLEASE DISCUSS THE FLOW-THROUGH RATES FOR LSRS FOR BUSINESS SERVICES AND UNES.

A. The complexity of LSRs for business services makes the flow-through of these considerably lower than flow-through for residential LSRs. LSRs for business services may contain, for example, multiple facilities terminations or different features for different locations of the same business, which add to the complexity of the LSR. Additionally, the volume of electronically-submitted LSRs for business services is approximately 5% of the total volume of electronically-submitted LSRs, making the base lower. In addition, it appears that the level of experience of the CLEC representatives preparing these LSRs may be lower than it is for preparing LSRs for residential services. This is reflected in the higher error rate on LSRs for business customers.

The flow-through of LSRs for UNEs is also lower than the flow-through of residential services, but is improving. The flow-through of LSRs for UNEs is lower because UNEs are still relatively new in the world of telecommunications; no one has nearly the experience ordering UNEs compared to the thousands of resale orders and millions of retail orders which have been ordered and processed. Additionally, the base of electronically-submitted LSRs for UNEs is small compared with LSRs for resale services. For example, in March 2001, LSRs for UNEs comprised approximately 21.7% of the total volume of electronically-submitted LSRs.

Because of BellSouth's efforts, the flow-through of LSRs for business services

and UNEs continues to improve. In summary, service order generation is a complicated process. BellSouth's extensive experience level with residential retail produces a high flow-through rate. Because business orders for retail and resale are more complex, the business flow-through rate is lower. Likewise, because experience with UNEs is at a much lower level, UNE flow-through is lower but increasing with time. BellSouth has introduced a number of change requests to the CCP to improve flow-through, and on January 12, 2001, the GPSC ordered BellSouth to establish a collaborative process with the CLECs to improve flow-through. BellSouth and the CLECs formed a cooperative "flow-through improvement task force," which is operating as a subcommittee of the CCP. The objective of the task force is to enhance the flow-through of electronic orders, document those enhancements, and develop a schedule for implementing enhancements. The CLECs and BellSouth first discussed the formation of the task force at the regularly-scheduled monthly status meeting of the CCP on February 28, 2001. Thus far, the task force has met on March 19, 2001 and April 24, 2001.

Below is a chart summarizing of the recent flow-through percentages for CLECs.[44]

Month	CLEC aggregate[45]	Issued CLEC service orders
Mar-00	92.03%	139,888
Apr-00	91.58%	125,445
May-00	91.30%	174,181
Jun-00	89.93%	197,651
Jul-00	90.58%	180,806
Aug-00	87.15%	195,129
Sep-00	87.05%	177,363
Oct-00	88.96%	220,731
Nov-00	87.04%	188,341
Dec-00	88.73%	184,710
Jan-01	88.57%	184,956
Feb-01	86.11%	167,700
Mar-01	88.01%	190,931

In the Georgia Test, KPMG conducted a detailed metrics evaluation of BellSouth's flow-through reporting and determined that BellSouth satisfied all test criteria. (Flow-Through Evaluation Final Report, at 23-30).

Mechanized Service Order Generation of LSRs

Q. DESCRIBE BELLSOUTH'S MECHANIZED SERVICE ORDER GENERATION OF LSRS.

A. The majority of non-LNP LSRs are generated through LEO and LESOG. The current exception to the process is LSRs for xDSL-compatible loops and UCL,

[44] These numbers do not include LNP.

which I discuss later in my testimony.

Before a mechanized service order is created, the LSR submitted through EDI, TAG, or LENS must pass edits that check for valid data entries and formats as well as conditions between various fields. The Business Rules cover all the necessary requirements for submitting complete and correct LSRs. For more information on the Business Rules, and on the training to assist CLECs with implementing the Business Rules, please see the "Support for CLECs" section of my testimony. BellSouth programs up-front edits for TAG and LENS in the Application Programming Interface ("API"). CLECs also can program additional edits in TAG, if they desire. Up-front edits for EDI are programmed by the CLECs on the CLEC side of the interface, based on the business decisions of the CLECs.[46] The up-front edits for TAG, LENS, and EDI are additional to those that BellSouth has programmed in LEO and LESOG. The check for valid date entries and formats for LSRs submitted through EDI are performed by LEO.[47] Flow-through for a CLEC LSR "starts" when a complete and correct electronically-submitted LSR is sent via the EDI, TAG, or LENS ordering interface.

A CLEC LSR submitted via EDI is first sent to the LSR Router. The LSR Router will determine what type of service is being ordered so that it can be routed to the

[46] For TAG users, the API resides on the CLEC's side of the interface in the CLEC's server. BellSouth's provides the API to TAG users so that they can download it to their servers. The EDI interface is based on a much older standard. For EDI, there is no equivalent to the TAG API server, nor does the EDI standard call for one. Thus, the CLEC is responsible for programming up-front edits on its side of the interface, if it chooses to use the EDI interface for ordering. The edits are contained in the BellSouth Business Rules and the EDI specification.

[47] LSRs for xDSL-compatible loops or UCLs are handled separately through the Telcordia platform that includes SGG, Order Manager, and SOG.

correct system. If the LSR is for LNP, it is sent to the LNP Gateway. If the service is for non-number portability xDSL-compatible loops or UCL, the LSR is sent to the ServiceGate™ Gateway ("SGG"). All other LSRs are routed to LEO.

All requests for xDS-compatible loops or UCL that are submitted via LENS or TAG will be routed to SGG. All others will be routed to the LSR Router. LSRs that are routed to the LSR Router will be sent to either the LNP Gateway or to LEO, depending upon the type of service being requested.

The LNP Gateway is the major link in the LNP process because it supports both internal and external communications with various interfaces and process, including the link between BellSouth and the CLECs for the electronic ordering of LNP. The electronic pre-ordering steps for LNP are the same as those for other UNEs and resale services. A clean and correct LSR for LNP is transmitted from the EDI or TAG ordering interface, then to the EDI or TAG gateways, and then to the LSR Router. The LSR Router sends LSRs for LNP to the LNP Gateway where error checks are performed for accuracy, completeness, and format. If an error is found, a reject notification is returned to the CLEC via EDI or TAG. If no errors are detected, the LSR is sent to LAUTO ("LNP Automation") for further processing. LAUTO interfaces with other BellSouth OSS to further check the LSR for validity. If an error is found, the error is recorded in the LNP Gateway database, and a clarification is returned to the CLEC. If LAUTO detects no errors and the LSR is eligible for mechanization, a service order is mechanically generated and transmitted to SOCS.

Complete and correct non-LNP LSRs flow mechanically to the LEO system. The LEO system receives the LSR/Order Manager and mechanically performs edit checks to determine if all the required fields have been correctly populated. If the LSR fails the edit checks in LEO/Order Manager, it will be returned to the CLEC via the appropriate interface as a "fatal reject." Fatal rejects are errors that prevent an LSR from being processed further. The CLEC receives a fatal error notification that contains an error code and an English-language description of the fatal reject.

Fatal rejects appear in a section of the Flow Through Report entitled “Fatal Rejects.” The total in this column represents the number of LSRs that were fatally rejected by LEO. Fatal rejects are not included in the calculation of flow-through.

If an LSR passes LEO's edit checks, it then will mechanically "flow" to LESOG. LESOG performs further checks for errors and for LSRs that cannot be mechanically handled. If the LSR contains an error or errors, or if it is not a candidate for mechanical handling, it will not flow-through to SOCS.

If an LSR is "passed" by LESOG, LESOG will mechanically transform the LSR into the service order format that can be handled by SOCS and by the other downstream BellSouth systems through which BellSouth's own service orders, as well as CLEC orders, are also processed. From LESOG, the CLEC service order flows to and is accepted by SOCS without any manual intervention. Once an order is accepted, its path through BellSouth's downstream legacy system is the

same for CLEC orders as it is for BellSouth's retail orders.

When the LSR is accepted by SOCS, SOCS mechanically returns a firm order confirmation ("FOC") to the CLEC via EDI or TAG or LENS, depending on which interface was used to transmit the LSR to BellSouth. The FOC is the CLEC's assurance that its LSR has successfully passed through the various edits and formatting checks and is pending as an order in SOCS.

Occasionally, SOCS is not available to accept service orders from LESOG. When that happens, LESOG will attempt nine times to send the service order to SOCS. After the ninth unsuccessful attempt, LESOG "drops" the service order to the LCSC for manual handling. A similar situation may occur for service orders from BellSouth's retail operations.

If an LSR does not "pass" LESOG/Order Manager's checks, the LSR will be sent back automatically to the CLEC for clarification ("auto-clarified") or will fall out of LESOG/Order Manager for manual handling.

Q. DESCRIBE THE PROCESS FOR THE LSRS THAT HAVE FALLEN OUT FOR MANUAL HANDLING.

A. A list of the LSRs that have fallen out for manual handling, whether by design or in error, is maintained in LEO/Provisioning Analyst WorkStation ("PAWS").[48] LSRs that fall out by design are listed in the chart above regarding LSRs that are transmitted electronically, handled manually. In addition, certain other types of

[48] PAWS contains manual fallout for xDSL-compatible loops and UCL.

LSRs that are transmitted electronically, also fall out for manual handling, as described earlier and on page 3 of Exhibit OSS-47. In order to process the LSRs that require manual handling, a service representative in the LCSC selects the next LSR that contains an error from LEO/PAWS. The service representative then analyzes the LSR to determine whether the LSR fell out by design for manual handling, or whether the LSR contains an error that was caused by the CLEC or by BellSouth's systems. LSRs that fall out by design for manual handling are treated as if they had been faxed to the LCSC. To make the determination about errors, the service representative reviews the LESOG error screen or the error code in PAWS, for additional information about the error. After this analysis, the service representative will next review information from systems such as SOCS or methods and procedures documentation.

If the service representative determines the error was caused by BellSouth (*i.e.*, LESOG/SOG could not handle part of the LSR), the representative will correct the error, issue the service order, and send an FOC to the CLEC via the same interface that was used to transmit the LSR. If the error was caused by the CLEC, the service representative will enter this information on the Error Screen in LEO or the clarification screen in PAWS, which then will send an electronic clarification notification to the CLEC via the same interface that was used to transmit the LSR. Service representatives in the LCSC are not supposed to correct errors made by CLECs; occasionally, in attempting to speed the process, they do correct CLECs' errors. These CLEC errors are then counted against BellSouth in the flow-through calculations. The CLEC must respond to a clarification notification before any further processing will occur.

Q. WHAT IS THE PROCESS FLOW FOR CERTAIN XDSL COMPATIBLE LOOPS?

A. Complete and correct LSRs for unbundled two-wire ADSL loops, unbundled two-wire and four-wire HDSL loops, and two-wire and four-wire UCLs (short and long) will flow mechanically from the CLEC interfaces to the ServiceGate™ Gateway ("SGG"). The SGG sends the LSR to the Order Manager. Order Manager checks the LSRs for formatting and errors, and validates or rejects the LSRs, similar to LEO and LESOG. SGG, via ServiceGate™ Service Order Generator ("SOG"), will mechanically transform complete and correct LSRs into the service order format that can be handled by SOCS and by the other downstream BellSouth systems through which BellSouth's own service orders, as well as CLEC orders, are also processed. From Order Manager, the CLEC service order flows to and is accepted by SOCS without any manual intervention. Once an order is accepted, its path through BellSouth's downstream legacy system is the same for CLEC orders as it is for BellSouth's retail orders. Notifications are sent back to the CLEC via SOCS and SGG as they are for LSRs processed via LEO, LESOG, and SOCS.

Q. EXPLAIN HOW THE CHANGES IN THE CLEC INDUSTRY AFFECTS BELLSOUTH'S FLOW-THROUGH RATES.

A. Every month new CLECs begin to use the electronic interfaces or established CLECs change interfaces. The increase or decrease of errors committed by the CLECs can depend on the experience and quality of the CLEC. Other than

providing CLECs with the information and training necessary to submit complete and correct LSRs, which BellSouth has done and continues to do, BellSouth has no control over these factors. Another reason for fluctuations in the allocation of errors has been the changes and enhancements made to the CLEC interfaces and BellSouth's OSS, such as Releases 6.0 and 7.0, which added more UNEs and resale services that flow-through (see items with asterisks in the chart entitled, "Resale Services & UNEs that flow through" found herein under the heading "Flow-Through").

Because of BellSouth's efforts, the flow-through of LSRs for business services and UNEs continues to improve. In summary, service order generation is a complicated process. BellSouth's extensive experience level with residential retail produces a high flow-through rate. Because business orders for retail and resale are more complex, the business flow-through rate is lower. Likewise, because experience with UNEs is at a much lower level, UNE flow-through is lower but increasing with time. BellSouth has introduced a number of change requests to the CCP to improve flow-through, and in compliance with the GPSC's Order of January 12, 2001, BellSouth has formed the "flow-through improvement task force" as a sub-committee of CCP in order to establish a collaborative process with the CLECs to improve flow-through.

Manual Handling for Resale Services/UNEs

Q. DO SOME CLECS CHOOSE TO USE MANUAL METHODS FOR INTERACTING WITH BELLSOUTH?

A. Yes. Even though there are electronic interfaces, some CLECs choose to use manual methods to perform pre-ordering, ordering, provisioning, maintenance and repair, and billing for resale services and UNEs. Please see the testimony of Ken Ainsworth for a complete description of the manual interfaces available to the CLECs that choose to use them.

Pre-ordering ("Service Inquiry") and Ordering for Complex Services

Q. ARE MANUAL INTERFACES REQUIRED FOR CERTAIN COMPLEX ORDERS?

A. Yes. There are some complex services for which manual interfaces must be used for pre-ordering and ordering for both CLECs and BellSouth. The testimony of Ken Ainsworth explains in detail how requests for complex services are handled for CLECs.

Q. PLEASE DEFINE NON-DESIGNED AND DESIGNED COMPLEX SERVICES AND EXPLAIN THE RATIONALE FOR MANUAL HANDLING OF CERTAIN COMPLEX ORDERS.

A. There are two types of complex services: "Non-designed" and "Designed." A "Non-designed" service is a class of service with a Universal Service Order Code ("USOC") that does not require special provisioning and is served by one central office or wire center. A "Designed" service involves special engineering and provisioning and may be served by more than one central office or wire center.

The manual processes BellSouth uses for complex resold services offered to the CLECs are accomplished in substantially the same time and manner as the processes used for BellSouth's complex retail services. The specialized and complicated nature of complex services, together with the relatively low volume of orders for them relative to basic exchange services, renders them less suitable for mechanization, whether for retail or resale applications. Complex, variable processes are difficult to mechanize, and BellSouth has concluded that mechanizing many low-volume complex retail services for its own retail operations would be an imprudent business decision, in that the benefits of mechanization would not justify the cost. Because the same manual processes are in place for both CLEC and BellSouth retail orders, the processes are nondiscriminatory and competitively neutral.

Q. WHAT ARE THE SERVICES THAT MUST BE ORDERED MANUALLY?

A. Below is a chart listing the services that must be ordered manually:

Resale Services & UNEs that must be ordered manually
UNEs
2 wire analog DID trunk port
2 wire ISDN digital line side port
4 wire DS0 & PRI digital loop
4 wire DS1 & PRI digital loop
4 wire ISDN DS1 digital trunk ports
Digital Data Transport
DS3
Resale Services
Accupulse
CENTREX
ESSX
FLEXSERV
Frame Relay
FX (Foreign Exchange)
LightGate
Megalink
Megalink-T1
Multiserv
Native Mode LAN Interconnection (NMLI)
Off-Prem Stations
Pathlink Primary Rate ISDN
Payphone Provider
Smartpath
SmartRING
Tie Lines
WATS

Q. CAN YOU GIVE THE COMMISSION AN EXAMPLE OF A COMPLEX SERVICE FOR WHICH RETAIL HANDLING IS NOT FULLY MECHANIZED?

A. Yes. An example of a complex service for which retail handling is not fully mechanized is Centrex® service, a complex service available to both retail customers and to resellers. In both cases, the pre-ordering and ordering processes

are largely manual. Nonetheless, these manual pre-ordering and ordering processes are substantially the same for both retail and CLEC orders. Service orders for retail services are handled primarily by the appropriate business unit for retail services -- BellSouth Large Business account teams. Orders for CLEC services are handled by the appropriate business unit for CLEC services – CLEC account teams that are part of Interconnection Services (ICS). The handling of complex services for CLECs by the Interconnection Services Account Teams is substantially the same as the handling of complex services by BellSouth's Large Business account team for BellSouth's retail customers.

Attached to this testimony is Exhibit OSS-49, which depicts the flow of the process for ordering Centrex® by CLECs, and Exhibit OSS-50, which depicts the flow of the process for ordering Centrex® by BellSouth's retail unit. These flow charts are included as examples to show the similarities in the processes used for CLECs and retail customers.

Detailed descriptions of the manual service inquiry and ordering processes for resale services and UNEs are found in the testimony of Ken Ainsworth. During the service inquiry and ordering processes an extensive package of paper forms is assembled. In both the retail and the resale cases, this package is manually handed off to the service center, where paper service order worksheets are created to assist in entering service orders in the ordering system. After the handoff, the service orders are typed into the appropriate service order system for the type customer, either ROS, for BellSouth retail customers, or DOE or SONGS,

depending on the location, for CLEC customers.[49] The entry of the order is accomplished in substantially the same manner for both the retail and the resale/UNE situations, whether the customer belongs to a CLEC or BellSouth. Thus, it is the same customer "experience" in either case. After the service order is entered, the account team and project manager are notified by e-mail of the service order numbers and due dates. They follow up with the service centers and the end user customer or CLEC as necessary. These processes, with their substantial reliance on manual handling and paper forms, are common to both retail and CLEC complex orders. Thus, BellSouth provides to CLECs the ability to order complex services in substantially the same time and manner as it provides this ability to its retail customers and retail service representatives.

Ordering of Interconnection

Q. PLEASE DESCRIBE THE ORDERING PROCESS FOR INTERCONNECTION.

A. Facilities-based CLECs obtain local interconnection trunking by using an Access Service Request ("ASR"), rather than an LSR. In addition to using the manual methods described in the testimony of Ken Ainsworth and the testimony of Keith Milner, facilities-based CLECs may use the Common Access Front End (CAFE) system, a Web-based GUI to order trunks. CAFE sends ASRs to EXACT, the

[49] The service representative in the LCSC inputs manually-submitted LSRs for Designed services into the Exchange Access Control and Tracking system ("EXACT") If the LSR comes in electronically and LESOG cannot issue the order, then it falls out for manual handling and the service representative issues the LSR through EXACT.

mainframe ordering system for ASRs. EXACT has been used to process ASRs for more than 15 years. Attached as Exhibit OSS-51 is a presentation on CAFE.

BellSouth offers CLECs training classes for access services (Access Service Request – Order Local Interconnection Trunking; Access Service Ordering Guidelines; and Special Access for ASR) and a class on CAFE.

Performance Measurements for Ordering

Q. HAS BELLSOUTH IMPLEMENTED PERFORMANCE MEASUREMENTS FOR ORDERING?

A. Yes. As will be further described in the performance measurement testimony Alphonso Varner, BellSouth provides performance measurements for ordering.

PROVISIONING

Q. WHAT HAS THE FCC HELD WITH RESPECT TO PROVISIONING INTERFACES?

A. According to §51.5 of the FCC's rules, "'[p]rovisioning' involves the exchange of information between telecommunications carriers where one executes a request for a set of products and services or unbundled network elements or combination thereof from the other with attendant acknowledgments and status reports." The type of information to which these rules refer generally is described in terms of

order status reports and completion notifications, such as those indicating missed appointments. BellSouth provides CLECs with access to provisioning information in substantially the same time and manner as BellSouth provides the maintenance and repair function for its retail customers.

Electronic Jeopardy Notification

Q. DOES BELLSOUTH PROVIDE CLECS WITH ELECTRONIC JEOPARDY NOTIFICATION?

A. Yes. Once an order for a CLEC or a BellSouth customer is pending in SOCS, certain situations can arise that result in a "jeopardy" condition. A jeopardy occurs when the established due date for the order may not or will not be met. There are two types of jeopardies. The first type, "customer-caused" or "end-user-caused," can occur when the end-user customer misses a scheduled installation appointment. The second type, "company-caused" or "service," can occur for a variety of reasons, including the lack of available facilities ("pending facilities" or "PFs"), defective facilities, weather, or unforeseen circumstances affecting technicians' workloads in an area. Service jeopardies do not occur when customers switch their existing telephone service from BellSouth to a CLEC "as is" because this type of order does not involve new facilities or a premise visit by an installation technician.

In the Georgia Test, KPMG found that BellSouth satisfied all test criteria for EDI and TAG electronic jeopardy notifications. (MTP, at O&P 2-4-5, p. V-B-24; O&P 2-3-5, p. V-B-17; O&P 1-3-5, p. V-A-17; O&P 1-4-5, p. V-A-25).

BellSouth transmits electronic notifications for both types of jeopardies to CLECs through the EDI, TAG, and LENS interfaces. Both types of jeopardy notification have been available through TAG and LENS since their inception. Electronic notification of "customer-caused" jeopardies has been available through EDI since its inception; electronic notification of service jeopardies was added December 19, 1998.

Electronic Notification of Order Completions

Q. DOES BELLSOUTH PROVIDE CLECS WITH ELECTRONIC NOTIFICATION OF ORDER COMPLETIONS?

A. Yes. For LSRs submitted electronically, CLECs receive completion notifications ("CNs") after a service order has been posted as complete in SOCS. A completion notification includes the date on which the order was completed. When SOCS is notified by downstream systems that an order has been completed, SOCS returns the completion notification to LEO. LEO then sends the completion notification electronically to the CLEC through EDI, TAG, or LENS, depending on which interface was used to submit the order.[50]

BellSouth does not transmit completion notifications through RNS and ROS to its service representatives. Measurements regarding completion notifications will be discussed in the performance measurements testimony of Alphonso Varner.

[50] Except in the case of xDSL-compatible loops, which are sent back via SGG. In the case of LNP, the completion notification is returned via the LNP Gateway.

In the Georgia Test, for those test criteria for electronic notification of order completions for which KPMG has results, KPMG found the criteria satisfied for EDI and TAG. (MTP, at O&P 1-4-4, p. V-A-24; O&P 2-4-4, p. V-B-23).

Q. DOES BELLSOUTH PROVIDE COMPLETION NOTIFICATIONS ("CN") TO CLECS FOR BOTH ELECTRONICALLY AND MANUALLY SUBMITTED LOCAL SERVICE REQUESTS?

A. BellSouth provides an electronic CN to CLECs who submit Local Service Requests ("LSRs") electronically. An electronic CN is delivered to the CLEC once BellSouth's systems determine that the service order is completed, is error free, and is in the Completion/Error free ("CPX") or Posted Complete/Error free ("PCX") status. Completion Notifications are not provided to CLECs on manually submitted LSRs, however, CLECs may determine the completion status of its LSRs (e.g. Completed Order ("CP"), Pending Facilities ("PF"), Missed Appointment ("MA"), etc.) by accessing the BellSouth CLEC Service Order Tracking System ("CSOTS") Website, which will be discussed in the next section.

The CLEC Service Order Tracking System

Q. DESCRIBE THE CLEC SERVICE ORDER TRACKING SYSTEM.

A. On November 8, 1999, BellSouth introduced a Web-based electronic interface for CLECs that enables them to view their service orders online, track their service orders, and determine the status of their electronically- and manually-submitted service orders in SOCS. This interface is called the CLEC Service Order Tracking System or "CSOTS." CLECs can use CSOTS to view their orders as they appear in SOCS, and to obtain other useful provisioning and status information, such as jeopardy statuses, like pending facilities ("PFs") and missed appointments ("MAs"). As discussed above, information about order status is available through LENS, TAG, and EDI for the orders submitted through these interfaces. CLECs may obtain access to the CSOTS by contacting their BellSouth Account Team. Attached as Exhibit OSS-28 is the CSOTS User's Guide.

CSOTS provides CLECs with a "view" that shows service orders by order status and by state. CSOTS allows CLECs to search for information using a variety of criteria, including a range of due dates; the current due date; the telephone account number; the service order number; and the purchase order number ("PON"). CLECs can sort this information by PON, by NPA NXX, by status type, by the number of days orders have been in a particular status, by listed name, by service order number, and by current due date.

CSOTS offers CLECs the option of viewing and/or downloading provisioning information using Microsoft's Excel™ spreadsheet program.

In the Georgia Test, KPMG tested the accuracy of response and clarity of information for CSOTS for orders placed through both EDI and TAG and found

these test criteria satisfactory. (MTP, at O&P 1-4-7; p. V-A-26 – 27; O&P 2-4-7, p. V-B-26).

Q. DID BELLSOUTH TEST CSOTS?

A. Yes. BellSouth performed internal user acceptance testing (UAT) of CSOTS on October 21, 1999. This test demonstrated that CSOTS was functionally ready for CLEC testing. In addition, five CLECs participated in a carrier-to-carrier Beta test of CSOTS during October 25-29, 1999. The Beta test demonstrated that CSOTS was ready for use in full production.

Q. HOW DO CLECS ACCESS CSOTS?

A. To access CSOTS, CLECs only need internet access, a Web browser, and a password. The Account Teams for the CLECs provide them with the Web address for CSOTS, a user identification and password, start-up instructions, and trouble reporting procedures. Because the interface is password-protected, it permits each CLEC to access only information about its orders.

Other Order Status Information

Q. WHAT OTHER ORDER STATUS INFORMATION DOES BELLSOUTH PROVIDE CLECS?

A. BellSouth provides CLECs with a Purchase Order Number ("PON") Status Report for all manually- and electronically submitted LSRs. These reportsprovide order status information, as well as information about clarifications and rejections, status of FOCs, and due dates. This report is described in more detail in the testimony of Ken Ainsworth. This report is posted on the Web.[51]

Also described in detail in the testimony of Ken Ainsworth is the "PF Report" ("PF" stands for "pending facilities"). This report shows information about any manual orders in PF status. The report is posted daily on the Web.[52]

Notification of Competitive Disconnects

Q. HOW DOES BELLSOUTH PROVIDE CLECS WITH NOTIFICATION OF COMPETITIVE DISCONNECTS?

A. Notifications of competitive disconnects (*i.e.*, loss of a CLEC customer to another local service provider) are furnished via a password-protected, electronic, internet-based Loss Notification Web Report for CLECs. The Loss Notification report provides CLECs with a list of the accounts that were lost on the previous day. The losses may be due to an abandon station condition, an end-user reporting that he has been switched in error, or an end-user choosing to migrate his service to another local service provider. This report is posted at the same site as the PON and PF Reports, and is updated daily.[53]

[51] https://CLEC.bellsouth.com
[52] https://CLEC.bellsouth.com
[53] https://CLEC.bellsouth.com

Performance Measurements for Provisioning

Q. HAS BELLSOUTH IMPLEMENTED PERFORMANCE MEASUREMENTS WITH RESPECT TO PROVISIONING?

A. Yes. As further described in the performance measurements testimony of Alphonso Varner, BellSouth has performance measurements dealing with provisioning.

MAINTENANCE & REPAIR

Q. WHAT HAS THE FCC HELD WITH RESPECT TO MAINTAINANCE AND REPAIR?

A. The FCC Rules (at §51.5) define maintenance and repair as involving "the exchange of information between telecommunications carriers where one initiates a request for maintenance or repair of existing products and services or unbundled network elements or combination thereof from the other with attendant acknowledgments and status reports."

Q. DOES BELLSOUTH OFFER CLECS ELECTRONIC INTERFACES FOR TROUBLE REPORTING?

A. Yes. As explained below, BellSouth offers CLECs electronic interfaces for trouble reporting, which provide CLECs with access to the maintenance and

repair function in substantially the same time and manner as BellSouth offers access for its retail customers.

The following chart demonstrates that CLECs have the same access to BellSouth's maintenance and repair OSS that BellSouth has.

BellSouth's Interfaces	**Repair & Maintenance Functions**	Interfaces offered to CLECs
Residential TAFI Business TAFI	Full repair & maintenance functionality for telephone number-based (non-designed circuit) services	CLEC TAFI
Not Applicable	Industry standard functionality for telephone number-based (non-designed circuit) services (T1/M1 local)	ECTA Local
WFA-C	Repair & maintenance functionality for designed circuit services (access to WFA system)	ECTA Local

Q. DOES THE ACCESS THAT BELLSOUTH PROVIDES TO MAINTAINANCE AND REPAIR OSS MEET THE FCC'S REQUIREMENTS?

A. Yes. The FCC found that, although it did not offer a machine-to-machine maintenance and repair interface when it filed for long distance relief in New York, "Bell Atlantic satisfie[d] its checklist obligation by demonstrating that it offers competitors substantially the same means of accessing maintenance and repair functions as Bell Atlantic's retail operations." *Bell Atlantic New York Order*, ¶ 215. Bell Atlantic accomplished this by providing CLECs with a Web-

based GUI. BellSouth accomplishes this by providing CLECs with TAFI. As shown above and described below, by also offering the Electronic Communications Trouble Administration ("ECTA") interface, BellSouth gives CLECs electronic access to its maintenance and repair OSS in a manner that far exceeds what is provided by the Web-based graphical user interface ("GUI") that Bell Atlantic had in place when it was approved by the FCC in December 1999. The FCC, in footnote 565 of its Texas Order, confirmed that interfaces like ECTA are not required when the BOC provides equivalent access in another manner (such as TAFI): "a BOC is not required, for the purpose of satisfying checklist Item 2, to implement an application-to-application interface for maintenance and repair functions – provided it demonstrates that it provides equivalent access to its maintenance and repair functions in another manner."

The TAFI and ECTA interfaces fall under the Change Control Process ("CCP"). On April 18, 2000, AT&T submitted the first request through the CCP for changes to the ECTA interface. This change request (CR0012) is currently under consideration within the CCP. Thus far, no change request for TAFI has been submitted.

Exhibit OSS-52 demonstrates BellSouth's and the CLECs' access to the maintenance and repair OSS.

Trouble Analysis Facilitation Interface ("TAFI")

Q. PLEASE DESCRIBE TAFI.

A. BellSouth offers CLECs access to the Trouble Analysis Facilitation Interface ("TAFI"), the same maintenance and repair system that BellSouth's own retail representatives use to handle a trouble report for any basic exchange service (*i.e.*, telephone number-based or non-designed services).

TAFI is a human-to-machine interface with intelligence to do diagnostics and provides rapid, consistent, and efficient automated trouble receipt, screening, and problem resolution. TAFI is an interactive system that prompts the BellSouth or CLEC repair attendant with questions and instructions while automatically interacting with other internal systems as appropriate. TAFI also provides for the queuing of reports to enable BellSouth or CLEC repair attendants to work on several customer troubles simultaneously. TAFI provides on-line reference tools. BellSouth and CLECs can use TAFI in the same manner to enter trouble reports, check the status of a report, and modify existing reports. TAFI gives BellSouth and CLECs direct access to their end user customers' maintenance histories. BellSouth and CLECs can use TAFI to check the status of repair tickets. In addition, by providing access to TAFI, BellSouth has made available to CLECs the functionality inherent in the many OSS with which TAFI interacts, such as the Loop Maintenance Operations System ("LMOS"), on the same basis as BellSouth retail personnel obtain such access. The CLEC TAFI End-User Training Manual and the CLEC TAFI User Guide that I described in the "OSS Documentation" section of my testimony are attached as Exhibits OSS-34 and OSS-35.

TAFI is not an industry standard interface. The industry standard for repair and maintenance interfaces addresses only basic functions, such as electronically

opening a trouble ticket or obtaining status information. The functionality of BellSouth and CLEC TAFI is superior to the limited functionality supported by the industry standard for trouble reporting. However, as previously stated, TAFI can only process trouble reports for basic exchange services. The industry standard does not include any of the interactive functionality that is contained in TAFI. BellSouth, however, does offer an industry standard based interface, ECTA, to CLECs. ECTA will be discussed below.

In the Georgia Test, KPMG found that BellSouth satisfied all of the test criteria for functional testing and capacity management evaluation of TAFI. (MTP, at VII-A-9 - VII-A-20; VII-E-7 – VII-E-16; STP, at VI-B-8 – VI-B-19).

Q. DOES CLEC TAFI INTERFACE PROVIDE CLECS WITH THE SAME FUNCTIONALITY AS THE BELLSOUTH RETAIL RESIDENCE AND BUSINESS VERSIONS OF THE TAFI INTERFACE?

A. Yes. Since the CLEC TAFI interface was introduced to CLECs in March 1997, CLEC TAFI has had exactly the same functionality as the TAFI residential interface or the TAFI business interface used by the BellSouth retail units. All upgrades to the BellSouth TAFI interfaces and CLEC TAFI interface have occurred in parallel. There are two slight differences in access. First, because the CLEC TAFI system is used by repair attendants from many different CLECs, CLEC TAFI contains a security screening step that grants CLECs access only to the CLEC's end-user's accounts, to ensure the confidentiality of each CLEC's information. TAFI identifies each CLEC's repair attendants by company and

allows each CLEC's repair attendants to access the records belonging only to that CLEC's customers. This process typically takes about 2-3 seconds. Once that validation check has been performed, the CLEC repair attendant has identical access for its end-user's accounts to the full range of TAFI functionality that is available to BellSouth repair attendants for both business and residence exchange services. Second, because the CLEC TAFI system combines the functionality of the separate business and residence versions of TAFI used by BellSouth's repair attendants, CLECs have the advantage of a single system for all types of basic exchange service trouble reports.

Q. IS TAFI A MACHINE-TO-MACHINE OR INTEGRATEABLE INTERFACE FOR BELLSOUTH?

A. No. Contrary to what CLECs have implied, BellSouth provides CLECs with the same access to TAFI that it provides to itself. TAFI is not a machine-to-machine or integrateable interface for BellSouth.[54] When BellSouth's maintenance and repair representatives take trouble reports from end user customers or check the status of a report, they log directly into TAFI. Since these are maintenance and repair functions, there would be no reason to go through BellSouth's marketing and sales support systems, and, therefore, TAFI is not integrated with BellSouth's marketing and sales support systems. When CLECs' representatives take trouble reports from end user customers or check the status of a report, they log directly into TAFI. All information about the trouble reports of CLECs' and BellSouth's end users is maintained in TAFI and in the repair and maintenance OSS to which TAFI interacts. BellSouth therefore provides TAFI to CLECs just as it does for

[54] Second Louisiana Order, paragraph 151.

itself. If CLECs wish to enter trouble reports via the same systems they use to place orders, they can integrate ECTA (discussed below) with their marketing and sales support systems just as they can integrate the TAG pre-ordering interface with the TAG ordering interface or the EDI ordering interface.

BellSouth or CLEC TAFI often enables trouble reports to be cleared remotely by the repair attendant handling the initial customer contact, frequently with the customer still on the line. This is possible because TAFI correctly screens 80% of the reports for non-designed services while the customer is on the line. TAFI will execute the appropriate test for that telephone number or retrieve the relevant data to help analyze the problem. For example, if a customer were to report that the customer's call forwarding feature was not working, the TAFI system would check the customer's records to see if the line should be equipped with the call forwarding feature and would electronically verify whether the feature has been programmed in the switch serving that customer's line. Once the TAFI analysis of the trouble is complete, TAFI recommends what is needed to correct the problem and in some cases implements the corrective action. In the above example, TAFI might instruct the repair attendant to have the customer contact the business office to add the call forwarding feature or might correct the trouble by implementing a translation change in the switch to add the feature to the line.

If TAFI determines that a trouble report must be dispatched to a downstream center or field work group, TAFI passes the trouble ticket to Loop Maintenance Operation Systems ("LMOS"). LMOS is used for maintaining customer line records, and for entering, processing, and tracking trouble reports. TAFI is a

front-end system to LMOS. LMOS dispatches the trouble report to the appropriate Installation & Maintenance (I&M) work group. If the ticket needs to be handled by a Central Office (CO) field work group, LMOS passes the ticket to the Work Force Administration (WFA) - Dispatch In module, which loads the ticket to the next available CO technician. No distinction is made in priority between trouble tickets related to CLEC customers versus tickets related to BellSouth retail customers.

Exhibit OSS-53 provides examples of the screens seen by both CLEC and BellSouth repair attendants for a trouble report involving the call forwarding feature. The function and sub-function menus included in Exhibit OSS-53 provide an indication of the depth of TAFI's abilities to process troubles. The nature of the trouble report determines which of the numerous screens would be seen by both CLEC and BellSouth repair attendants. No matter what the situation, both CLEC and BellSouth repair attendants have the same access through TAFI to the same information and functions.

Q. CAN TAFI BE USED FOR TROUBLE REPORTS ON COMPLEX SERVICES?

A. Yes, in part. For trouble reports on complex services that involve exchange services, such as Centrex® service or PBX trunks, TAFI can be used to input trouble reports, obtain commitment times, and check the status of previously entered reports. The full range of TAFI functionality, however, is not available for these services.

Q. IS THERE MORE INFORMATION ON TAFI AVAILABLE SHOULD THE COMMISSION NEED SUCH?

A. Certainly. For a more technical description of TAFI's functionality, please see the TAFI Functionality Overview, attached as Exhibit OSS-54, the CLEC TAFI End User Training Manual (Exhibit OSS-34), and the CLEC TAFI User Guide (Exhibit OSS-35).

Q. HOW DO CLECS CONNECT TO TAFI?

A. BellSouth provides two ways for CLECs to connect to TAFI: Dedicated Local Area Network (LAN-to-LAN) connections (the same kind of access that BellSouth uses); and Dial-up connections, for CLECs that choose not to use LAN-to-LAN connections. CLECs pay for their costs of arranging access connections, just as BellSouth does for itself.

TAFI "times out" for no activity after 10 minutes for both BellSouth and CLEC users. TAFI was designed to time out if it is not used actively for 10 minutes, so as not to waste central processor unit time.

Q: HOW ARE CLEC END-USERS' REPAIR CALLS HANDLED BY BELLSOUTH?

A. If a CLEC end-user calls BellSouth directly regarding a repair or maintenance matter, the BellSouth repair service center personnel are notified by the system

that the record is a CLEC record, and are instructed to re-direct any reports to the CLEC in a manner specified by the CLEC. As stated earlier, if TAFI determines that a trouble report must be dispatched downstream, the downstream center or field work group makes no distinction in priority between CLEC and BellSouth tickets.

Q. HAS BELLSOUTH ENHANCED TAFI IN ANY WAY?

A. Yes. BellSouth developed an enhanced owner validation process in December 1997 that enables CLECs to use TAFI to open tickets for troubles reported on the same day that the end user is switched to a CLEC, but before the order completion has posted to the billing record. This process uses pending service order data to validate that the CLEC is the "owner" of the end user's account.

Until October 1999, TAFI permitted the entry of 10-character length telephone numbers. Any services with telephone numbers longer than 10 characters had to be entered in LMOS. In October 1999, the length was increased to allow 18 characters. This increase enables CLECs to open trouble tickets for Multiline, DID, and Hunt Groups.

In September 2000, BellSouth enhanced TAFI in order to accommodate DLECs' reports for trouble conditions related to high speed data communications (line sharing) to a BellSouth voice end user. Because the full functionality is not necessary for a DLEC to report troubles related to line sharing, and because BellSouth is responsible for reporting troubles related to the voice service, DLECs

(including CLECs acting as DLECs in this situation) use a subset of TAFI's functionality. For line sharing troubles, a DLEC user may:

- enter a line sharing data trouble report
- modify an existing line sharing report
- obtain MLT test results
- view trouble history data
- request a vendor meet.

Q. CAN CLECS USE TAFI FOR UNES?

A. Yes. From a maintenance and repair perspective, port/loop combinations (UNE-P) are treated as basic local exchange service and TAFI will correctly process trouble reports on them. After determining that the problem is not in the customer's equipment or the CLEC's network, the CLEC can use TAFI to handle troubles associated with UNEs that can be identified with a telephone number, such as unbundled ports or interim number portability. TAFI sends trouble reports for such UNEs to the UNE Center for manual handling.

The Electronic Communications Trouble Administration ("ECTA") Gateway

Q. DESCRIBE THE ECTA GATEWAY.

A. ECTA is a machine-to-machine interface, built to the American National Standards Institute (ANSI) national standards for Trouble Administration:

T1.227-1995, T1.228-1995, T1.227A-1998 and T1.282-1998. This interface allows the CLEC to (1) enter a trouble report, (2) modify an existing trouble report (initiated by the gateway), (3) obtain status information on open trouble reports, (4) close an existing trouble report and (5) request and obtain MLT test results for a line without generating a trouble report. ECTA interfaces with both of BellSouth's maintenance and repair OSSs - LMOS for non-designed services and WFA for designed services.

Since December 1995, BellSouth has offered CLECs nondiscriminatory, machine-to-machine access to the WFA system via the IXC Electronic Communications Trouble Administration ("ECTA") Gateway using the same industry standard used by interexchange carriers to report troubles on access services. This gateway gives CLECs the ability to report troubles for designed (circuit-ID-based) services, such as resold complex private line services, or designed UNEs, or interconnection trunking. No CLEC has chosen to use the capability provided by the IXC ECTA Gateway.

In November 1997, BellSouth also began offering CLECs machine-to-machine access through the Local ECTA Gateway using industry standards for the exchange trouble reporting and notification information. To comply with a new industry standard, ECTA was enhanced on October 28, 1999, to provide CLECs with the ability to request a mechanized loop test ("MLT") without generating a trouble report. Currently, ECTA Local provides industry-standard nondiscriminatory access to the BellSouth's maintenance OSS for both telephone-

number services (LMOS) and nondiscriminatory access for circuit-identified services - *i.e.*, designed and non-designed services (WFA). ECTA Local supports both resold services and UNEs. Some CLECs may refer to ECTA Local as an "electronic bonding" maintenance and repair interface.

The *ECTA Start-Up Guide* is attached as Exhibit OSS-55. This guide provides CLECs with an overview of the ECTA gateway, including a discussion about the appropriate ANSI standards. It supplements the generic *Joint Implementation Agreement for Electronic Communications Trouble Administration Gateway for Local Service Between CLEC and BellSouth Telecommunications, Inc.*, which is attached as Exhibit OSS-56.

In the Georgia Test, KPMG found that BellSouth satisfied all of the test criteria for functional testing and capacity management evaluation of ECTA, (MTP, at VII-B-7 – VII-B-9; VII-F-6 – VII-F-13; STP, at VI-C-7 – VI-C-12).

Q. WHAT FUNCTIONS ARE AVAILABLE TO USERS OF ECTA LOCAL?

A. Following the industry standard for local exchange trouble reporting and notification, the functions available to users of ECTA Local are:

- the ability to enter a report;
- the ability to modify a report;
- the ability to obtain status information during the life of the report; and
- the ability to cancel a report.

- when repairs are complete and service has returned to normal, an automatic notice is sent to the CLEC.
- The ability to request and obtain Mechanized Loop Testing (“MLT”) test data.

Q. PLEASE DESCRIBE ECTA LOCAL “PHASE II.”

A. ECTA Local "Phase II" was implemented on June 25, 1999. This implementation was "transparent" to the CLECs using ECTA Local - that is, there was no need for them to rewrite their side of the interface. Phase II added the ability for CLECs to report troubles for non-designed UNE loops. Non-designed loops are identified by a circuit ID and are supported in LMOS (that is, they are not supported in WFA and TAFI, even though designed UNEs with circuit IDs are handled in WFA and CLECs could report for designed UNEs through ECTA from its inception). Phase II also enhanced BellSouth's ability to mechanize the analysis of certain line troubles.

Q. HAVE ANY CLECS USED ECTA LOCAL?

A. Yes. The ECTA Local interface was implemented pursuant to AT&T's and MCI's Interconnection Agreements, which specifically required an industry standard machine-to-machine interface for maintenance and trouble reporting rather than the non-standard functionality of TAFI. MCI WorldCom began sending trouble reports through ECTA Local on July 27, 1998, and now averages approximately 50-100 reports a month. Sprint completed end-to-end testing of ECTA on

November 30, 1999, but has not yet chosen to transmit any reports. AT&T implemented ECTA Local in mid-March, 1998. Shortly thereafter, apparently for internal business reasons, AT&T advised BellSouth that it had ceased sending trouble reports via ECTA Local and would report troubles manually. Although AT&T has indicated to BellSouth in 2000 and 2001 that it was interested in resuming use of ECTA, it has not yet done so. BellSouth started testing in the summer of 2001 with a fourth and fifth CLEC to implement ECTA.

BILLING

Q. WHAT HAS THE FCC HELD WITH RESPECT TO BILLING?

A. The FCC Rules state (at §51.5) that "[b]illing involves the provision of appropriate usage data by one telecommunications carrier to another to facilitate customer billing with attendant acknowledgments and status reports. It also involves the exchange of information between telecommunications carriers to process claims and adjustments."

Q. DOES BELLSOUTH PROVIDE CLECS WITH NONDISCRIMINATORY ACCESS TO BILLING?.

A. Yes. The testimony of David Scollard describes in depth BellSouth's nondiscriminatory access to billing provided to CLECs.

Q. PLEASE SUMMARIZE YOUR TESTIMONY WITH RESPECT TO BELLSOUTH'S PROVISION OF NONDISCRIMINATORY ACCESS TO OSS.

A. BellSouth's interfaces, processes, and procedures provide CLECs with access to the required OSS information and functions in substantially the same time and manner as BellSouth's access for its retail customers, and therefore conform to the FCC's definition of nondiscriminatory access.

II. GEORGIA INDEPENDENT THIRD-PARTY OSS TESTING

Q. PLEASE PROVIDE THE COMMISSION SOME BACKGROUND REGARDING THE GEORGIA INDEPENDENT THIRD-PARTY OSS TEST ?

A. Certainly, and I will note that a complete report on the Test – including the full details of the background, scope, methodologies and results – as supplied to the GPSC – are provided as Exhibits OSS-64-66.

Q. PLEASE DESCRIBE THE SCOPE OF THE TEST.

A. In its Order in Docket 8354-U establishing the third-party Test, the GPSC specified that the Test should focus on the following service delivery methods:

- UNE analog loops – with and without number portability (both Interim Number Portability [INP] and Local Number Portability [LNP]),
- UNE switch ports, and

- UNE loop/port combinations

These categories would each be evaluated based upon the following five OSS functions: Pre-ordering, Ordering, Provisioning, Maintenance and Repair, and Billing.

The Order also called for normal- and peak-volume testing of the OSS interfaces supporting the above-mentioned categories (except Billing) for both resale and UNE service requests.[55] Further, the Order also called for a review of BellSouth's Percent Flow-through Service Request Report.

In response to the requirements of the Order, BellSouth developed and filed a MTP which was subsequently approved by the GPSC on May 29, 1999. I would also like to note here that, although not required by the Order, BellSouth introduced and submitted a change management process for evaluation with the MTP.

The LENS interface, as well as the manual ordering processes, were not tested because they had been subject to commercial usage at the time the test was begun. For example, in May, 1999, 153 CLECs were using LENS for pre-ordering and ordering region-wide. In addition, BellSouth was processing over 100,000 orders per month on a manual basis.

[55] Normal-volume testing data was evaluated based on 2001 year-end projections for 100% of CLEC daily service request volume over a 2-10 hour period. Peak-volume testing data was evaluated based on 2001 year-end projections for 150% of CLEC daily service request volume over a 2-8 hour period.

As mentioned above, a key goal of the GPSC's independent test was to assess BellSouth's readiness to support CLEC entry into the local telecommunications market as it relates to the ability of a CLEC's Local Service Requests ("LSRs") to flow through BellSouth's OSS. Flow-through ("FT") is defined as electronic transmission of a CLEC LSR through an ordering interface with acceptance into BellSouth's downstream OSS, culminating in the development of local BellSouth service orders – all without manual intervention. BellSouth currently produces a Percent Flow-through Service Request Report to assess the degree to which LSRs submitted to BellSouth actually flow through. Because of the importance of flow-through reporting for CLEC entrance into the local market, the GPSC ordered a separate, complete evaluation of this reporting procedure as part of the Test under the MTP.

The FT Evaluation included the following:

- Audit of the calculations used by BellSouth for FT reporting according to the definitions, exclusions, Business Rules and calculations documented in the applicable versions of the Service Quality Measurements ("SQM") guidelines;
- Documentation of systems, processes, procedures and work papers used to calculate summary and detailed flow-through percentages;
- Accuracy of the reported values of published FT reports for all CLECs using raw data and documentation provided by BellSouth;
- Evaluation of the processes and Business Rules used to determine the cause (CLEC vs. BellSouth) of relevant errors resulting in fallout;

- Assistance provided by BellSouth to CLECs in understanding the flow-through process and its reports, and verifying the monthly percentage FT reports;
- FT reporting categorization of LSRs submitted during the EDI and TAG functional tests; and
- Accuracy of the reported values of BellSouth FT reports using data collected from the EDI and TAG functional tests, and accuracy of the documentation provided by BellSouth.

On January 12, 2000, the GPSC issued a second Order obligating KPMG to develop a STP to expand the scope of the original third-party test. KPMG submitted the STP to the GPSC on January 24, 2000. KPMG revised the STP following receipt of CLEC comments, and re-filed it on both March 2, 2000 and March 17, 2000. The STP was subsequently approved by the GPSC.

The STP established the following additional areas of evaluation:

- Electronic Interface Change Control Process (formerly "EICCP", but now referred to as the Change Control Process ("CCP")) as applied to the implementation of OSS '99;
- Pre-ordering, ordering and provisioning of various types of Digital Subscriber Loop- ("xDSL") capable loops;
- Pre-ordering, ordering, provisioning, maintenance and repair, and billing of resale services

- Processes and procedures supporting the collection and calculation of performance data.

Q. WHAT INDEPENDENT AUDITORS CONDUCTED THE INDEPENDENT THIRD-PARTY TEST?

A. Hewlett-Packard ("HP") served initially as the Test manager, with KPMG serving as the Test auditor. HP developed a revised MTP that was filed with GPSC on August 16, 1999.

On September 9, 1999, HP, BellSouth, the GPSC and KPMG agreed that KPMG would assume the additional role as Test manager. KPMG took over responsibility for Test activities already in progress, and for planning and executing those activities not yet initiated. This appointment made sense, particularly in light of the fact that KPMG developed and conducted the third-party test in New York upon which the FCC relied to grant Bell Atlantic's 271 application. Because KPMG had not been involved in the initial drafting of the MTP – and to improve the clarity of test definitions – KPMG subsequently filed MTP revisions with the GPSC on October 15, 1999, December 15, 1999, and March 31, 2000.

Q. PLEASE BRIEFLY DESCRIBE THE APPROACH USED BY KPMG IN THE TEST OF BELLSOUTH'S WHOLESALE ENVIRONMENT.

A. In both the MTP and the STP, KPMG divided the test of the wholesale environment into ‘domains’ to facilitate parity comparisons – where appropriate – to BellSouth's retail operations for selling local services.

The MTP contained five (5) Test domains:

- Pre-ordering (designated PRE)
- Ordering and Provisioning (O&P)
- Maintenance and Repair (M&R)
- Billing (BLG)
- Change Management (CM)

The STP also contained five (5) Test domains:

- Pre-ordering, Ordering and Provisioning (POP)
- Billing (BLG)
- Maintenance and Repair (M&R)
- Change Management (CM)
- Performance Metrics (Metrics)

(Note: Capacity Management evaluations of xDSL-associated pre-ordering and ordering processes were included in the POP domain)

Within each domain in the MTP and the STP, KPMG applied specific methods and procedures to evaluate BellSouth's performance against specific Test targets. Details on the evaluation and analysis methods, and the results of each evaluation are provided in the individual Test sections of KPMG’s Final Report, attached as

Exhibits OSS-64-66. A summary of the evaluations and results is provided in Section III, Test Summaries of the Final Report.

Q. PLEASE DESCRIBE THE TYPES OF TESTS PERFORMED AS PART OF THE INDEPENDENT THIRD-PARTY TESTING PROCESS.

A. When KPMG developed the prior test for Bell Atlantic – New York's OSS, it identified two fundamental types of tests that are useful in an evaluation of an ILEC's provision of wholesale services to CLECs: transaction-based and operational. Both of these test types were used in the Georgia Third-Party Test.

Attached as Exhibit OSS-71 is a comparison of the Georgia, New York, and Texas third-party tests.

Q. PLEASE DESCRIBE THE TRANSACTION-BASED TESTING.

A. The goal of transaction-based testing is to live the CLEC experience. In Georgia, KPMG established a pseudo-CLEC to submit pre-order, order and repair transactions using BellSouth's electronic interfaces as a real CLEC would do. At the same time, the activities of the KPMG pseudo-CLEC were 'blind' to BellSouth to ensure non-preferential treatment. Transaction-based system testing was utilized extensively in both the MTP (for PRE, O&P, M&R and BLG domains) and the STP (for POP, M&R and BLG domains). These tests were 'non-invasive' in that they depended upon arms-length interaction (e.g., order submissions, trouble reports, receipt of bills) using publicly available interfaces and documentation.

KPMG and HP worked together to administer the transaction-based tests. KPMG acted as the pseudo-CLEC, and assumed CLEC responsibilities such as understanding the ordering business rules, creating and tracking service requests and subsequent service orders, entering trouble tickets, and evaluating the billing that resulted from completed orders. HP's role was that of a CLEC's information technology group – establishing the electronic interface link with BellSouth, programming and translating between business rule and electronic interface rule formats, and resolving problems with missing orders and responses.

For the MTP, the PRE and O&P transaction-based tests utilized the Telecommunications Access Gateway ("TAG") and Electronic Data Interchange ("EDI") interfaces, both constructed by HP. Bills were processed for the BLG evaluations through the Customer Records Information System ("CRIS") and Carrier Access Billing System ("CABS") invoicing systems, while usage was processed in the Optional Daily Usage File ("ODUF") and Access Daily Usage Files ("ADUF") systems. M&R trouble tickets were submitted through the Trouble Analysis Facilitation Interface ("TAFI") and the Electronic Communications Trouble Administration ("ECTA") Gateway.

While no transactions were prepared specifically for the FTE portion of the MTP, transaction-driven system testing was utilized extensively in the O&P domain, including transactions designed to test basic flow-through and fallout business rules. The transaction-based portion of the FTE reviewed the flow-through status of transactions submitted by O&P in testing the TAG and EDI interfaces and comparing their status to KPMG expectations.

For the STP, the POP transaction-based tests also utilized TAG and EDI. Bills were processed for the BLG evaluations through CRIS, while usage was processed in the ODUF system. M&R trouble tickets were submitted through both TAFI and ECTA.

KPMG's testing pursuant to the MTP and STP was designed to be broader in scope than the ordering environment of any one CLEC. However, it was not intended to be an exhaustive study of all combinations and permutations of all features and functions across all offered resale, UNE or xDSL services. In fact, in certain situations – such as LNP – KPMG lacked access to facilities or registrations to perform certain order types. In order to fill this gap, KPMG – in collaboration with the GPSC – solicited the participation of actual CLECs currently doing business with BellSouth in Georgia to execute LNP service requests.

Q. PLEASE DESCRIBE THE OPERATIONAL TESTING.

A. Operational tests for the MTP and STP focused on the form, structure and content of the business process being studied. This test method was used to evaluate BellSouth's day-to-day operations and operational management practices, including procedural development and procedural change management. These tests were 'invasive' in that KPMG had access to documentation, personnel and procedural descriptions that are not necessarily publicly accessible.

Operational analysis also evaluated the results of a process to determine if the

process appeared to function correctly in practical application; i.e., in accordance with BellSouth documentation and expectations for outcomes. In some cases, KPMG reviewed management practices and operating procedures, comparing the results against legal or statutory requirements, or against 'best practices' identified by KPMG.

Another portion of the operational testing in the MTP involved interviewing selected CLECs to gain an understanding of their experience with BellSouth's FT reporting. Participants were asked to provide documentation of attempts to gain access to the FT reports and to reconcile their actual flow-through with that reported by BellSouth, as well as any issues observed.

Q. HAS CLEC INPUT BEEN CONSIDERED DURING THIRD-PARTY TESTING, AND HAVE THE CLECS BEEN ALLOWED TO TAKE AN ACTIVE ROLE IN THE PROCESS?

A. The CLECs have been active throughout the third-party testing process in Georgia. The GPSC considered the input of the CLECs, such as that obtained from the OSS workshop in 1997 and the matrix mentioned above, as well as CLEC filings encouraging the Commission to adopt a third-party testing plan. The CLECs provided input to the formation of the intital MTP, as well as the subsequent plans. The CLECs have also filed comments on the MTP and STP, and on KPMG's status reports. Beginning in January, 2000, with the support of BellSouth and the GPSC, KPMG invited the CLECs to participate in weekly conference calls to discuss the status of the third-party test, including exception

resolution, and to entertain any questions the CLECs might have about the progress of the test. The first meeting, face-to-face rather than by teleconference, was held on February 1, 2000. A second face-to-face meeting was held on April 26, 2000. The weekly teleconferences continued until the testing was completed. CLECs were also involved in the testing itself. CLECs actually submitted orders throughout the test in various areas (LNP and xDSL) and were involved in the numerous interviews with KPMG as the test progressed.

Q. WOULD YOU PLEASE EXPLAIN THE PURPOSE OF THE 'TEST BED' FOR WHICH BELLSOUTH HAD DEVELOPMENT RESPONSIBILITY PRIOR TO THE START OF THE TEST?

A. Prior to the Test, BellSouth was required to establish and provision a 'test bed' of initial accounts that would represent a market share of BellSouth or other CLEC accounts that would be 'lost' to KPMG's pseudo-CLEC. To accurately portray a live wholesale environment, the test bed was created in BellSouth's production system – not in a separate, or standalone, system.

KPMG defined the test bed, using the UNE Test scenario descriptions in the MTP and the resale and xDSL Test scenario descriptions in the STP. KPMG developed test cases for each scenario, and defined line and account requirements for BellSouth to provision. These requirements covered a range of test-accounts for which service requests would be issued and provisioned, including these examples:

- type of account (BellSouth retail, CLEC UNE, KPMG resale, etc.)
- line counts (single line, multiline)
- service type (business, residential)
- features (call waiting, call forwarding, etc.)

These test bed accounts were established for seven (7) central offices, covering different rate centers and switch types. The test bed specifications submitted by KPMG to BellSouth did not indicate the subsequent order activity planned for those accounts by KPMG. BellSouth also provided KPMG with facility and customer information (such as cable-pair assignments, telephone numbers and addresses) required when populating specific types of service requests. Prior to the start of the Test, KPMG validated the provisioning of the test bed by BellSouth to ensure that the accounts had been established according to the requirement scenarios provided by KPMG.

Q. WHAT TYPE OF TEST PHILOSOPHY DID KPMG USE TO CONDUCT THE TEST?

A. KPMG employed a 'military-style' test philosophy, with the strategy of 'test until you pass'. The GPSC believed that the 'military style' test was in the best interest of all parties seeking an open, competitive market for local services in Georgia.

Q. HOW DID KPMG'S 'MILITARY-STYLE' TEST PROCESS WORK?

A. The 'military-style' process is a multi-step process administered by KPMG as follows:

- KPMG tested a component;
- KPMG informed BellSouth of any problems encountered by creating a written exception describing the failed component and the potential impact on a CLEC;
- BellSouth prepared a written response to the exception describing any intended fix;
- After BellSouth completed the fix, KPMG re-tested the component as required; and
- If the exception was cleared, then the process was considered complete and KPMG prepared a written closure statement for consideration by the GPSC. Otherwise, KPMG continued to cycle through this process until exception closure was reached.

Q. PLEASE DESCRIBE THE CRITERIA USED BY KPMG TO EVALUATE THE TEST RESULTS.

A. KPMG relied upon specific Test targets and their corresponding evaluation criteria as the basis for conducting the MTP/STP tests. The evaluation criteria were identified as the norms, standards, benchmarks, guidelines and expectations that were identified for the individual components being tested, and these criteria were also useful for identifying the scope of testing required and the approach to use for analysis of each component's Test results.

On June 6, 2000, the GPSC voted to approve a set of Service Quality Measurements ("SQM") to be used in KPMG's evaluation for the FT portion of the MTP. On January 16, 2001, the GPSC ordered a set of permanent performance measurements that differed in some cases from the original June 2000 Test standards. In cases where Test evaluation criteria mapped to a BellSouth SQM, the Test results were evaluated against the proposed standards. In cases where a standard did not exist, results were evaluated using criteria established based upon the professional judgment of KPMG.

KPMG analyzed each evaluation criterion individually in the MTP (including the FT portion) and the STP, and reported on each with its own result and comment. The five (5) categories of results (and their definitions) are:

- Satisfied – KPMG's analysis demonstrated that the evaluation criterion was satisfied through existing business operations components (e.g., procedure, system or document). A criterion was satisfied by meeting a quantitative, qualitative, parity or existence parameter established for purposes of the Test.
- Not Satisfied – KPMG's analysis demonstrated that the evaluation criterion was not satisfied through existing business operations components (e.g., procedure, system or document). A criterion was not satisfied by failing to meet a quantitative, qualitative, parity or existence parameter established for purposes of the Test.
- No Result Determination Made – Test results are presented as diagnostic information only (Not a category for the FT portion of the MTP).

- Not Complete – Test execution is in progress and/or exceptions remain open.
- Not Applicable

Exceptions were a means of identifying to BellSouth defects in its OSS components, processes or performance. Where applicable to an evaluation criterion, the significant details of an exception are documented in the 'Comments' column of the Results Summary for each test (contained in Exhibits OSS-64-66). Other items worthy of mention – but not necessarily presenting a significant business impact to CLECs – are also mentioned in the 'Comments' column.

Q. HOW DID KPMG SUMMARIZE THE RESULTS OF THE THIRD-PARTY TEST TO THE GEORGIA PUBLIC SERVICE COMMISSION?

A. As I stated earlier, I have attached the KPMG Final Reports as Exhibits OSS-64-66. In addition, KPMG issued an opinion letter, attached to my testimony as Exhibit OSS-67.

In the opinion letter, KPMG reported that the Test activities specified in the Test plans – with the exception of the metrics evaluations – were complete as of the date of the letter (March 20, 2001). KPMG also stated that it would file a supplemental report on the outstanding metrics criteria with the GPSC as soon as the metrics evaluations are complete.

KPMG's final opinion was favorable. After evaluating BellSouth across 1,173 test points in the MTP/STP/FT categories, KPMG concluded "that no deficiencies creating potentially material adverse impacts on competition currently exist in the Test categories of Pre-Ordering, Billing, Maintenance and Repair, Capacity Management, Change Management and Flow-Through". Further, in the Ordering and Provisioning categories, KPMG noted in its letter that "all evaluation criteria have been satisfied except those in three areas: timeliness of responses to fully mechanized orders; timeliness and accuracy of clarifications to partially mechanized orders; and, accuracy of translation from external (CLEC) to internal (BellSouth) service orders resulting in switch translations and directory listing errors". KPMG also reminded the GPSC that the GPSC would "be able to monitor these issues on an ongoing basis through performance measures and/or penalty plans in place to address [them]".

In addition to its comments on the few 'Not Satisfied' criteria, KPMG further explained that, for the number of Metrics items that remain 'Not Complete' as of the date of the letter, "KPMG metrics testing is ongoing; and BellSouth has a number of initiatives in place… to address the deficiencies identified to date by KPMG". KPMG also noted that "in our judgment, inaccuracies in metrics reporting would not in and of themselves have a materially adverse impact on competition".

In general, and in regard to specific Test criteria, BellSouth believes that KPMG's evaluation and report to the GPSC validates our assertions that BellSouth's interfaces, processes and procedures provide nondiscriminatory access to its OSS,

and, therefore, conform to FCC requirements. Further, the KPMG report verifies that there are no barriers to CLECs entering the local market in the nine-state BellSouth region.

Q. WOULD YOU PLEASE FURTHER EXPLAIN THE EXCEPTIONS FOR WHICH BELLSOUTH RECEIVED THE 'NOT SATISFIED' RATING, AND IDENTIFY THE COURSE OF ACTION THAT BELLSOUTH HAS TAKEN – OR WILL TAKE – TO RESOLVE THOSE ISSUES?

A. I will be happy to individually address each exception that pertains to my area of expertise. In KPMG's Final Report, the 'Not Satisfied' evaluation criteria covered 16 tests involving fully- and partially-mechanized orders. I will address 10 of these exceptions. The other six "not satisfieds," and the "not completes" are addressed in the testimony of Alphonso Varner.

As I address each of the exceptions from the Test, I will provide the title of the actual test from which the exception was created. Footnotes will provide the test numbers. This information can be used to cross-reference the complete Test report contained in Exhibits OSS-64-66.

Accuracy of System Responses - Partially-Mechanized – EDI & TAG[56]

Q. WHAT TESTS WERE PERFORMED BY KPMG ON THE EDI AND TAG INTERFACES TO EVALUATE THE ACCURACY OF SYSTEM RESPONSES FOR PARTIALLY-MECHANIZED SERVICE REQUESTS?

[56] Master Test Plan-O&P 1-2-1 and O&P 2-2-1

A. KPMG performed functional tests of EDI and TAG. The objective of the EDI Functional Test (O & P-1) and the TAG Functional Test (O & P-2) was to evaluate the functionality of BellSouth's ordering systems in processing LSRs for UNEs submitted via EDI and TAG. Specifically, KPMG evaluated the interfaces to determine if they provided the expected system responses (O&P 1-2-1 and O&P 2-2-1). KPMG's standard was that 99% of the expected system and service representative responses should be received from EDI and TAG.

Q. WHAT WERE THE RESULTS OF THE FUNCTIONAL TEST FOR THE PROCESSING OF PARTIALLY-MECHANIZED LSRS FOR UNES VIA EDI AND TAG?

A. During a functional test on August 25, 2000, KPMG received completion notifications for 86% of EDI transactions for which KPMG expected a completion notification. KPMG also received completion notifications for 84% of TAG transactions for which KPMG expected a completion notification. As a result of these below-standard percentages, KPMG issued Exception 118.

Q. HOW DID BELLSOUTH ADDRESS EXCEPTION 118?

A. BellSouth investigated the 30 service requests related to this exception and found that 13 of these 30 requests contained incorrect information in the listed name code field. Because BellSouth's systems did not detect KPMG’s incorrect information in the listed name code field, KPMG’s LSRs flowed through BellSouth's systems, and received FOCs. The resulting orders, however, dropped

out for manual handling downstream as a result of the incorrect listed name code information. When the LCSC personnel reviewed these orders, they mistakenly identified them as internal test orders and cancelled them.

Had these requests been handled correctly, BellSouth would have returned these requests to KPMG for clarification. After KPMG had corrected and resent these requests, BellSouth would have processed the requests and KPMG would have received FOCs. Because these 13 orders were cancelled, KPMG never received the appropriate clarification or confirmation. This situation does not indicate systemic problems with BellSouth's issuance of clarifications.

Q. HOW WILL BELLSOUTH PREVENT FUTURE ERRORS BY CLECS THAT HAVE INPUT INCORRECT INFORMATION INTO THE LISTED NAME CODE FIELD?

A. To prevent errors of this type in the future, BellSouth has submitted a change request to implement functionality that would clarify the errors before the requests reach BellSouth's service order generator. This clarification would require the CLECs to correct the error before the request generated service orders and an FOC, or moved downstream.

Q. WHAT DID BELLSOUTH’S INVESTIGATION REVEAL ABOUT THE REMAINING REQUESTS?

A. BellSouth determined that two of the 30 requests submitted by KPMG contained

incorrect miscellaneous account numbers. Like the requests described above, these requests suffered errors in BellSouth's downstream systems after KPMG had received mechanical FOCs. BellSouth service representatives mistakenly cancelled these two requests rather than sending the manual clarifications to KPMG.

BellSouth also found that another four of the 30 requests were handled incorrectly by BellSouth's service representatives. BellSouth has trained its representatives on the correct procedures to prevent future occurrence of all of these errors.

Finally, BellSouth disagreed with KPMG's findings for four requests (Purchase Order Numbers 625R214PTJ000006*00, 318R112PEH000001*00, 440R124PTJ000002*00 and 801R222PEI000003*00) because it sent completion notifications for these requests upon successful provisioning of the BellSouth service orders.

Q. DID KPMG ALSO TEST THE EDI AND TAG INTERFACES FOR SYSTEM RESPONSES FOR RESALE SERVICES?

A. Yes. KPMG also tested EDI and TAG to determine if these interfaces provided the expected system responses for orders for resale services (Supplemental Test Plan PO&P 11-2-1). This evaluation criterion is 'Satisfied' in KPMG's report.

Q. WHAT IS BELLSOUTH'S CONCLUSION ON THE 'NOT SATISFIED' ISSUES IN EXCEPTION 118?

A. For the reasons stated above, BellSouth believes that the 'Not Satisfied' O&P 1-2-1 and 2-2-1 deficiencies attributed to BellSouth have been corrected, and that such correction will prevent these deficiencies from causing any material adverse impact on local competition.

Accuracy of Rejects and Clarifications – Partially-Mechanized – EDI & TAG[57]

Q. HOW DID KPMG TEST THE ACCURACY OF REJECTS AND CLARIFICATIONS OF PARTIALLY-MECHANIZED ORDERS SUBMITTED THROUGH EDI AND TAG, AND ON WHAT BASIS?

A. As part of the functional tests of EDI and TAG, BellSouth's systems and service representatives were tested to determine if they provided clear, accurate, and complete error clarifications for UNEs. KPMG examined a sample of error clarification notices for clarity, accuracy, and completeness in accordance with BellSouth's Business Rules in the Local Exchange Ordering ("LEO") Guide, Volume 1. KPMG determined an error was accurate when it received a response type that was relevant to the type of LSR submitted. That is, the clarification was sent by BellSouth in response to an erred LSR that contained: a) all expected data elements; b) no unexpected data elements; c) all required data values in the expected format, and; d) no prohibited values. Expected and prohibited values were developed based on the LEO Guide, Volume 1.

Initially, KPMG received a number of clarifications for valid LSRs that were sent via EDI and TAG, and KPMG issued Exception 47 as a result.

[57] Master Test Plan - O&P 1-4-2 and 2-4-2

Q. HOW WERE THE ISSUES RAISED IN EXCEPTION 47 RESOLVED BY BELLSOUTH?

A. As a result of the clarifications that were sent for valid LSRs via EDI and TAG, BellSouth provided additional training to its service representatives to correct this problem. The clarifications that KPMG received after this training were accurate. As a result, Exception 47 was closed as 'Satisfied' on September 22, 2000.

Q. DID THE ACTIONS TAKEN BY BELLSOUTH TOTALLY ELIMINATE THE PROBLEM FROM EXCEPTION 47?

A. Unfortunately, no. During a re-test on other issues which began on August 25, 2000, KPMG noticed that 18% of the clarifications for partially-mechanized LSRs sent via EDI, and 7% of the clarifications for those sent via TAG, were inaccurate. Although this re-test was not designed to measure the accuracy of clarifications, KPMG nevertheless re-opened Exception 47.

Q. WHAT WAS BELLSOUTH'S RESPONSE TO THE RE-OPENED EXCEPTION 47?

A. BellSouth investigated KPMG's findings, and agreed that the inaccuracies were attributable to BellSouth service representatives in the LCSC. In order to prevent future occurrences, BellSouth retrained the service representatives on the appropriate Business Rules in November and December 2000.

Q. DOES BELLSOUTH BELIEVE THAT IT HAS NOW ADDRESSED THE CONCERNS NOTED IN KPMG'S EXCEPTION 47?

A. Yes. BellSouth believes that the retraining of its LCSC service representatives and other LCSC initiatives will prevent future occurrences and will not cause any material adverse impact on local competition.

Accuracy of Rejects and Completions – Partially-Mechanized – Resale – EDI[58]

Q. HOW DID KPMG TEST THE ACCURACY OF REJECTS AND COMPLETIONS OF PARTIALLY MECHANIZED ORDERS FOR RESALE SERVICES VIA THE EDI INTERFACES?

A. As part of the Supplemental Test, KPMG performed a "Resale Functional Evaluation" of EDI to evaluate BellSouth's OSS and the processes associated with the pre-ordering and ordering systems in processing pre-order queries and firm requests. Specifically, KPMG evaluated BellSouth's systems and service representatives to determine whether they provided clear, accurate, and complete errors for requests for resale services (PO&P 11-4-4).

Q. WHAT WERE THE RESULTS OF THESE TESTS?

A. During the test by KPMG in January 2001, KPMG received a number of inaccurate clarifications for partially-mechanized resale service requests submitted through EDI. The clarifications for EDI requests contained a message

[58] Supplemental Test Plan - PO&P 11-4-4

stating that KPMG had used invalid data. KPMG investigated the clarifications and found that its requests conformed to the Business Rules. As a result, KPMG issued Exception 132.

Q. HOW DID BELLSOUTH ADDRESS EXCEPTION 132, AND WHAT CONCLUSION WAS DRAWN?

A. BellSouth investigated KPMG's findings and discovered that the service representatives in the LCSC incorrectly populated the error information on KPMG's clarifications. BellSouth retrained service representatives on these errors on February 9, 2001. BellSouth determined that KPMG did not receive the error message for the three LSRs submitted by KPMG after February 9, 2001.

Therefore, BellSouth believes that this was an isolated incident and that the retraining of its service representatives and other initiatives within the LCSC will prevent this from causing any material adverse impact on local competition.

Accuracy of Firm Order Confirmations ("FOCs") – Resale– EDI and TAG[59]

Q. HOW DID KPMG EVALUATE BELLSOUTH'S SYSTEMS AND REPRESENTATIVES REGARDING THE ACCURACY OF FOCS?

A. As part of the Supplemental Test, KPMG performed a "Resale Functional Evaluation" of EDI and TAG to evaluate BellSouth's OSS and the processes associated with the pre-ordering and ordering systems in processing pre-order

[59] Supplemental Test Plan - PO&P 11-4-3

queries and firm requests. Specifically, KPMG evaluated BellSouth's systems and service representatives to determine whether they provided clear, accurate, and complete FOCs for resale orders sent via EDI and TAG (PO&P 11-4-3).

KPMG compared the FOCs it had received via EDI and TAG against the requirements of the Business Rules. KPMG determined it should not have received FOCs because it had submitted LSRs with errors. KPMG believed it should have received rejects or clarifications instead for 14 requests. Subsequently, KPMG issued Exception 95.

Q. WHAT WAS BELLSOUTH'S RESPONSE TO KPMG'S FINDINGS REGARDING THE ISSUANCE OF FOCS?

A. BellSouth investigated the 14 FOCs and the related requests for the resale services that KPMG believed were inaccurate. BellSouth agreed with KPMG about one request, which had an error caused by a service representative in the LCSC. BellSouth retrained the representatives in March 2001.

On the other hand, BellSouth disagreed with KPMG about the remaining 13 FOCs. KPMG claimed that it should have received rejects or clarifications instead of FOCs for five orders because it had omitted required characters in the directory listing field. BellSouth disagreed because the business rules (LEO Guide, Volume 1) instruct the CLECS to use the designation "(OAD)" to tell BellSouth's systems that a listed address is to be omitted. The parentheses inform BellSouth's systems that it should interpret "(OAD)" as an instruction to omit the

listed address, and not that it should interpret “(OAD)” to be letters in the address. The requests submitted by KPMG incorrectly omitted the parentheses. When KPMG omitted the parentheses, BellSouth's systems properly interpreted “OAD” as a word in the address and processed the request according to KPMG’s instructions. KPMG stated that it had received error messages for other similar requests, but BellSouth believes that these requests must have fallen out for manual handling or for other reasons.

For six of the requests, KPMG explained that it had populated an invalid end user address and should have received rejects or clarifications for these requests instead of FOCs. Again, BellSouth disagreed. Although the business rules require the CLEC to include the end user’s address on the request, BellSouth has determined that, if the end user’s telephone number is correct, the address is not required to process requests for resale activities such as suspend, restore, and disconnect, which occur after the end user has established service with the CLEC. BellSouth's systems have been programmed to use the end user’s telephone number to process the order when the address is incorrect. This reduces the number of clarifications that would be sent if a valid address were required, and also increases flow-through. BellSouth has submitted a change request to clarify this point in the LEO Guide. On April 30, 2001, BellSouth will post a revised issue of the LEO Guide that will include notes explaining the use of the end user’s address and telephone numbers.

For two other requests, KPMG entered invalid characters in the service center field. Therefore, it expected rejects or clarifications instead of the FOCs that it

received. BellSouth disagreed because the business rules require the CLEC to populate the field with four alphanumeric characters and – although not a requirement – states that they *should* use "LCSC". Although the Ordering and Billing Forum ("OBF") requires this field on the service request, the information in the field is currently not used by BellSouth to process requests. At this time, requests flow through as long as there are four characters in the field. In the future, if CLECs are able to route their resale requests to a particular service center, BellSouth will program its systems to clarify the requests if the field is not properly populated with the correct service center characters.

Q. DID KPMG PERFORM TESTING OF THE ACCURACY OF FOCS FOR UNE REQUESTS SUBMITTED VIA EDI AND TAG IN THE SAME MANNER AS THEY DID FOR RESALE?

A. Yes. KPMG performed similar functional tests of EDI and TAG that evaluated whether BellSouth's systems and service representatives provided clear, accurate, and complete FOCs for requests for UNEs sent via EDI and TAG. Both evaluation criteria (O&P 1-4-1 and O&P 2-4-1) are 'Satisfied'.

Accuracy of Switch Translations for UNEs – EDI and TAG[60]

Q. HOW DID KPMG PERFORM ACCURACY TESTING FOR PROVISIONING OF SERVICE ORDERS FOR CLEC-REQUESTED UNES?

[60] Master Test Plan - O&P 5-2-1

A. KPMG performed a comprehensive review of BellSouth's ability to accurately and expeditiously complete the provisioning of the service orders for CLEC-requested UNEs. KPMG tested the accuracy of the provisioning by examining the switch translations for service orders on requests for UNEs placed via EDI and TAG (O&P 5-2-1). Because there is no standard approved by the GPSC or documented by BellSouth, KPMG applied a standard of 95% for the provisioning accuracy of the switch translations.

KPMG reviewed the switch translations for 89 lines to determine if the data retrieved from the switch matched the information on the corresponding and confirmed LSRs. Seventy-seven lines (87%) were provisioned correctly. The 12 lines that were provisioned incorrectly were related to LSRs that were partially-mechanized. As a result, KPMG issued Exception 76.

Q. HOW DID BELLSOUTH RESPOND TO EXCEPTION 76?

A. BellSouth investigated the 12 orders that KPMG identified and agreed that the switch translations were incorrect. Eight orders had the wrong long distance carrier in the switch translations, and these errors were attributable to service representatives in the LCSC. BellSouth also agreed with KPMG that four of the orders were not working because the BellSouth service representative recognized that no working service was assigned.

Q. WHAT HAS BELLSOUTH DONE TO ADDRESS THIS PROBLEM IN THE FUTURE, AND HAS THAT RESPONSE RESOLVED THE ‘NOT SATISFIED’

EVALUATION CONTAINED IN KPMG'S FINAL REPORT?

A. To prevent this problem from occurring in the future, BellSouth retrained the service representatives on details appropriate to these errors. Although BellSouth believes this deficiency has been properly and effectively addressed, KPMG, nevertheless, shows evaluation criterion O&P 5-2-1 as 'Not Satisfied' in its final report.

Accuracy of Directory Listings and Switch Translations for Resale – EDI and TAG[61]

Q. HOW DID KPMG TEST THE ACCURACY OF DIRECTORY LISTINGS AND SWITCH TRANSLATIONS FOR RESALE?

A. As part of the Supplemental Test, KPMG performed a "Provisioning Verification Evaluation". Specifically, KPMG tested the accuracy of the provisioning by examining the directory listings and the switch translations for service orders from CLEC resale requests placed via EDI and TAG (PO&P 13-4-2 and 13-4-3). Because there is no standard approved by the GPSC or documented by BellSouth, KPMG applied a standard of 95% for the provisioning accuracy of directory listings and switch translations.

KPMG reviewed 88 directory listings to determine if BellSouth had provisioned the listings correctly. Seventy-seven listings (88%) were provisioned correctly. Of the 11 listings that KPMG believed were incorrect, 8 flowed through

[61] Supplemental Test Plan - PO&P 13-4-2 and PO&P 13-4-3

BellSouth's systems and 3 were partially mechanized. KPMG reviewed 174 switch translations to determine if the data retrieved from the switch matched the information requested in the corresponding and confirmed LSRs. 159 (91%) were provisioned correctly. Of the 15 that KPMG believed were incorrect, five flowed through BellSouth's systems and 10 were partially mechanized. As a result of these two tests, KPMG issued Exception 114.

Q. WHAT WERE THE RESULTS OF BELLSOUTH'S INVESTIGATION OF THE DIRECTORY LISTING ERRORS IN EXCEPTION 114?

A. BellSouth found that a service representative caused one of the 11 directory listings order errors, and BellSouth provided additional training to the service representative to correct the problem. Further, BellSouth found that one of the errors resulted when KPMG reused the same purchase order number for a request that had already been clarified for errors. KPMG should have sent the LSR with a different version of the original purchase order number, a process that is outlined in the LEO Guide, Volume 1. Two errors (representing 2% of the total orders reviewed) resulted when LESOG, a downstream BellSouth system, ignored the listing portion of the LSRs to change the service. BellSouth is in the process of correcting the problem in LESOG.

BellSouth agreed with KPMG's findings on the remaining seven request errors that occurred when KPMG erroneously placed seven resale requests while attempting to place directory listing requests. BellSouth is implementing a procedure that would make the request fall out mechanically before a service

representative manually receives the error.

Q. HOW HAS BELLSOUTH ADDRESSED THE FINDINGS OF THEIR DIRECTORY LISTING ERROR INVESTIGATION OF EXCEPTION 114?

A. BellSouth's findings indicated that, of the 88 directory listing service orders tested by KPMG, 11 contained errors. That resulted in an 87.5% accuracy rate. Though this percentage fell below the 95% benchmark assigned by KPMG, BellSouth has implemented procedures that should eliminate these errors for directory listing service orders generated by CLEC requests. In addition, KPMG tested the accuracy of provisioning by examining the directory listings service orders for CLEC-requested UNEs placed via EDI and TAG (O&P 5-2-5). This test criterion is 'Satisfied' in KPMG's report.

Q. WHAT WERE THE RESULTS OF BELLSOUTH'S INVESTIGATION REGARDING SWITCH TRANSLATION LINE ERRORS IN EXCEPTION 114?

A. BellSouth agreed with KPMG's findings on 14 of the 15 switch translation line errors. BellSouth verified eight service order errors for switch restorals. The analysis indicated that these service orders were automatic completion service orders and should have flowed through BellSouth's systems without manual intervention. The Wire Maintenance Center staff erroneously completed these service orders, and did not physically perform the switch translation work on, or prior to, the due date. Therefore, the service orders did not flow through the

systems. These eight switch translation resale lines contained incorrect information due to a mistake in handling the test account service orders associated with the test bed.

Another six errors resulted when a BellSouth service representative issued the incorrect call forwarding feature. BellSouth has addressed this situation by providing additional training to the service representative. On the other hand, BellSouth does not agree with KPMG about one of the errors. BellSouth found that the line was working in the switch when BellSouth sent the service order through to completion.

Q. WHAT IS BELLSOUTH'S CONCLUSION REGARDING THE TEST RESULTS OF THE SWITCH TRANSLATION LINE ERRORS?

A. BellSouth concluded that, of the 174 switch translations tested by KPMG, 14 contained errors, thus resulting in a 92% accuracy rate. This percentage is slightly below the 95% benchmark developed by KPMG, but is not an indicator that there are deficiencies in this area that have a materially adverse impact on a CLEC's ability to compete.

Timeliness of Clarifications - Partially-Mechanized – Resale – EDI and TAG[62]

Q. HOW DID KPMG PERFORM A TEST TO EVALUATE THE PROVISIONING OF TIMELY CLARIFICATIONS FOR PARTIALLY-MECHANIZED RESALE LSRS?

[62] Supplemental Test Plan - PO&P-11-3-3b

A. As part of the Supplemental Test, KPMG performed a "Resale Functional Evaluation" of EDI and TAG to evaluate BellSouth's OSS and the processes associated with the pre-ordering and ordering systems in processing pre-order queries and firm requests. One of the areas that KPMG evaluated was whether EDI and TAG provided timely clarifications for partially-mechanized LSRs (11-3-3b). The GPSC-approved standard for clarifications for partially-mechanized LSRs is 85% received within 24 hours.

The LSRs submitted by KPMG via TAG received clarifications within the following periods: 72% of the clarifications were received in less than 24 hours. An additional 22% were received within 48 hours. As a result, KPMG issued Exception 98.

Q. HOW DID BELLSOUTH RESPOND TO EXCEPTION 98?

A. BellSouth disagreed with KPMG about two requests because it found that it had either returned the clarification to KPMG in a timely manner, or that the clarification was sent later due to mistakes made by KPMG. On three of the requests, KPMG had selected a working or invalid telephone number, which required BellSouth to send a clarification to KPMG after the order had moved to BellSouth's downstream systems. BellSouth followed an established process in providing these clarifications, as is described in the LEO Guide, Volume 1. For the remaining 25 requests, BellSouth agreed with KPMG that it exceeded 24 hours for the clarifications. The last request in this particular test was sent to BellSouth on May 18, 2000. At that time, BellSouth's standard for returning

partially-mechanized clarifications was 48 hours. Under this internal standard, BellSouth returned 94% of the clarifications in question in a timely manner. KPMG, however, applied the GPSC's standard – 85% of the clarifications for partially-mechanized orders returned within 24 hours – which was not actually adopted until June 6, 2000.

Q. WHAT HAS BELLSOUTH DONE TO MEET THE COMMISSION'S STANDARDS FOR PARTIALLY-MECHANIZED CLARIFICATIONS AND OTHER NOTIFICATIONS?

A. In order to meet the GPSC's standards for partially-mechanized clarifications and other notifications, BellSouth has made process improvements and applied additional resources in the LCSCs. BellSouth also continues to investigate ways to improve flow-through of various service request types that are currently designed to fall out.

Q. HAVE BELLSOUTH'S ACTIONS RESOLVED THE ISSUES REGARDING EXCEPTION 98?

A. No. Because KPMG does not agree with BellSouth's response position for Exception 98, O&P 11-3-3b remains 'Not Satisfied' in KPMG's report.

Q. DID KPMG PERFORM TESTS REGARDING TIMELY CLARIFICATIONS FOR PARTIALLY-MECHANIZED ORDERS FOR UNES SIMILAR TO THOSE FOR RESALE THAT RESULTED IN EXCEPTION 98?

A. In January 2001, KPMG retested TAG and EDI to determine if those interfaces provided timely clarifications for partially-mechanized orders for UNEs (Master Test Plan O&P 1-3-2b and O&P 2-3-2b). The retest occurred after BellSouth added the resources to comply with the Commission's order. These test criteria are 'Satisfied' in KPMG's report. For this reason and those listed above, BellSouth believes that this 'Not Satisfied' test criterion is not likely to cause a materially adverse impact on competition.

Q. DOES BELLSOUTH BELIEVE THAT KPMG'S FINDINGS REGARDING PARTIALLY-MECHANIZED ORDERS REFLECT THE ACTUAL IMPACT TO THE CLEC'S END USER?

A. No. BellSouth agrees that the handling of partially-mechanized orders is critical for the CLECs, but BellSouth believes that KPMG's interpretation of the test data does not reflect the actual impact to the CLEC's end-user. Rather KPMG's interpretation tends to overstate the actual customer impacting errors. KPMG classified any difference between the LSR and the actual order as provisioned as a significant error, without attempting to make any judgment of the true impact of the error, and regardless of whether other items on the same order were provisioned correctly.

For example, KPMG submitted several LSRs that either converted retail service to resale service or converted resale service to UNE-P. When reviewing the LSR against the provisioned order, KPMG scored errors against them because the PIC code for the long distance carrier on the provisioned order was not modified to

conform to the PIC that KPMG put on the LSR. KPMG found that the end user had the same LD carrier that it had chosen before the conversion. All other items on the LSR, the primary purpose of which was to convert the end user from retail to resale (or resale to UNE-P), were properly handled. While BellSouth obviously erred in provisioning the long distance carrier, the effect of the impact to the end user can be stated in two very different ways.

- First: If KPMG were to test 10 orders, and if there were PIC errors on eight of the orders, KPMG could count each error as an entire order in error. KPMG then could calculate the accuracy rate for these transactions as 20%.

- Second: Consider, however, that each of these orders typically could contain 15 different line items, not just a PIC change item. If KPMG were to count the PIC error as 1 error out of a total of 15 items for each order, the accuracy rate for these orders would be 94.7%.

- BellSouth believes that the second method more accurately states the end user customers' experience with the service delivered, and thus is more indicative of the scope of the issue. The customers' perception of their experience can be more appropriately determined by looking at the metrics for Invoice Accuracy, which I discussed earlier. These metrics will demonstrate that the actual customer impact of these types of BellSouth errors is quite low.

III. BELLSOUTH'S OSS REGIONALITY

Q. DOES BELLSOUTH PROVIDE ONE REGIONAL SET OF INTERFACES THAT CLECS USE TO REQUEST RESALE AND UNE SERVICES?

A. Yes. BellSouth provides CLECs with one set of electronic and manual interfaces for all CLEC resale and UNE service requests throughout BellSouth's nine-state region – all of which provide nondiscriminatory access to BellSouth's OSS. Very simply put, a CLEC in Kentucky uses the same interfaces for access to the same BellSouth OSS as a CLEC in any other state in BellSouth's region. There is only one Telecommunications Access Gateway ("TAG"), RoboTAG™, Electronic Data Interchange ("EDI"), Local Exchange Navigation System ("LENS"), Trouble Analysis and Facilitation Interface ("TAFI"), Electronic Communications Trouble Administration ("ECTA"), Optional Daily Usage File ("ODUF"), Enhanced Daily Usage File ("EODUF"), and Access Daily Usage File ("ADUF").

To the extent that there are separate servers for processing CLEC requests via these interfaces, the servers use the same programming code and are designed to operate in an undistinguishable manner. The servers use the same type of hardware running identical software.

Additionally, service requests can be submitted manually (via fax machine) by CLECs throughout the BellSouth region, using the same national industry-standard Ordering and Billing Forum ("OBF") guidelines and business rules. (Note: In some cases, the OBF guidelines have been modified for BellSouth-

specific situations. Regardless, such modifications themselves are regional in scope.)

Q. PLEASE BRIEFLY DESCRIBE THE ELECTRONIC INTERFACES YOU REFERENCED IN YOUR PREVIOUS ANSWER.

A. A complete overview of these interfaces is contained in Section I of my testimony, but, for ease of reference, I will again briefly describe the interfaces BellSouth provides to CLECs.

Telecommunications Access Gateway ("TAG") – An electronic interface that provides a standard Application Programming Interface ("API") to BellSouth's pre-ordering and ordering OSS. Based upon industry-standard pre-ordering Common Object Request Broker Architecture ("CORBA") and, for ordering, the industry-standard Ordering and Billing Forum ("OBF") guidelines for CLEC Local Service Requests ("LSRs"). TAG pre-ordering can be integrated with TAG ordering, with the CLEC having the responsibility for the integration.

RoboTAG™ - An electronic Web-based interface to TAG, offered by BellSouth as an alternative for CLECs who have made the decision not to hire programmers to develop and maintain their own interface to TAG. Resides on a CLEC's Local Area Network ("LAN") server.

Electronic Data Interchange ("EDI") – Electronic interface to BellSouth's ordering OSS, which follows an industry-standard data transmission protocol

(EDI) for ordering, and the industry-standard OBF guidelines for LSR formatting. Can be integrated with TAG pre-ordering to create full pre-order/order functionality.

Local Exchange Navigation System ("LENS") – A non-integrateable Web-based electronic graphical user interface (GUI"), which requires software development only on BellSouth's side of the interface. Now a GUI to TAG, LENS, therefore, uses the TAG architecture and gateway for pre-ordering and ordering functionality. A LENS user must have, at a minimum, a personal computer, Web browser software, an Internet connection and a password from BellSouth.

Trouble Analysis and Facilitation Interface ("TAFI") – Direct interface to BellSouth's systems for trouble reporting and tracking. For use with Plain Old Telephone Services ("POTS").

Electronic Communications Trouble Administration ("ECTA") – Interface to BellSouth's systems for trouble reporting and tracking. Unlike TAFI, a CLEC's representative interacts with the CLEC's own computer software, which, in turn, interacts with the BellSouth OSS. Also for use with POTS.

Optional Daily Usage File ("ODUF") – Provides CLECs with usage records for billable call events recorded by BellSouth's central offices. Includes details (e.g., directory assistance, intraLATA toll, billable feature activations) for resold lines, Interim Number Portability ("INP") accounts, and unbundled switch ports.

Enhanced Daily Usage File ("EODUF") – Provides CLECs with usage data for local calls originating from resold flat-rate business and residential lines. Usage data includes date of call, 'from' number, 'to' number, connect time, conversation time, rate class, message type, billing indicators and 'bill to' number.

Access Daily Usage File ("ADUF") – Provides CLECs with records for billing interstate access charges to interexchange carriers for calls originating from, and terminating to, unbundled ports. Arranged on a contractual basis.

Q. ARE CLEC REQUIREMENTS FOR USING BELLSOUTH'S ELECTRONIC AND MANUAL INTERFACES THE SAME THROUGHOUT THE NINE-STATE BELLSOUTH REGION?

A. Yes. BellSouth has produced and published a comprehensive set of guides, procedures, information and job aids that apply to all CLEC service requests. This information is used by all CLECs – regardless of their location – to educate, inform and assist in the configuration of CLEC systems that will interface with BellSouth's regional OSS. For example, business rules for pre-ordering and ordering are provided in BellSouth's regional BellSouth Pre-Order Business Rules and BellSouth Business Rules for Local Ordering. These documents serve as a basis for CLEC pre-ordering and ordering interaction with BellSouth, whether the CLEC serves end users in any or all of the states in BellSouth's region. There are not separate business rules documents for different states in BellSouth's region, nor are there separate sections or pages within the Business Rules that apply to specific states.

In addition to the above-noted information provided by BellSouth, BellSouth offers a regional training program via live attendance and/or Web-based tutorials for CLECs to learn the skills necessary for completing and submitting correct local service requests ("LSRs") through BellSouth's interfaces. Training content is the same for all CLECs for all interfaces and forms, regardless of the states in which the CLECs serve end users.

Q. ARE CLECS REQUIRED TO BUILD AN ELECTRONIC INTERFACE FOR EACH STATE OF BELLSOUTH'S OPERATING REGION IN WHICH THE CLEC SERVES END USERS?

A. No. Like all of BellSouth's internal OSS, all of BellSouth's ordering interfaces are region-wide interfaces. A CLEC is not required to build a discreet TAG, EDI or RoboTAG™ interface for each state of BellSouth's operating region. Once a CLEC has constructed its side of the ordering interface, it can be used to submit LSRs for end users in any or all state(s) in BellSouth's operating region. In fact, many CLECs are currently in production ordering service via TAG, EDI, or RoboTAG™ in multiple states within BellSouth's region. BellSouth's side of the gateway consists of a single system that receives LSR transmissions from CLECs for end users in any of BellSouth's nine states.

Q. CAN CLECS SUBMIT LSRS ORDERING SERVICE FOR END USERS IN MULTIPLE STATES WITHIN BELLSOUTH'S REGION THROUGH ANY OF BELLSOUTH'S INTERFACES?

A. Once a CLEC builds its side of the TAG or EDI ordering interface, or if the CLEC uses LENS, its service representatives are able to submit LSRs ordering service for end users in multiple states within BellSouth's region. For example, if a CLEC submits LSRs for end users in Kentucky, Georgia or North Carolina for resale lines with features, the LSRs will be identical (assuming the features are the same) with the exception of customer-specific (not state-specific) fields such as "telephone number," "address," and "city/state/zip code," etc. LSRs reflect the following identical fields:

- "ACT" or activity type of "N" for new
- "REQTYP" or requisition type of "EB" for resale.
- "TOS" or type of service
- the "CC" field or CLEC company code is identical.

The remaining fields are customer-specific such as the fields for address, features, etc. In addition, the related service orders contain the same Universal Service Order Codes ("USOCs") as those specified on the LSR. For example, all appropriate features listed in the "Feature detail" section of the LSR appear on the appropriate page of the related service order.

As evidence of this consistency, I have provided Exhibit OSS-68 that includes a single CLEC's service requests for end users in different states, and the resulting similar BellSouth service orders, also from different states.

Q. WHY IS IT IMPORTANT THAT CLECS BE AWARE OF HOW TO CORRECTLY POPULATE BELLSOUTH'S INDUSTRY STANDARD LSR?

A. To ensure the highest degree of accuracy possible, BellSouth's Business Rules for pre-ordering and ordering are identical throughout the region. Correct population of BellSouth's industry-standard LSR includes populating the correct data for area codes, addresses, and various tariffed services. These data may be different not only across state lines, but also in different areas within the same state. The selected interface for transmitting the information, as well as the Rules governing the completion of the LSR, are identical, regardless of the state for which the request is submitted. However, CLECs may have to populate different information on industry-standard LSRs for end users in different parts of one state or in different states within BellSouth's region.

Q. DOES BELLSOUTH HAVE A SINGLE SET OF UNIVERSAL SERVICE ORDER CODES ("USOCS") THAT IS REQUIRED ACROSS ALL NINE STATES?

A. Yes. BellSouth utilizes a single set of USOCs across the nine-state region. "1FR" indicates a flat rate residential line in all nine states. "UNETW" indicates an Unbundled Network Terminating Wire in all nine states. "ESX" indicates call waiting in all nine states. However, state-specific USOCs or Field Identifiers ("FID") may arise as a result of regulatory differences. For example**,** CREXN indicates Customized Code Restriction, residence/business line, PBX trunk option #5 in four states only.

Q. ONCE A CLEC IS CERTIFIED TO DO BUSINESS IN ONE STATE WITHIN BELLSOUTH'S REGION, MUST THE CLEC BE "RECERTIFIED" IN PRODUCTION STATUS PRIOR TO SUBMITTING LSRS FOR THE ADDITIONAL STATES IN BELLSOUTH'S REGION?

A. No. BellSouth does not require additional testing of the CLEC's interfaces for a CLEC to be recertified. However, BellSouth is not implying that a CLEC can begin to submit LSRs for end users in additional states without doing its "homework". Every CLEC is still responsible for complete and accurate population of its LSRs, including knowledge of the product and regulatory differences that may apply in that "new" state, as well as attaining appropriate billing codes that are applicable within the additional states.

Q. ARE INDIVIDUAL USER GUIDES AVAILABLE FOR EACH BELLSOUTH ELECTRONIC INTERFACE, AND ARE THEY APPLICABLE REGION-WIDE?

A. Yes. BellSouth provides only one regional set of User Guides for each electronic interface. Separate guides for each state are simply not published. All regional guides are posted on BellSouth's online Website.

Q. DO ALL TRANSACTION QUERIES SEARCH AND RETURN THE SAME INFORMATION FOR END USERS RESIDING IN ALL NINE STATES IN BELLSOUTH'S REGION, REGARDLESS OF THE CLEC'S LOCATION?

A. Yes. Access to BellSouth's pre-order functionality providing access to Customer Service Records ("CSRs") is an example. A competing carrier retrieving a CSR for an end user in Kentucky follows the same process in BellSouth's pre-ordering interface as a CLEC retrieving a CSR for an end user in any other state. Moreover, the result of any CSR request is presented in identical format, regardless of the state location of the end user.

Q. ARE THERE OTHER EXAMPLES TO DEMONSTRATE THAT BELLSOUTH'S ELECTRONIC INTERFACES PROVIDE THE SAME FUNCTIONALITY ACROSS THE NINE-STATE REGION?

A. Yes. For example, a CLEC desiring more information on retrieving service order lists for posted orders needs only to review BellSouth's Web-based CLEC Service Order Tracking System ("CSOTS") User Guide. The same procedure is used whether the CLEC is accessing service order lists for Kentucky or specific end-users in any other state. In fact, a CLEC serving end users in multiple BellSouth's states can retrieve a service order list for the entire region. If a list is desired for one or more of the individual states, the CLEC can then request a separate service order list for each state by clicking the Web option for such a list.

Q. DOES BELLSOUTH PROVIDE CLECS WITH NONDISCRIMINATORY ACCESS TO THE SAME PRE-ORDERING, ORDERING, AND PROVISIONING OSS ACCESSED BY BELLSOUTH'S TWO RETAIL MARKETING AND SALES SUPPORT SYSTEMS, REGIONAL ORDERING SYSTEM ("ROS") AND REGIONAL NEGOTIATION SYSTEM ("RNS")?

A. Yes. BellSouth provides CLECs with access to the same pre-ordering, ordering, and provisioning OSS accessed by RNS and ROS through the machine-to-machine TAG and EDI (EDI does not currently provide pre-ordering functionality, but CLECs using EDI may utilize TAG for the pre-ordering function). There are no separate OSS established for CLECs, e.g., regional street and address database, customer service record database, local facility assignment systems, service order communications system, etc. The same OSS is used for both CLEC and BellSouth retail service requests.

Additionally, BellSouth provides CLECs with all the specifications necessary for integrating the BellSouth interfaces. A CLEC may integrate ordering with pre-ordering functions by integrating the TAG pre-ordering interface with EDI ordering interface, or by integrating TAG pre-ordering with TAG ordering. CLECs interested in integrating the pre-ordering and ordering systems with their own internal systems must, of course, have their own internal OSS, and have responsibility for that integration. By using the integrateable interfaces, CLECs can customize their own marketing and sales support systems to perform functions such as automatic telephone number selection, Primary Interexchange Carrier ("PIC")/Local Primary Interexchange Carrier ("LPIC") searches, and credit checks. Integrateable interfaces allow CLECs to design the appearance and "feel" of their marketing and sales support systems as they see fit, just as BellSouth designs its own retail systems for its "feel" and desired appearance. Because these CLEC's marketing and sales support systems integrate the electronic interfaces with the CLEC's own internal OSS, CLECs can use

information obtained via the electronic interfaces to build their own databases, such as databases of their own customer service records.

Q. IS BELLSOUTH'S OSS VOLUME AND SYSTEM UTILIZATION MANAGED ON A NINE-STATE BASIS FOR CAPACITY PLANNING?

A. Yes. BellSouth manages and tracks the OSS volume and system utilization for capacity management on a nine-state basis as part of its regionalized OSS operational management. Responsibility for software development and overall capacity monitoring is also regionally managed.

Thus, OSS design, development, modification and performance is supported on a nine-state regional basis. Support centers for the processing and oversight of CLEC service requests, including provisioning and repair, are regional centers, as confirmed in the testimony of BellSouth Witness Kenneth Ainsworth.

Q. DO BELLSOUTH PERFORMANCE MEASUREMENTS REFLECT THE REGIONALITY OF BELLSOUTH'S OSS?

A. Yes. BellSouth's interfaces and OSS are regional. The processes for extracting, calculating, and reporting performance measurements are the same for each state. The best indicator, therefore, of OSS performance in Kentucky is the measurements currently posted on BellSouth's Web site.

Q. HAS ANY INDEPENDENT THIRD-PARTY AUDITED BELLSOUTH'S ATTESTATION OF OSS REGIONALITY?

A. BellSouth engaged PWC to perform an OSS regionality evaluation. PWC rendered an affirmative opinion in the Comparability Report, attached as Exhibit OSS-74; in which they fully support BellSouth's attestation of the regionality of BellSouth's OSS.

PART C: SUMMARY AND RECOMMENDATIONS FOR THE COMMISSION

Q. PLEASE SUMMARIZE YOUR TESTIMONY BEFORE THIS COMMISSION.

A. In my testimony, I have described BellSouth's interfaces, processes, and procedures that provide CLECs access to the required OSS information and functions in substantially the same manner as BellSouth's access for its retail customers, and therefore conform to the FCC's definition of nondiscriminatory access. KPMG conducted an extensive third-party test of OSS in Georgia, and concluded that BellSouth satisfied over 96% of the test criteria with findings. As detailed above, of the few "Not Satisfieds " found by KPMG, BellSouth believes that it has addressed and/or has resolved all of the material issues raised by the "not satisfied" criteria. Further, I have shown that BellSouth's OSS provides CLECs with region-wide:

- electronic and manual ordering interfaces that provide uniform functionality;

- comprehensive set of user guides, procedures, information, and job aids for the use of the electronic and manual ordering interfaces; and
- region-wide Business Rules with extensive training.

Additionally, BellSouth's OSS is designed, developed, modified, and measured for performance on a region-wide basis to operate in an undistinguishable manner whether a CLEC is in Kentucky, Georgia or any of the other seven states in the BellSouth region. BellSouth has engaged PWC to evaluate and confirm its assertion that its OSS is regional in nature.

In conclusion, the FCC recognized in its Order approving the Kansas and Oklahoma applications of SWBT that "[c]ommissions may conduct successful section 271 reviews without overwhelming their regulatory resources by building on the work of other states," [63] (SWBT-KA/OK, at ¶ 2), BellSouth respectfully submits that the Commission can rely on the independent third-party test performed in Georgia, the PWC Comparability Report confirming BellSouth's assertion of the regionality of its OSS, in addition to the evidence of actual commercial usage, to determine that BellSouth provides nondiscriminatory access on a region wide basis to its OSS in Kentucky.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

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[63] Joint Application by SBC Communications, Inc., d/b/a Southwestern Bell Long Distance for Provision of In-Region, InterLATA Services in Kansas and Oklahoma, CC Docket No. 00-217, Memorandum Report and Order (Released January 22, 2001) ("SWBT Order-KS/OK").