

DRAFT

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554**

In the Matter Of)

Application by SBC Communications Inc.,)
Michigan Bell Telephone Company d/b/a)
Ameritech Michigan and Southwestern Bell)
Communications Services, Inc. d/b/a)
Ameritech Long Distance for Provision of)
In-Region InterLATA Services in Michigan)

CC Docket No. _____

STATE OF ILLINOIS)

COUNTY OF COOK)

**AFFIDAVIT OF MARK COTTRELL
ON BEHALF OF AMERITECH**

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OPERATIONS SUPPORT SYSTEM AFFIDAVIT**

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I. INTRODUCTION

I, Mark J. Cottrell, being of lawful age and duly sworn upon my oath, do hereby state as follows:

1. My name is Mark J. Cottrell. My business address is 2000 W. Ameritech Center Drive, Hoffman Estates, Illinois, 60196, Room 4G50. I am Strategic Director-Long Distance Compliance-OSS for Michigan Bell Telephone Company d/b/a Ameritech Michigan (“Ameritech”)¹. In this position I am responsible for coordinating, developing, and delivering testimony related to Ameritech's compliance with the Federal Communications Commission (“FCC”) and state rules, regulations, and orders relating to nondiscriminatory access to Operations Support Systems (“OSS”). This includes representing Ameritech in the Michigan 271 collaborative process, and project management of the 3rd-party test of Ameritech’s Operations Support Systems (“OSS”) in support of Ameritech’s entry into interLATA long distance in Michigan.

EDUCATION AND PROFESSIONAL EXPERIENCE

2. I received a Bachelor of Science degree in 1989 from Eastern Michigan University in Ypsilanti, Michigan and I am in the final stages of completing my Master’s of Science in Information Systems from Lawrence Technological University in Southfield, Michigan. I have eight years of experience in the telecommunications industry and two years with Ameritech. Over my career, I have held numerous positions in Auditing, Accounting, Finance, and Information Technology both at the technical level and senior management level.

PURPOSE OF AFFIDAVIT

3. The purpose of my affidavit is to describe how Ameritech provides to requesting carriers electronic access to its operational support systems (“OSS”). I also describe the resources, documentation, technical assistance and training that Ameritech provides so that carriers can effectively use the electronic access to OSS made available to them. My affidavit demonstrates that Ameritech provides nondiscriminatory access to its processes, procedures, and systems relating to preordering, ordering, provisioning, maintenance and repair. The separate affidavit of Ms. Kagan describes in detail electronic access to billing functions. The affidavits of Messrs. Brown and Foster describe the resources and support that Ameritech makes available for manual access to these OSS functions.
4. As part of the Michigan Public Service Commission’s (“MPSC” or “Michigan Commission”) eleven-month collaborative process, described in the affidavit of Robin Gleason, Ameritech agreed to make a number of OSS enhancements to its pre-ordering and ordering interfaces. These OSS commitments are detailed in the Joint Report of the Participants Regarding Resolved OSS Enhancements and Process Improvements (“Joint Report”), MPSC Case No. U-12320. The manner in which Ameritech has implemented or will implement these OSS enhancements, is described in the appropriate section of my affidavit.

¹ Michigan Bell Telephone Company, a Michigan corporation, is a wholly owned subsidiary of Ameritech Corporation, which owns the former Bell operating companies in the states of Michigan, Illinois, Wisconsin, Indiana, and Ohio. Ameritech Corporation is a wholly owned subsidiary of SBC Communications, Inc. Michigan Bell offers telecommunications services and operates under the names "Ameritech" and "Ameritech Michigan" pursuant to assumed name filings with the state of Michigan.

II. EXECUTIVE SUMMARY

5. My affidavit is structured into five basic areas: commercial readiness, CLEC support, the actual electronic interfaces and OSS functions themselves, change management and CLEC training. Each area is summarized below.

Commercial Readiness

6. Ameritech has made significant and continuing investments in OSS beginning in 1996 and most recently demonstrated by a major OSS enhancement deployed in the March 24, 2001 release. Ameritech has developed, tested, and implemented a full range of OSS systems that fit CLECs' varying service requirements and varying levels of technical sophistication. These electronic OSS have been subjected to significant commercial usage.
7. For example, Ameritech's OSS have processed over 3 million manual and electronic orders and order supplements for 109 CLECs in the Ameritech region since January 2000. With the exception of its recently introduced pre-ordering and ordering graphical user interfaces, the electronic interfaces Ameritech makes available to CLECs have been in use for many years at commercial volumes. The newly deployed interfaces will be subjected to an intensive, independent third-party review during 2001.

OSS Technical Assistance and Support

8. Ameritech's electronic systems are complemented by organizations and procedures developed specifically to serve CLECs. In addition to the Local Service Center ("LSC"), and Local Operations Center ("LOC"), (described in Mr. Brown's affidavit), and Account Teams assigned to each CLEC, (as described in Ms. Regan's affidavit), Ameritech offers specialized OSS support.

9. For example, Ameritech employs a full-service support team, the OSS Customer Support (“OSSCS”) team that provides a variety of support functions to CLECs utilizing Ameritech’s OSS. This group focuses on pre-implementation connectivity, supporting CLEC EDI development, and providing testing support. In addition, on-line documentation and assistance is available through Ameritech’s secure Internet site, located at <<https://clec.sbc.com>>. For post-implementation OSS support, Ameritech has also established an Information Services (“IS”) Call Center and the Mechanized Customer Production Support Center (“MCPSC”), which are both available to assist CLECs that have questions or problems regarding electronic access to OSS functions

OSS Interfaces and Functions

10. As discussed in detail in this affidavit, Ameritech’s electronic interfaces and OSS functions far exceed its checklist requirements. Moreover, Ameritech provides these pre-ordering, ordering, provisioning, maintenance and repair and billing OSS interfaces on a regional basis. With only minor differences in cases where products or services offered vary between states, a CLEC accessing an Ameritech OSS function will access the same interfaces, systems, processes and business rules regardless of the geographic location of the end customer. CLECs may construct a single interface, e.g. EDI ordering interface, and use it for operations in all five Ameritech-region states (Illinois, Indiana, Michigan, Ohio, and Wisconsin). The following is a brief overview of the OSS options available to CLECs. CLECs can select from the interfaces described below, to develop comprehensive programs for access to Ameritech’s OSS that match the CLECs’ particular services, volumes, technical expertise, resources, and future plans.

Pre-ordering

11. In addition to manual processes for pre-ordering through the LSC and LOC, Ameritech offers CLECs in Michigan a choice of “real time” electronic interfaces:

- Electronic Data Interchange (“EDI”) / Common Object Request Broker Architecture (“CORBA”), an industry-standard “real-time” pre-ordering gateway that utilizes two different protocols promulgated by the technical industry committees. EDI/CORBA is used to “front-end” (or overlay) Ameritech’s OSS, preserving its commercially proven functionality, data content, and performance standards while allowing for an industry standard application-to-application interface that can be integrated with CLECs’ own systems and that supports both resale services and UNEs. EDI/CORBA can also be integrated by the CLEC with Ameritech’s EDI ordering gateway. The CORBA protocol was made available for CLEC use, on March 24, 2001. However, using the prior EDI protocol, CLECs used Ameritech’s pre-ordering gateway for over one million transactions per month over the last three months.
- Enhanced Verigate², a proprietary web-based graphical user interface (“GUI”) operating on Internet Explorer™ versions 4.x and 5.x. Enhanced Verigate uses the same data stream and processing systems as EDI/CORBA, and – like EDI/CORBA – provides CLECs with real-time access to the pre-ordering capabilities of Ameritech’s OSS for resold services and unbundled network elements (“UNEs”). Enhanced Verigate uses plain-English displays along with OBF³-defined field names and was designed for CLECs that do not want to pursue the development of software programs required to use application-to-application interfaces. Implemented in March 2001, Enhanced Verigate is available to all CLECs in Ameritech.

Ordering / Provisioning

12. Once a CLEC has performed the necessary pre-order processes, it generally transmits a Local Service Request⁴ (“LSR”) to Ameritech. Ameritech’s ordering systems then create

² Verigate is a graphical user interface pre-ordering application first deployed by SBC Communications, Inc. (“SBC”) in the Southwestern Bell Telephone Co. (“SWBT”) region. This application has been enhanced to be accessed via Internet browser, and to include certain additional pre-ordering functionality. This browser-based version of the application will be referred to “Enhanced Verigate” in this document to differentiate it from the version presently deployed in other regions of SBC.

³ The Ordering and Billing Forum is a subcommittee of the Alliance for Telecommunications Industry Solutions, and is a collaboration of industry participants formed to create and maintain guidelines for ordering and billing between ILECs, IXCs, and CLECs.

⁴ The OBF has defined the Local Service Request (“ASR”) as method to be used for ordering most local services, and the Access Service Request (“ASR”) as the method for some transport and collocation services. Both the ASR and LSR can be transmitted manually (as a paper form via fax) or electronically (via NDM/Telis for ASRs or EDI for LSRs). Throughout this affidavit, any reference to an “order” or “service order” sent to Ameritech by a CLEC should be read as meaning LSR or ASR, depending on the product being ordered. This is in contrast to the internal service order(s) created by Ameritech upon receipt of a valid LSR.

one or more service orders, sometimes with manual assistance, as described in the affidavit of Justin Brown. Ameritech provides CLECs with a choice of three electronic interfaces for ordering and provisioning:

- EDI is an industry-standard electronic interface that provides an ordering gateway for resold services and UNEs and conforms to the national guidelines. EDI returns electronic reject/jeopardy notifications, Firm Order Confirmations (“FOCs”), and Service Order Completions (“SOCs”). The EDI ordering gateway can be integrated with the EDI/CORBA pre-order interface to provide an integrated pre-ordering and ordering system.
- Enhanced LEX⁵ is a proprietary web-based GUI based upon national guidelines and operating on Internet Explorer™ versions 4.x and 5.x. CLECs can use Enhanced LEX to order resold services and UNEs and to receive electronic reject/jeopardy notifications, FOCs, and SOCs. Enhanced LEX was made available to CLECs in March 2001.
- Ameritech Customer Information System (“ACIS”) and Exchange Access Control and Tracking (“EXACT”) allow CLECs to perform all ordering functions for resold services and UNEs. ACIS can also be used to supplement pending service orders. ACIS is the same ordering system used by Ameritech’s retail operations and LSC service representatives.

13. Ameritech is constantly enhancing its capabilities for processing valid service orders without manual intervention. Additionally, Ameritech has committed, with CLEC participation, to a two-year flow through enhancement plan. Collaboration between Ameritech and CLECs on that plan began in April 2001.

14. Regardless of how the CLEC submits its orders, once orders have been entered and accepted for processing, they are assigned due dates in a nondiscriminatory fashion. CLECs may check the provisioning status of all pending orders electronically via the Provisioning Order Status transaction.

⁵ LEX is a graphical user interface ordering application first deployed by SBC in the SWBT region. This application has been enhanced to be accessed via Internet browser, and to support the ordering of additional products. This browser-based version of the application will be referred to “Enhanced LEX” in this document to differentiate it from the version presently deployed in other regions of SBC.

Maintenance and Repair

15. Ameritech provides CLECs a choice of two electronic interfaces, Electronic Bonding Trouble Administration (“EBTA”) and Electronic Bonding Trouble Administration/Graphical User Interface (“EBTA/GUI”), for maintenance and repair services⁶. These interfaces provide CLECs the same access to maintenance and repair capabilities as Ameritech provides to its retail operations, enabling them to report troubles and request repair of resale services and unbundled network elements, and to determine the status of these trouble reports. EBTA/GUI is the same GUI interface used by Ameritech’s wholesale payphone and wireless customers and interexchange carriers (“IXCs”) for maintenance and repair. EBTA is an application-to-application interface that conforms to national standards and enables CLECs to perform the same functions as EBTA/GUI. CLECs using EBTA may choose to integrate their side of the interface with their own back office systems in the same manner that Ameritech has integrated its side of the EBTA interface with Ameritech’s own back office systems. Both EBTA and EBTA/GUI permit the CLEC to submit and determine the status of trouble reports, initiate mechanized loop tests (“MLT”), receive test results for resold POTS⁷ lines and POTS-like UNE combinations, and receive information related to the closure of trouble tickets all without any manual intervention by Ameritech.

⁶ In September of 1999, Ameritech replaced its original EBTA system and the associated EBTA/GUI with a system sometimes referred to as EBTA II and its associated GUI, EBTA II/GUI-Web. This newer system presents essentially the same application-to-application interface to CLECs as the previous system. The newer GUI differs from the older in that it is Web browser-based, however it provides virtually the same functionality to CLEC as the previous GUI. Since the older EBTA system has been completely replaced by the newer system, this document will simply reference the current, newer system and GUI as EBTA and EBTA/GUI.

⁷ Plain Old Telephone Service (“POTS”) is basic voice telephone service for residential or business use as differentiated from more complex voice services, e.g. Centrex service, or data services, e.g. circuits or xDSL.

Billing

16. Ameritech offers CLECs four different electronic interfaces for billing, which allow CLECs to bill customers, to process customers' claims and adjustments, and to view Ameritech's bill for services provided to the CLEC. These interfaces are Ameritech Electronic Bill Service ("AEBS450") and EDI 811 (for resale, line ports, cross-connects and usage), Carrier Access Billing System Bill Data Tape (for unbundled loops, trunk ports, and transport), and Daily Usage Extract. Each of the four interfaces is currently in commercial use. Billing and the associated interfaces are covered in detail in the affidavit of Denise Kagan.

OSS Change Management Process

17. Ameritech's systems, both retail and wholesale, are constantly evolving and improving. Ameritech has established a change management process to ensure coordination with CLEC users as Ameritech introduces new versions of its interfaces and updates its systems. In March 2001, a 13 State SBC/CLEC Interface Change Management Process was finalized in a collaborative effort with interested CLECs. That Change Management Process includes provisions for outstanding issue resolution, dispute voting, EDI joint testing, and versioning. The dispute voting or "go/no go" provision allows CLECs to delay introduction of a new system upgrade, thus ensuring all upgrades will be carried out in a manner that benefits CLECs.
18. This SBC-wide OSS change management process is based upon and significantly similar to the change management process that the FCC has found, in its Texas and Kansas/Oklahoma Orders, to provide CLECs an effective voice in the management of enhancement to OSS interfaces. The process has been further enhanced through a

thirteen-month process of collaboration between SBC and CLECs. As a result, Ameritech makes available a robust, stable CLEC joint testing environment and has implemented an OSS interface software versioning that, together, provide CLECs the means to test and implement new interface software releases at a time of their choosing.

CLEC OSS Training

19. Ameritech has developed, at its own expense, extensive training for CLEC employees. Ameritech offers classes on using its electronic OSS interfaces as well as free workshops that cover both manual and electronic ordering processes. Ameritech offers CLECs 19 different workshops and 5 OSS classes, for a total of 30 class days of available training

III. COMMERCIAL READINESS

20. The BellSouth Second Louisiana Order 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. Second Louisiana Order ¶ 86. Ameritech agrees with the FCC that actual commercial usage is the most probative evidence concerning a system's operational readiness and ability to handle large commercial volumes. Bell Atlantic New York Order ¶ 166. Commercial usage is present on most Ameritech interfaces available to CLECs today.
21. The process of making interfaces operational and commercially ready involves a number of steps. They include the following: modifying front office and back office systems, testing those modifications, developing new interfaces or functionalities as required or requested by CLECs, testing the new interfaces internally and in conjunction with Ameritech back office systems, and sizing the interfaces to ensure forecasted volumes can be adequately and timely processed. Ameritech has taken these required steps and

performed all necessary actions. As a result, Ameritech's OSS electronic interfaces and functions have been commercially ready for CLECs to utilize since 1996.

Current Commercial Usage and Volumes

22. The table below lists each Ameritech interface and the types of usage (i.e., Ameritech, Ameritech retail customers, CLEC, and Interexchange Carrier (“IXC”) commercial usage for each interface.

Interface	Ameritech Wholesale Customers	CLEC	IXC
Enhanced Verigate		**	
EDI /CORBA		X	
Enhanced LEX		**	
EDI (Ordering)		X	
EBTA/GUI	X	X	X
EBTA		X	X

**These interfaces were placed into production in March 2001.

23. Ameritech's EDI or NDM/Telis interfaces presently process a commercially significant level of usage. With the recent introduction of the easy-to-implement GUI interface, Enhanced LEX, it is anticipated that the proportion of electronically received orders will rise. Refer to the affidavit of Justin Brown for a discussion of the ordering volumes received by Ameritech.

24. Ameritech maintains regional pre-ordering interfaces rather than individual interfaces for each state. The average volume of pre-order transactions processed for the Ameritech region from December 2000 to March 2001 is 1,125,000 per month.

25. Similarly Ameritech processes a commercial volume of maintenance and repair transactions through its EBTA and EBTA/GUI interfaces. The volume of total trouble tickets successfully created through EBTA or EBTA/GUI by all customers, including CLECs, IXCs, and other wholesale service providers has averaged approximately 10,000

per month over the period November 2000 through March 2001. During the same period, the number of trouble tickets created through EBTA or EBTA/GUI by CLECs only for the entire Ameritech region averaged 4,800 per month, and averaged 642 per month for Michigan CLEC-originated trouble tickets.

System Scalability

Of course, Ameritech assumes that CLEC usage of its OSS will continue to grow and, therefore, has implemented a Capacity Planning process to do the following:

- 1) **Monitor** system utilization statistics to track how busy the processors and other key system resources are and to identify which applications are contributing to the usage, and
 - 2) **Forecast** future system utilization levels for the purposes of budgeting and developing upgrade plans to accommodate normal growth and new or special projects in order to support wholesale business processes while meeting performance measurement benchmarks.
26. System utilization data is summarized on a monthly basis. Utilization reports/graphs are assembled each month to display key data for the systems involved. Daily utilization data is available to the capacity planners, if needed; however, such detailed data is typically used in the performance tuning area. For capacity planning, Ameritech averages the daily utilization values over the month, excluding weekends and holidays, to capture what the system usage is on a typical workday.
27. System forecasts are generated quarterly and include projections for up to next 18 months. Projected utilization growth is based upon 1) historical trending, using the monthly statistics collected on an on-going basis, and 2) input from the application

groups supporting CLEC processing, including volume growth forecasts. Application groups supply information on anything that they are aware of that would impact system resource usage, such as new releases, additional workload volumes, application redesign, etc. Projections are then calculated using this data. Although forecasts typically are generated quarterly, these projections are continually revised and refined as more reliable sizing data became available.

28. As part of its capacity monitoring process, Ameritech does the following:

- Ameritech prepares formal forecasts based on the same data previously used for both MVS and UNIX on a quarterly basis.
- Ameritech reviews and adjusts these forecasts as necessary based on actual performance and other adjustments in demand on a monthly basis.
- Ameritech forecasts up to 18 months in advance.
- Ameritech manages hardware acquisitions, installations and upgrades throughout the calendar year as the forecasts deem appropriate. Emergency or unforeseen needs are dealt with in an expedited manner.
- Ameritech uses the MVS planning threshold of 85% Central Processing Unit (“CPU”) busy over the business day. Ameritech performs additional data evaluation procedures to ensure that on-line use of the CPU does not impact transaction response times. Ameritech systems prioritize the batch demand on the MVS systems in such a way as to eliminate their impact on the on-line processing performed. Allowing batch processing to use any CPU resources not in use by on-line processing maximizes efficiency of system resources.

29. These processes enable Ameritech to meet whatever needs are created by either CLEC or retail business units. Though some of the CLEC interfacing systems are new, the processes, which are part of a world-class Information Technology organization, are in place, rigorous and well-managed. The scalability of manual processes performed by the LSC and LOC are addressed in the affidavit of Justin Brown.

Third-party Testing

30. In addition to providing the Commission with the evidence from years of OSS interface operation and the existing commercial volumes, Ameritech has, under the guidance of the Michigan Commission, begun a third-party test of its OSS readiness and ability to meet increased volume. Consistent with the Michigan Commission's February 9, 2000 order, KPMG Consulting, Inc. ("KPMG") has been retained to conduct an independent test of the readiness of Ameritech's OSS, interfaces, documentation and processes. KPMG's test is broad in scope. All stages of the relationship between Ameritech and competing carriers are being considered, from establishing the initial relationship, to performing daily operations, to maintaining the relationship. Resale, UNE-loops, UNE-P, and combinations are all included in the test. In addition, both the application-to-application electronic data interchange (EDI) and the terminal-type web-based graphical user interface (GUI) are being tested. KPMG will perform pre-ordering, ordering, provisioning, maintenance and repair, billing, and relationship management and infrastructure tests to evaluate functional capabilities and determine whether competing carriers receive a level of service comparable to Ameritech retail service.
31. To fully test these systems, orders will be submitted with known error conditions, canceled, and supplemented. To perform these transaction-driven tests, KPMG is

combining efforts with Hewlett Packard. Documentation is being evaluated for usefulness, correctness, and completeness. KPMG will also perform stress volume tests of Ameritech's systems.

IV. OSS TECHNICAL ASSISTANCE AND SUPPORT

32. My affidavit focuses on electronic access to the extensive OSS interfaces and functions that Ameritech makes available to CLECs. However, prior to addressing those matters in detail, this section summarizes the technical support and assistance that Ameritech provides to CLECs to enable them to use these OSS interfaces.
33. Ameritech has established a number of organizations specifically designed to support its CLEC customers and their use of the OSS. The general organizations providing this support are the account team ,the LSC and the LOC:
- Ameritech has established an Account Team for each CLEC customer. The Account Team offers personalized support and is the CLECs' single point of contact with Ameritech for general inquiries, contract inquiries, or requests for information. The affidavit of Mary Pat Regan describes the structure and operation of the Account Teams in more detail.
 - The Local Service Center ("LSC") serves as the single point of contact for CLECs for pre-ordering, ordering/provisioning, and billing. The affidavit of Justin Brown describes the structure and operation of the LSC in more detail.
 - The Local Operations Center ("LOC") serves as the single point of contact for CLECs for repair and maintenance 24 hours a day, 7 days a week. The affidavit of Justin Brown describes the structure and operation of the LOC in more detail.

In addition to these general organizations, Ameritech has specialized groups responsible for implementation and post-implementation OSS support. I will provide a detailed description of this technical assistance and support. First, I describe Ameritech's OSS Customer Support ("OSSCS") team which provides full-service support to CLECs that utilize Ameritech's OSS. Second, I summarize the OSS documentation made available to assist CLECs understand Ameritech's interface requirements. Third, I describe Ameritech's Remote Access Facility that is used by a CLEC to establish connectivity with Ameritech OSS interfaces. Fourth, I describe the support and documentation provided to assist CLEC implement their EDI interfaces. Fifth, once the CLEC deploys its electronic interfaces, Ameritech engages in pre-production joint testing. When that testing has concluded, Ameritech provides post-production support through its Mechanized Customer Production Support Center ("MCPSC") and the Information Services Call Center. Each of these steps in initial OSS account set-up, OSS testing, production transition and post production support is described in detail below. Later in my affidavit, I describe related OSS support functions, including a comprehensive "change management" process and a wide range of OSS training opportunities.

OSS Customer Support Team

34. SBC employs a full-service support team of support managers that provides a variety of support functions to CLECs utilizing the OSS interfaces in any of its regions, including Ameritech. In an effort to stimulate CLEC interest in Ameritech's electronic interfaces, this OSS Customer Support team has, at considerable expense, provided "live" demonstrations of its electronic interfaces to regulators and all CLECs that have shown an interest in learning about Ameritech's electronic interfaces. SBC has established a

monthly OSS demonstration, hosted by each region on a rotating basis. Each demonstration highlights OSS of the host region, however any attendee can ask for details on any of SBC's interfaces. For example, the most recent OSS demonstration, which centered on the Ameritech OSS interfaces, was held March 6, 2001 in Chicago, IL.

35. If a CLEC new to the Michigan local telecommunications market decides to deploy the Ameritech electronic interfaces, Ameritech makes its OSS Customer Support team of application and information services experts available to that CLEC for conference calls and/or premises visits. This dedicated team provides services at no charge to the CLEC. The CLEC's Account Manager notifies the OSS Customer Support team to meet with the CLEC to discuss its business plans and recommend the best OSS to support the CLEC's business needs. This meeting is considered to be a technical one-on-one meeting at which Ameritech and the CLEC discuss hardware and software requirements, training needs, and implementation strategies.
36. Once a CLEC completes its OSS training, the Customer Support team works cooperatively with the CLEC to ensure a complete understanding of the service ordering process, via face-to-face meetings or via conference calls. These meetings typically include question and answer sessions about business rules and system access. The visits and meetings described above are designed to aid the CLEC with minimizing start-up problems that invariably occur when companies deploy new software applications. These experts have helped to bring about quick resolutions to questions, problems, and operational concerns as CLECs deploy Ameritech's electronic interfaces. After a CLEC is in production, day-to-day questions regarding business rules will be referred to the Mechanized Customer Production Support Center.

37. Ameritech offers the same types of support services mentioned above when a CLEC already competing in the Michigan local market decides to transition from manual to electronic service requests. But Ameritech's CLEC support for OSS does not end here. If the CLEC at any time experiences problems using Ameritech's OSS, additional on-site visits are scheduled as required. For example, if a CLEC experiences problems with ordering and receives excessive rejections, the OSS Customer Support team will consult with the CLEC to offer assistance in resolving the problem. For ongoing production problems, the OSS Customer Support team may consult with Ameritech's subject matter experts ("SMEs") or even arrange for the SMEs' participation on conference calls with the CLEC to discuss the problem and possible solutions. In essence, Ameritech's OSS support for CLECs serving end users in Michigan is an ongoing project beginning when a CLEC first decides to access Ameritech's operational support systems (with assistance provided by the OSS Customer Support team), ongoing support provided by the Mechanized Customer Production Support Center, and ending only when a CLEC decides to discontinue its Ameritech OSS access.
38. The OSSCS team is also heavily involved with any CLEC desiring to employ the EDI Ordering Gateway for OSS access as well as Ameritech's pre-ordering application-to-application systems. OSS Customer Support team personnel participate in all phases of EDI turn-up. The typical CLEC process and the role of the OSS Customer Support team in EDI implementation is described in detail in the "CLEC EDI Implementation" subsection of my affidavit. In addition, the OSS Customer Support team is a member of Ameritech's EDI joint release testing team.

CLEC Web Site and Documentation

39. In addition to organizations designed to support CLEC OSS access, Ameritech provides other accommodations, which benefit CLECs accessing Ameritech's OSS. For example, Ameritech's previous CLEC web site, TCNet, was integrated with the existing SBC CLEC web site in September 2000 to create an enhanced web site to support CLECs in all SBC operating regions. The CLEC web site address is <<https://clec.sbc.com>>. Through this web site, Ameritech provides a wide variety of information to CLECs through a single access point with a uniform appearance and operation ("look-and-feel") rather than through multiple subject-specific sites. While the CLEC web site is discussed more generally in the affidavit of Mary Pat Regan, below are examples of OSS-related documentation which can be accessed from the online menu:

- **CLEC Handbook** – The OSS section of the CLEC Handbook contains OSS documentation, including User Guides, interface specifications, product ordering instructions, escalation procedures, the Joint CLEC Test Plan Template, and other information about OSS systems and procedures.
- **Customer Education** - This site presents an overview of OSS classes available for CLECs. The Customer Education site also gives instructions for registering for OSS classes. In addition, this site lists dates for classes offered during the current quarter.
- **Accessible Letter Search** – The CLEC web site provides the ability to search and easily locate OSS Accessible Letters. The user may search by type of letter, date, state, or may search the text of letters within a date range.
- **IS Call Center Web site** - This is a secure site within the CLEC Online web site and is designed to expedite and eliminate many problems that may arise while

accessing Ameritech's OSS. CLECs can view this web site while simultaneously accessing Ameritech's OSS through the ARAF. Thus, should a CLEC user encounter a problem or question while utilizing Ameritech's OSS, the user would also have immediate access to troubleshooting guidelines, and system status messages while online. This site provides on-line access to:

- ARAF dial-up procedures,
- OSS requirements,
- OSS troubleshooting guidelines,
- System status (which provides system status notifications, the geographical region affected, and the approximate time the status message will be updated; system status is refreshed at 60-second intervals),
- User ID application forms, and
- On-line forms for feedback.

In short, the IS Call Center web site provides CLECs with another resource, aside from the technical support offered by the IS Call Center, to assist in troubleshooting the most common problems quickly and easily.

- **Documentation** - Attachment B contains a list of some of the documentation posted on the CLEC Online web site, such as the Local Service Order Requirements ("LSOR") and the Local Service Pre-Order Requirements ("LSPOR") provided by Ameritech to support those CLECs who access Ameritech's OSS.
- **Performance Measurements** - CLECs may view performance reports for their own company, including reports related to OSS, via the Internet. Ameritech's current wholesale performance measurements for each month are posted by the 20th of the following month. The reports on the web contain the last 12 months of data. Regulatory agencies are able to view all reports. These are discussed in the affidavit of Salvatore Fioretti.

Ameritech Remote Access Facility

40. Once a CLEC has decided to electronically interface with Ameritech it needs to establish connectivity. The Ameritech Remote Access Facility (“ARAF”) was created in 2000 to provide CLECs with a centralized secure point of entry for gaining access to Ameritech’s OSS functions. A “Remote Access Facility” consists of network connectivity hardware (routers, modem banks, firewalls, etc.) that allows the CLECs to connect to Ameritech’s data network. A redundant security “firewall” has also been put into place to prevent unauthorized access to and from Ameritech’s internal communications network. Prior to the creation of the ARAF, CLEC connectivity was provided via similar hardware and firewall software, but as part of a general purpose facility also used to provide access to Ameritech’s internal network for other wholesale customers.
41. There are two different ways to access Ameritech OSS applications via the ARAF: dial-up connection and direct connection. **Dial-up connection**, which is available to all CLECs, is initiated no differently than when someone dials into an Internet service provider (America OnLine, Microsoft Network, etc.) to access the Internet or to get personal email. While most dial-up connections are analog, the ARAF may also be accessed via an ISDN connection. Currently, there are 184 analog and ISDN ports (evenly divided among two dial-up routers with 92 connections each) available for dial-up connections.
42. Of the two dial-up routers, one router is considered a “hot spare.” This spare router is available to take calls immediately in the event of a dial-up router failure. Utilization of the dial-up connection is measured and monitored by the Network Operations group to ensure that capacity is increased to meet CLECs’ needs. The dial-up routers are polled

every five minutes for utilization. This data is analyzed monthly for trends and capacity concerns.

43. **Direct connection** is available to a CLEC that provisions a private circuit between its location and Ameritech's ARAF. This private circuit can be a 56/64-KB digital circuit or a fractional T1 all the way up through a full T1. Direct connections provide much greater bandwidth and allow one connection to support multiple users. As is the case for dial-up connections, a spare router with enough capacity to replace a failed router is always available for emergency use for direct connections.
44. Providing for additional RAF ports is not a substantial investment compared to the upgrading of a server or mainframe and, therefore providing access to the ARAF for additional simultaneous CLEC users is a relatively simple task. Equipment for the ARAF is ordered on-line and can arrive as soon as one week after the order is placed.
45. Procedures for establishment of connectivity to Ameritech are documented in the Competitive Local Exchange Carrier (CLEC) Operations Support System Interconnection Procedures, which may be found on the CLEC web site.

CLEC EDI Implementation

46. To begin the EDI connectivity process with Ameritech, a CLEC confirms receipt of the most current issues of Ameritech's LSOR and EDI Technical Requirements. The LSOR is posted on the CLEC Online web site and EDI Technical Requirements can be found on the Alliance for Telecommunications Industry Solutions ("ATIS") web site. Ameritech's exceptions to the ATIS standards are also posted on the CLEC Online web site. The typical CLEC EDI implementation process consists of four distinct phases.

47. The first phase is the **“Pre-Trial Joint Coordination”** phase, where Ameritech and the CLEC work to validate the joint test plan by outlining trial expectations and exchanging all required documentation. Ameritech and the CLEC mutually agree and document the following tasks:
- Trial Process and Support Coordination – which includes firm start and end dates, points of contact and roles for the participants, monitoring the process (such as through weekly status calls, etc.), tracking and documenting issues and results,
 - Measures for Trial Success – entrance and exit criteria, and
 - Subsequent Plans – any plan for continued, periodic monitoring after CLEC cuts from “OSS Evaluation” stage to “Live Production” stage.
48. The second phase is the **“EDI Trial – Task Coordination for the Test System”** phase, which involves Ameritech and the CLEC actually exchanging LSRs and notifications via EDI. This activity takes place in the Ameritech test environment to allow for manual intervention in trouble-shooting. The OSSCS team employs a “hands-on” approach throughout this stage and is available to assist the CLEC in preparing for or implementing any of the activities listed below. The activities for this phase includes:
- CLEC submits LSRs on the Test System,
 - EDI validates the format of the LSR information based on EDI requirements,
 - The Mechanized Order Receipt system (“MOR”) validates the ordering requirements of the LSR, (for more information on MOR and ordering requirements, refer to the “MOR” section of my affidavit),
 - LSR is reviewed for content,

- If necessary, a reject of LSR is returned electronically (for more information, refer to the “Electronic Reject Notification” section of my affidavit),
 - If the LSR is accurate and complete, FOCs and SOCs , if part of the CLEC test plan, are generated and are electronically returned to the CLEC via EDI.
49. Ameritech’s OSSCS personnel are ready to provide process and/or rule explanations when requested. The results of this phase are discussed on daily or weekly status calls or as needed.
50. The third phase is the “**EDI Trial – Task Coordination for the Production System**” phase, which involves the CLEC submitting LSRs in the Production System. First, the CLEC and Ameritech establish access to the production environment. The CLEC submits LSRs via EDI, which follow the flow described in the “Transaction Flows” section of my affidavit. These LSRs and subsequent responses will be handled mechanically in almost all situations. Manual “hand-holding” will be greatly lessened.
51. The final phase is the “**EDI – Cut to Production**” phase. At this point in the trial, Ameritech and the CLEC agree that the terms of the trial have been met and the CLEC has indicated that it wants to move into production ordering. If both parties agree, the parties work to establish a production date and ensure all systems and processes are updated for production access.
52. A CLEC wishing to operate in one or more states in the Ameritech region need only go through the EDI implementation process one time. Ameritech has a single EDI ordering interface with a single set of operating procedures. A CLEC who initially implements the EDI ordering interface for particular order and product types to support their operations

in one state can begin supporting operations in other Ameritech states for those same order and product types without additional EDI implementation activities.

53. As mentioned above, the first step for a CLEC in establishing EDI connectivity is to obtain the necessary documentation. Of course, the most probative evidence that Ameritech provides adequate technical documentation that conforms with its interfaces is the proof that a CLEC can build its side of the EDI gateway and submit orders successfully to Ameritech. The soundness and usability of Ameritech's interface specifications are demonstrated by the fact the number of CLECs that have built to, and are using, the interfaces today.
54. Additionally, Mantiss, Inc., an independent developer and designer of software, was able to create an EDI-based pre-ordering and ordering interface relying upon the specifications provided by Ameritech. Mantiss has supplied its software for several CLECs to use to access Ameritech's pre-ordering and ordering interfaces. Mantiss's November 15, 1999 and November 22, 1999 press releases, announcing the use of their software by Focal and MCI WorldCom respectively, are attached as Attachments C-1 and C-2.
55. As an outcome of the MPSC's OSS collaborative, Ameritech made it possible for interested CLECs to use the Mantiss software in the interim period until the deployment of Ameritech's ordering GUI in March 2001. That offer is described in the Joint Report.

CLEC Joint Test Environment

56. Ameritech has established a test environment to be used as the sole CLEC test environment. This CLEC test environment was made available January 15, 2001, in accordance with the SBC/Ameritech Uniform and Enhanced OSS Plan of Record, (*SBC/Ameritech Merger Order*, CC Docket No. 98-141, ASD File No. 99-49). This new

test environment was utilized during the CLEC joint testing period associated with the March 24, 2001 release. During this joint testing period, seven CLECs performed regression testing while one CLEC utilized the test environment for testing of the Web-based LEX GUI. This joint testing environment mirrors the production environment and will support all LSOG versions that Ameritech supports in production. The new test environment complies with the FCC requirement for a stable test environment. Bell Atlantic New York Order ¶ 109, Texas Order ¶ 132.

Mechanized Customer Production Support Center

57. The SBC Mechanized Customer Production Support Center (MCPSC) provides business process support to all Competitive Local Exchange Companies (CLECs) using Operational Support Systems (OSSs) in all SBC regions including Ameritech. The Mechanized Customer Production Support Center is available Monday through Friday from 7:00A.M. until 7:00P.M. Central Time.
58. The MCPSC will assist CLECs in analyzing error codes, as well as resolving issues pertaining to process flows within each application. The MCPSC will investigate and analyze Problem Reports resulting from a CLEC reporting a problem with an OSS application. Below are the functions performed by the MCPSC:
 - Provide Business Process support to CLECs using OSS applications for preorder/order activity in the Ameritech region
 - Assist CLECs with issues pertaining to process flows within the applications
 - Assist CLECs with error code analysis for each application
 - Assist CLECs with questions that are specific to data fields within individual applications

- Address questions regarding service order exhibits and necessary requirements to process service orders when errors occur (where applicable)
- Assist CLECs with system navigation when encountering difficulty with an SBC supported System/Application
- Assist CLECs with business processes and rules for pre-ordering and ordering transactions by assisting with LSOR interpretations and issues

IS Call Center

59. On February 3, 1997, the IS Call Center began to provide support to CLECs in SWBT's region. The goal of SWBT's IS Call Center is to provide a single point of contact for CLECs' to resolve issues related to OSS access and system connectivity and availability. The IS Call Center is available by phone Monday through Friday from 7:00 a.m. to 9:00 p.m., Central Time; Saturday 8:00 a.m. to 5:00 p.m.; Sunday and off hours are covered via pagers that are activated by voice mail to ensure that IS Call Center personnel are available 24 hours a day, 7 days a week.
60. The same IS Call Center began to provide support to CLECs in other SBC regions as follows:
- in the Pacific/Nevada region in May 1998,
 - in the Southern New England Telephone ("SNET") region in April 1999, and
 - in the Ameritech region in October 2000.
61. The IS Call Center includes three distinct groups to provide a wide range of connectivity support for CLECs:
- The IS Call Center Hotline provides 24 X 7 support for all CLEC connectivity issues.

- The User Admin Team coordinates the establishment of all CLEC access to SWBT OSS.
 - The Technical Team provides file transfer and network configuration support including initial setup and testing.
62. The IS Call Center refers tickets to other organizations when the issue is outside the scope of the support provided by the IS Call Center. For example, calls that are related to business processes are referred to the Mechanized Customer Production Support Center; whenever possible these referrals are via “warm transfer.”
63. The IS Call Center uses a system called Vantive to record and categorize the types of trouble calls received from CLECs. The vast majority of CLEC calls to the IS Call Center relate to CLEC user problems associated with easily correctable situations, particularly the resetting of user identifications and passwords. These situations occur when CLEC users have allowed their User IDs to the Ameritech Remote Access Facility (“ARAF”) expire or they have forgotten their passwords. For example, during January 2001, the IS Call Center logged over 8,000 calls for all SBC regions, 59.0% of which related to questions on User IDs and passwords.

V. OSS INTERFACES AND FUNCTIONS

64. On August 8, 1996, the FCC released its First Report and Order in CC Docket No. 96-98 (“First Report and Order”) to implement the network access and interconnection provisions of the Act. The FCC stated that “... in order to comply fully with section 251(c)(3) an incumbent LEC must provide, upon request, nondiscriminatory access to operations support systems functions for pre-ordering, ordering, provisioning, maintenance and repair, and billing of unbundled network elements under section

251(c)(3) and resale services under section 251(c)(4).” (§ 525). In the *UNE Remand Order*, the FCC reaffirmed the need to provide these five functions.

65. As noted above, since passage of the Telecommunications Act of 1996, Ameritech has made significant OSS investments and has spent millions of dollars in its Information Technology (formerly Information Services) organization to comply with these requirements. Attachment A provides a diagram that describes the electronic interfaces Ameritech makes available to the CLECs, as one product of these expenditures.
66. The following sections of this affidavit explain Ameritech’s interfaces and capabilities in relation to each of these five OSS functions.

VI. PRE-ORDERING FUNCTIONS

67. In this section I first generally describe the nature and purpose of pre-ordering information. Then I describe the specific pre-ordering functions and interfaces that Ameritech makes available to CLECs. Third, I summarize access to loop make-up information. Finally, I describe how a CLEC can integrate pre-ordering information into the ordering process.
68. The pre-ordering phase of OSS generally includes those activities that a carrier undertakes to gather and verify the information necessary to place an order.⁸ Pre-ordering involves the exchange of information between Ameritech and a CLEC about an end user during the CLEC’s “negotiation phase” with its end user customer. The term “negotiation” in this context refers to the discussion between the end user and CLEC

regarding local service. Pre-ordering activities enable the CLEC to submit a complete and accurate service request to Ameritech.

69. Most of the pre-ordering activities undertaken by a competing carrier to order resale services and UNEs from the incumbent are analogous to the activities a BOC must accomplish to furnish service to its own customers orders. The Commission has emphasized that providing pre-ordering functionality through an application-to-application interface is essential in enabling carriers to conduct real-time processing and to integrate pre-ordering and ordering functions in the same manner as the BOC.⁹
70. The pre-ordering functions and capabilities that Ameritech makes available to all CLECs include the following:
- Address verification (or Address validation) – Provides the ability for the CLEC to validate an address provided by an end customer. The transaction will return a indication that the address is valid, or will return suggested alternative addresses,
 - Access to customer service records (“CSRs”) - This transaction is also known as customer service inquiry (“CSI”), and provides CLECs with a means to determine parameters, such as service address and custom calling features, of an end customer’s current service.
 - Access to Directory Listings (“DL”) – CLECs may use this transaction, which is associated with the CSR Inquiry transaction, to determine the current directory

⁸ See *SWBT Texas Order*, 15 FCC Rcd at 18426, para. 148; *Bell Atlantic New York Order*, 15 FCC Rcd at 4014, para. 129. In prior orders, the Commission has identified the following five pre-order functions: (1) customer service record (CSR) information; (2) address validation; (3) telephone number information; (4) due date information; (5) services and feature information. See *id.*, 15 FCC Rcd at 4015, para. 132. In addition, the Commission determined in the *UNE Remand Order* “that the pre-ordering function includes access to loop qualification information.” See *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, Third Report and Order, 15 FCC Rcd 3696, 3885, para. 426 (*UNE Remand Order*).

listing of an end customer where that listing is provided by Ameritech in conjunction with a network service, i.e. UNE-P, resale, or Unbundled Local Switching with Shared Transport (“ULS-ST”).

- Determining service and feature availability – This pre-ordering capability is used by CLECs to determine the features and services that may be offered to a given end customer based on their working telephone number.
- Access to telephone number inquiry/reservation/confirmation/cancellation – CLECs use this function to select and reserve telephone numbers for assignment to their end customers. They may also confirm and/or cancel existing telephone number reservations.
- Dispatch requirements - This inquiry is used by a CLEC to determine whether the dispatch of an Ameritech technician will be required for a given order. The response will be based on the existence of cut-through facilities to the end customer’s address.
- Due date availability - If the dispatch of an Ameritech technician is required to complete a given order, the CLEC uses the due date availability transaction to determine available premise visit dates, i.e. when Ameritech technicians are available.
- Access to Primary Interexchange Carrier (“PIC”) and Local Primary IntraLATA Carrier lists – CLECs may use this inquiry to request a list of interexchange carriers and intraLATA carriers providing service at a given Ameritech central office switch

⁹ *SWBT Texas Order*, 15 FCC Rcd at 18426, para. 148; *Bell Atlantic New York Order*, 15 FCC Rcd at 4014,

- Access to Common Language Location Identifier (“CLLI”) for the serving central office - Using an end customer’s telephone number, a CLEC may use this transaction to determine the CLLI associated with the central office serving that end customer.
- Channel facility assignment (“CFA”) verification (for UNEs) - This inquiry may be used by a CLEC to verify the status of a CFA prior to using that CFA on an order.
- Network Channel (“NC”)/Network Channel Interface (“NCI”) verification (for UNEs) – CLECs may use this inquiry to verify the correctness of NC/NCI codes prior to using those codes on an order for service.
- Digital Subscriber Line (“DSL”) Loop Pre-Qualification and Qualification – These transactions are used by CLECs to determine whether loop facilities available to a given address or associated with a specific working telephone number are likely to support xDSL service. (A detailed discussion of access to loop qualification information is provided in ¶¶ 81 – 96 below.)

71. The data to support the pre-ordering functions described above is available from Ameritech’s “back office” systems. “Back office” systems are those systems not generally accessed directly by service representatives (either Ameritech or CLEC), but accessed through systems used by those service representatives. In the case of CLEC users, Ameritech has provided interface software that selects the appropriate back office system to provide the requested data, allowing the CLEC to interface with Ameritech at a single point. Additionally, this interface software translates incoming CLEC requests and

para. 130; *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20661-67, para. 105.

the Ameritech responses into the appropriate format, freeing the CLEC from having to be able to ‘converse’ with the many Ameritech back office systems. CLECs access the pre-ordering functions through this interface software using Enhanced Verigate or Electronic Data Interchange (“EDI”) and Common Object Request Broker Architecture (“CORBA”) which are discussed next.

Electronic Pre-ordering Interfaces

72. Ameritech provides CLECs with a choice of electronic interfaces for access to Ameritech OSS pre-ordering capabilities. Utilizing the national guidelines available for several of the pre-ordering functions based on an Electronic Data Interchange (“EDI”) and Common Object Request Broker Architecture (“CORBA”) protocols, Ameritech makes an industry standard EDI/CORBA Gateway available to CLECs. Enhanced Verification Gateway (“Enhanced Verigate”) is a graphical user interface designed for smaller CLECs who want an inexpensive, web-based method of access to Ameritech’s systems. The Enhanced Verigate interface provides CLECs with “real time” access on a dial-up or direct connection basis, or via the public Internet. EDI/CORBA also provides “real time” access, but on a direct connection basis only. Ameritech provides CLECs with access to all the necessary technical specifications and documentation for the aforementioned pre-ordering interfaces. Attachment D depicts the various Ameritech options available to CLECs for pre-ordering functionality and a high-level view of the pre-order system flows.
73. Ameritech service representatives make use of two systems for access to pre-ordering functions and for placing orders, Ameritech Customer Information System (“ACIS”) and Exchange Access Control and Tracking (“EXACT”). Besides being used by Ameritech’s

retail representatives for ordering most retail services, ACIS is used by LSC service representatives for ordering resale and unbundled local switch. EXACT is used by Ameritech service representatives to order services for IXC customers of Ameritech, as well as by LSC representatives for ordering unbundled loops, unbundled dedicated transport, and collocation trunks. While ACIS is also a billing system as described in the affidavit of Denise Kagan, EXACT is strictly an ordering system which sends orders on to the Carrier Access Billing System (“CABS”) for billing.

74. The table below lists the Ameritech back office system used to support the functionality and data requirements of the various pre-ordering functions. Note that the same system supports a given function for both Ameritech and CLEC service representatives.

	Enhanced Verigate	EDI/CORBA	ACIS and/or EXACT
Address verification	ACIS Street Address Guide (“SAG”)	ACIS SAG	ACIS SAG
CSR / CSI	ACIS	ACIS	ACIS
DL/DA	ACIS	ACIS	ACIS
Service & feature availability	ACIS	ACIS	ACIS
Access to TN inquiry	ACIS	ACIS	ACIS
Due date availability	Work Force Administration (“WFA”) (through ACIS)	WFA (through ACIS)	WFA
Dispatch requirements	Loop Facility Assignment Control System (“LFACS”)	LFACS	LFACS
PIC/LPIC	ACIS	ACIS	ACIS
CLLI	X	X	X
CFA verification	Trunk Integrated Record Keeping System (“TIRKS”)	TIRKS	TIRKS
NC/NCI verification	EXACT	EXACT	EXACT
DSL loop qualification and pre-qualification	LFACS and Ameritech Records and Engineering System (“ARES”)	LFACS and ARES	N/A

EDI and CORBA

75. On January 1, 1997, Ameritech implemented its first pre-ordering interface – the industry standard EDI Pre-ordering Gateway. On March 24, 2001, Ameritech deployed the most recent update to this interface. Following this deployment, Ameritech now supports two structural protocols, EDI and CORBA, as recommended by the technical industry committees. These protocols were introduced by industry forums, and have been used to “front-end” the same backend application functionality, data content, and performance standards as is available to Ameritech personnel. While EDI and CORBA are different protocols and allow CLECs to select which ‘format’ they wish to use in their pre-ordering interface, they provide access to the same pre-ordering functionality. Consequently, they will be referred to jointly as the EDI/CORBA interface in this document. EDI/CORBA is an application-to-application interface that can be integrated with the CLEC’s own negotiation system and that supports both resale services and UNEs. EDI/CORBA for pre-order can also be integrated by the CLEC with Ameritech’s EDI (Ordering Gateway) to provide an integrated pre-ordering and ordering system. The EDI/CORBA interface allows a CLEC’s electronic systems and “applications” to communicate directly with their counterparts at Ameritech. Application-to-application interfaces are based on industry guidelines and require software development by both Ameritech and the CLEC users. They are suited to CLECs that already have electronic applications for pre-ordering and that would rather integrate those systems with Ameritech’s application than use a separate GUI. Rather than having CLEC systems development tied to a particular Regional Bell Operating Company’s (“RBOC”) system

in a way that would inconvenience CLECs that place orders with multiple RBOCs, EDI/CORBA is an industry-wide standard pre-ordering interface that reduces the development requirements for CLECs who operate in multiple regions. Additionally, Ameritech's single EDI/CORBA interface allows a CLEC to access pre-ordering information for its entire five-state region, which also serves to minimize CLEC development effort.

76. Ameritech's implementation plans for the March 2001 EDI/CORBA implementation were discussed with CLEC customers during the collaborative sessions associated with MPSC Case No. U-12320, as part of the FCC SBC/Ameritech OSS Uniform and Enhanced Merger Condition collaborative process, and as part of the Change Management Process (discussed in the "Change Management" section of my affidavit) prior to deployment. Pursuant to those processes, Ameritech's March 2001 EDI/CORBA deployment provided CLECs with the following enhancements to the existing pre-ordering functionality:

- Updated the pre-ordering interface consistent with the OBF's LSOG version 4
- Added the CORBA protocol as an additional alternative to the available EDI protocol
- Synchronized pre-ordering and ordering data elements
- Modified the following existing transactions: CLLI (Common Language Location Information) Inquiry, CFA (Connecting Facility Assignment) Inquiry, CSR (Customer Service Record) Inquiry, TN (Telephone Number) Availability Inquiry, Loop Qualification, Address Validation, and the Feature/Service Availability Inquiry

- Implemented new Dispatch Inquiry and Loop Pre-Qualification transactions

77. EDI/CORBA is today processing commercial volumes of pre-order transactions. Ameritech has established 111 CLEC IDs¹⁰ to its EDI/CORBA pre-ordering interface. During February 2001, EDI/CORBA processed over 1,000,000 commercial pre-order transactions, about four times the total number of pre-order transactions processed by Bell Atlantic's systems in one month at the time of the FCC 271 approval for New York. Bell Atlantic New York Order ¶ 150.

Enhanced Verigate

78. Enhanced Verigate is a web-based graphical user interface that operates with Internet Explorer™ versions 4.x and 5.x and provides CLECs access in plain English along with OBF-defined field names to pre-ordering functions. Enhanced Verigate was designed as a pre-order interface for CLECs that wish to utilize Ameritech's Enhanced LEX or EDI ordering interfaces for resale and/or UNEs, but do not wish to pursue the development of the software programs required for use of EDI/CORBA, Ameritech's application-to-application pre-order interface. Being a graphical user interface, Enhanced Verigate is an interface through which a person (i.e. a CLEC service representative) communicates with an electronic software program or "application." Many well-known personal computer applications are, in essence, GUIs. The only software development required for a GUI is on Ameritech's side. The CLEC user is responsible only for learning to navigate the details of the latest version (e.g., the various screens, commands and search criteria). As a result, Enhanced Verigate has the advantages of economy and quick start-up capability

and is well suited for smaller CLECs that do not have (or wish to develop) software and systems of their own.

79. Ameritech deployed Enhanced Verigate for commercial use on March 24, 2001. It is modeled on a Southwestern Bell pre-order interface known as Verigate; it is “enhanced” because it is designed to work like an Internet web browser and can be used with Windows. Ameritech implemented Enhanced Verigate to meet the Uniform Plan of Record requirements as part of the SBC/Ameritech Merger Commitments, and as committed in the December Joint Report in MPSC Case No. U-12320. It was implemented in accordance with Version 4 of the Local Service Ordering Guide (“LSOG 4”) promulgated by the Ordering and Billing Forum (“OBF”). Since it was made available, thirty-one CLECs have made use of Enhanced Verigate in production, and 7,143 CLEC user IDs have been issued.
80. Prior to March 24, 2001, Ameritech provided CLECs with electronic access to certain pre-ordering functions through a GUI known as TCNet GUI. Enhanced Verigate is the replacement for TCNet, which will be retired on December 1, 2001 per Accessible Letter CLECAM00-066, dated November 22, 2000, which can be found on CLEC Online. TCNet will still be available to CLECs until its retirement.

Loop Qualification

81. Loop pre-qualification and qualification refer to different types of information about a loop’s characteristics or make-up (such as its length) to find out if it will support xDSL technology. Through pre-qualification, one obtains basic loop information associated

¹⁰ In some cases, a single CLEC may have multiple IDs. For example, one CLEC may have an ID for its production activity and another ID for its test activity. In other cases, where one CLEC has merged with another, the original IDs will remain in use although only a single company then exists.

with facilities to an address but not the details regarding the loop make-up. Qualification, on the other hand, involves detailed make-up information about the loop that serve a specific working telephone number or address.

82. Loop pre-qualification is an optional “real-time” screening tool that provides information about Ameritech’s facilities, which allows the accessing carrier immediately to draw some preliminary conclusions as to whether advanced service may be appropriate for a particular customer, as well as the type of xDSL service that could be used. Pre-qualification is available in addition to the loop qualification option discussed more fully below. Ameritech’s pre-qualification system offers the following types of information:

- **Loop Status** – This field provides the loop length indicator at a verified customer’s address. This information is helpful because the various types of advanced services technologies function best at different distances from the central office. The loop length indicator is a quick, graphical representation of the available loop information useful in determining whether it will be possible to provide an advanced service to a particular user and the types of advanced service potentially capable of serving that user. The information retrieved will be a field display of “L,” “M,” or “N.”
 - **L (“green”)** – indicates the existing loop length is less than 12,000 ft. at the serving wire center of the customer address.
 - **M (“yellow”)** – indicates the existing loop length falls between 12,000 ft. and 17,500 ft. at the local serving wire center of the customer address.
 - **N (“red”)** – indicates that either the existing length is greater than 17,500 ft. at the local serving wire center of the customer address and/or that the end user’s address is served exclusively by pair gain.
- **Taper Code** – The taper code is an internal identifier for a set of pairs within a cable that should be referenced on Loop Qualification requests that follow pre-qualification. This identifier helps to facilitate the manual loop qualification process.
- **Equivalent Loop Length** – The equivalent 26-gauge loop length information is the length of the loop, converted to the equivalent length had the entire loop consisted of 26-gauge wire. This data provides a

facility-based customer with loop length information displayed in thousands of feet.

- **Design Cable Gauge Make-Up (“DCGMU”)** – Is the theoretical loop length and gauge design for the area that serves the telephone number of address being qualified. This length is an actual loop length typical for the address being qualified.
- **NPA/NXX** – This is the NPA/NXX combination for the telephone numbers or addresses being qualified on the loop qualification request.

83. CLECs may access pre-qualification information through their EDI/CORBA or Enhanced Verigate interfaces. All interfaces will retrieve the same data. To access pre-qualification data with Enhanced Verigate, a CLEC simply clicks on “address validation” and then fills in the end user’s address on the screen displayed. After performing the address validation, the user selects the “loop pre-qualification inquiry” from the main menu. CLECs that utilize one of the application-to-application interfaces (EDI/CORBA) may program their application in a similar manner.

84. As noted above, the Ameritech pre-qualification system returns data fields including the 26-gauge equivalent loop length (*e.g.*, the end user is 13,200 feet from central office); and a “(N), (M) or (L)” status indicator, signifies whether the loop falls into one of three categories. Because the various forms of xDSL service operate at differing degrees of effectiveness depending upon the distance separating the end user from the central office, the loop length provides CLECs with a helpful tool for narrowing the types of xDSL they may be able to offer a given end user. The “(N), (M) or (L)” status indicator provides an additional graphical representation of the information available in pre-qualification.

85. The status “(L)” indicates that the actual 26 gauge equivalent loop lengths serving the specified address is between 0 and 12,000 feet. Because a copper loop that is 12,000 feet or less in length will likely be capable of supporting some form of xDSL service without

additional conditioning, “(L)” typically signifies that the loop is a strong candidate for ADSL and other xDSL technologies. In addition, Ameritech has committed to automatically remove any load coils, repeaters and/or excessive bridged tap in excess of 2,500 feet at no charge to the CLEC for loops with a pre-qualification status of “L.”

86. “(M)” indicates that the actual 26 gauge equivalent loop lengths serving the specified address falls between 12,001 and 17,500 feet. A “(M)” status signal suggests CLECs may want to rule out those xDSL technologies requiring loop lengths of 12,000 feet or less, and otherwise may indicate the need for a more detailed investigation of loop makeup information to determine the physical characteristics of the loop.
87. “(N)” indicates either that the actual 26 gauge equivalent loop lengths serving the specified address is greater than 17,500 feet from the local service wire center of the customer address and/or that the end user’s address is served exclusively by pair gain. For customers ordering UNE Loop service, if the end user is served exclusively by pair gain, xDSL capable loops are not available to serve this customer. If the loop is longer than 17,500 feet but is not served exclusively by pair gain, this loop does not qualify for any xDSL technology that is not qualified past 17,500 feet, including ADSL technology. If a CLEC utilizes technology that may be capable of working on this type of facility, the “(N)” signal indicates the need for further loop investigation to determine the physical characteristics of the loop. Copper loops over 18,000 feet need load coils to support voice service. Removing these load coils would degrade the voice service. As a result, a “(N)” response would indicate that the loop will probably not be a candidate for line sharing.

88. In short, the “(N), (M), and (L)” status indicators are a quick, graphical representation of the available loop information useful in determining whether it will be possible to provide an advanced service to a particular end user, and the types of advanced service potentially capable of serving that end user. The more specific pre-qualification information provided by Ameritech regarding loop length allows the inquiring carrier to better identify the potential capabilities of the loop.
89. “Loop qualification” provides the detailed, customer-specific loop make-up information the service provider needs to make a decision regarding the provisioning of an advanced service. CLECs may request electronically stored loop qualification or manually stored loop qualification information. This loop make-up information includes the data a carrier needs to determine the loop’s ability to support a particular xDSL service, such as the 26 gauge equivalent loop length; the length of the loop by gauge; the quantity of bridged tap, load coils and repeaters present on the loop; the length of the feeder cable (“F1”) and the distribution cable (“F2”) respectively; the presence (or absence) of DLC in the loop; and the presence of potentially disturbing technologies in the same and/or adjacent binder groups as well as other loop make-up information. In contrast to the pre-order process described above where the CLEC provides an address or telephone number, in the ordering process the industry-standard LSR requires more than 30 fields to be populated for service provisioning and service order creation.
90. A loop qualification request is highly recommended prior to a CLEC submitting a request for a loop. By providing access in pre-ordering to loop make-up information, Ameritech ensures that every CLEC has the unrestricted opportunity to decide whether to provide

xDSL services to its end user customers, the ability to select a particular xDSL-based technology to offer, and the information necessary to order such services.

91. There are three types available, Actual Data Request, a Design/Archived Actual Data Request and a Manual Request.
92. Actual data or loop qualification, is specific loop make-up information for an actual loop serving the requested end user's address or telephone number. In most cases, actual loop make-up information is inventoried in Ameritech electronic databases.
93. When actual information is not available electronically, Ameritech gives CLECs an option. They may request designed/archived actual loop make-up information or alternatively, they can request a manual look-up of the actual loop make-up information.
94. A Designed/Archived Actual inquiry provides a detailed loop qualification using a pre-ordering validated address to obtain design/archived actual results. Loop Qualification searches for the submitted address in its designed/archived actual database and returns the loop make-up. The archived actual inquiry will generally provide a faster response than the actual inquiry. Archived Actual results are produced from actual loop make-up information by downloading actual information into the archived actual database every 30 days.
95. With the March 24, 2001 implementation, a CLEC also has the option of submitting a manual loop qualification request for loop make-up information via the Enhanced Verigate and EDI/CORBA interfaces. When a CLEC makes a request for manual loop make-up information, the request is forwarded to Outside Plant ("OSP") Engineering electronically. OSP Engineering will complete the request within three to five business days and update the information in the loop qualification database where it is available

for viewing by the CLEC. In addition, upon request, Ameritech will return the results of manual look-ups to an e-mail address pre-designated by the CLEC.

96. A completed manual loop qualification contains all the information in Ameritech's electronic and paper records about the status of a particular loop.¹¹ This information allows a CLEC to determine whether a loop to the requested premise is "capable of supporting xDSL and other advanced technologies,"¹² and to plan for and avoid provisioning problems stemming from technical or other facility-related limitations.

Pre-ordering Integration

97. Integration refers to the ability for a CLEC to make use of data provided by one interface or contained in one database as input to another interface or database. Most commonly, integration is used to specifically describe the use of data retrieved through the pre-ordering interface directly as input to the ordering interface. Ameritech has made two recent enhancements to further simplify integration by CLECs, parsing of its CSR data and field-level synchronization of its pre-ordering and ordering data.
98. Data may be transmitted in two ways in EDI and CORBA protocols, either "parsed" (using the individual data fields) or "unparsed" (a grouping of information in a single field). When it first implemented the pre-ordering transaction for retrieval of its customer service records by CLECs, Ameritech chose to implement the unparsed method, because it better reflects how information is stored in Ameritech's backend systems and made available to Ameritech's retail operations. Once OBF created a guideline for this transaction, that guideline specified that the CSR information could be provided in a fielded, or parsed, format.

¹¹ See *UNE Remand Order*, 15 FCC Rcd at 3885, ¶ 427.

99. On July 27, 2000, as part of its participation in Ameritech OSS collaboratives, MCI WorldCom presented Ameritech with a change request asking that Ameritech modify its CSR transaction to return information in a fielded format. Ameritech made such an enhancement and now returns CSR data in a fielded format (parsed) as was promised in the Joint Report.
100. Although CLECs requested this enhancement to simplify their task in integrating pre-ordering and ordering functionality, those CLECs wishing to do so had successfully integrated the unparsed CSR into their pre-ordering and ordering process using the prior format. As an example, the Mantiss software previously described in the “EDI Implementation” has integrated the information provided by Ameritech through its pre-ordering interface into its ordering interface as described in their product brochure included as Attachment C-3.
101. As documented in the Joint Report, in addition to providing Customer Service Record information in parsed form, Ameritech committed to synchronizing the data fields of its pre-ordering and ordering interfaces. Synchronizing means that specific data fields used both in pre-ordering and ordering would have the same characteristics, such as field length and valid values. Where it is likely that information returned in pre-order transaction would in turn be used by the CLEC to create an order, or where the same data would be supplied by the CLEC as an input to both the pre-ordering and ordering interfaces, Ameritech has modified its pre-ordering transaction inputs and outputs and its ordering interface requirements to synchronize the data characteristics of the fields

¹² *UNE Remand Order*, 15 FCC Rcd at 3884-885, ¶426.

common to both interfaces. This synchronization was implemented as part of the March 2001 LSOG 4 release.

102. Pre-ordering is interactive, “real-time” activity. A pre-ordering transaction is essentially an inquiry for information residing in an Ameritech system database. Thus the fundamental processing paradigm of pre-order requires that, all systems within the processing flow must be simultaneously available in order to fulfill a request for pre-order information. Ameritech provides access to pre-order information through interfaces to its core backend systems. A CLEC pre-order transaction must be processed “real-time” from receipt of the request, through the appropriate interfaces that direct the request to the appropriate backend system hosting the information, to the response that then returns the requested information back to the CLEC – all in a matter of seconds.
103. The computing process to satisfy a CLEC pre-order request works like a “chain” of systems that are linked together. If one of these systems should be unavailable, then the processing “chain” is broken and the flow of information cannot be completed. The ability to provide information in response to a CLEC pre-order request requires end-to-end availability of all systems involved in the processing of that request, which typically includes the interface, middleware, midrange databases, and backend systems.
104. Each pre-order request requires the availability of the Ameritech Enterprise Messaging System (AEMS). This system receives the EDI pre-order request and translates the EDI format into a request for information. Depending on the specific pre-order request, AEMS then forwards the pre-order request to either Service Access Manager (SAM) to obtain information from the appropriate backend system or to the MORTel database to extract information directly.

105. SAM is Ameritech's middleware and is used as a common linkage product to access the appropriate core backend system to acquire the requested information. The SAM infrastructure is also utilized for some of Ameritech's retail service representatives' information requests. This flow of information through Ameritech's pre-ordering interface systems may be found as Attachment D.
106. All of the systems utilized in responding to CLEC pre-ordering inquiries require various forms of maintenance in order to keep them running efficiently and reliably. The specific maintenance activities, the frequency, and the magnitude of time required will vary from system to system. The backend systems and architectures used by Ameritech are primarily based on large-scale mainframe processors. While these processors do require significant overhead and maintenance, they yet are also still considered an appropriate and technologically sound choice for processing large amounts of data with speed and reliability. Maintenance can be generally classified into two categories: maintenance that is scheduled periodically (e.g., daily, weekly, monthly, quarterly, etc.) and special maintenance activities that are scheduled on a non-recurring basis. Much of the periodic maintenance is oriented on efficient management of information databases. Examples of periodic maintenance include database reorganization, making database image copies, CPU maintenance, and database scrubs. Maintenance scheduled on a non-recurring basis is typically event driven (i.e., hardware installs/upgrades, system software upgrades, problem resolution, etc.). The non-recurring maintenance activities are often major events, requiring elongated system unavailability. Examples of non-recurring maintenance activities include replacement or upgrade of computing hardware to provide capacity for transaction volume growth, installation of new releases of system software,

and hardware or storage maintenance activities based on monitoring of performance trends. Each of these can typically be scheduled with advance notice.

107. The source of pre-order information, however accessed, is Ameritech's backend systems. There are many different backend systems. Each has a different business purpose and maintains different information in its databases that is relevant to pre-ordering. Most pre-order functions require access to multiple backend systems. These are the same backend systems that support Ameritech's retail operation. It is transparent to these backend systems as to whether they're processing CLEC transactions or retail transactions. Consequently, the availability of a given backend system, and therefore the functionality and data availability provided by that system, is the same for Ameritech's retail users as for CLECs. Information regarding pre-ordering interface availability may be found on the CLEC web site.

Pre-ordering Performance Measurements

108. Ameritech provides OSS measures to demonstrate that it provides CLECs nondiscriminatory access. As further described in the affidavit of Salvatore Fioretti, Ameritech provides pre-order measures such as:

- Average Response Time for OSS Pre-Order Interfaces (PM #1)
- % Response within "x" Seconds (PM #2)
- OSS Interface Availability (PM #4)

VII. ORDERING AND PROVISIONING---OVERVIEW

109. In this and the following two sections, I describe how Ameritech provides competing carriers with access to the OSS functions necessary for placing wholesale orders. In doing this, I will address those same elements of ordering as have been probative in past

section 271 orders: First, in this Section VII, I will describe the ordering interfaces Ameritech makes available to CLECs. Then I summarize the types of services and products that can be ordered over these interfaces. In Section VIII below, I describe the ordering process flow, and Ameritech's efforts to improve order "flow-through." Next, I summarize various notices provided to a CLEC during the ordering process, including confirmation notices, rejection notices, completion notices, and jeopardy information. Finally, in Section IX below, I summarize all of the above by the use of actual transaction flows

110. Ordering typically involves the transmission of a local service request ("LSR") from the CLEC to Ameritech via Enhanced LEX or the EDI Gateway with the necessary information for creation of a service order. The LSR transmission / service order creation process is described in more detail in the "Flow Through" section of my affidavit.
111. Provisioning involves the exchange of information whereby the CLEC has the capability to obtain order confirmation data, service order status, and service order completion information. It is difficult at times to separate the functionalities because ordering and provisioning functions in Ameritech's ordering interfaces are so closely intertwined.

Ordering/provisioning capabilities include:

- Order receipt,
- Return of acknowledgments,
- Editing for valid information,
- Return of error information,
- Order confirmation, and
- Return of service order completion status.

Ordering/Provisioning Interfaces

112. Ameritech provides CLECs with a choice of two electronic interfaces for access to its OSS ordering/provisioning capabilities: an EDI Gateway, and Enhanced LEX. Additional electronic interfaces are available to order local interconnection trunks, and unbundled dedicated transport. For those CLECs that do not want to utilize an electronic interface for ordering, Ameritech also accepts some service requests by facsimile. In these situations, the LSC service representative creates the order for the CLEC. The manual ordering process is discussed in the affidavit of Justin Brown. Attachment E depicts the various Ameritech options available to CLECs for ordering/provisioning functionality and a high-level view of the ordering system flows.
113. Ameritech retail service representatives utilize ACIS and EXACT to create service orders, described in the “Pre-ordering” section of this document, while CLECs make use of EDI and/or Enhanced LEX. Ameritech’s ordering and provisioning functionality are provided by these same two ordering systems used by its retail service representatives. As it has for pre-ordering, though, Ameritech has created interface software which ‘routes’ orders received from CLECs to the proper back office ordering system, and then routes responses from those systems back to the CLEC while allowing the CLEC to connect with Ameritech at a single point. This interface software also translates and formats these orders and responses so that the CLEC need only be familiar with a single interface, i.e. Enhanced LEX or EDI, without having to be aware of the differences between the two Ameritech ordering systems. The table below lists all the interfaces

available to Ameritech and CLECs for ordering/provisioning¹³ functions and the capabilities available in each system.

Order Interfaces			
	EDI	Enhanced LEX	ACIS and EXACT
Order receipt/input	X	X	X
Return of acknowledgments	X	X	
Editing for valid information	X	X	X
Return of error information	X	X	X
Order confirmation	X	X	
Proactive notification of due date jeopardy	X	X	
Return of service order completion status	X	X	

EDI Gateway

114. Ameritech’s Electronic Data Interchange (“EDI”) Gateway provides an electronic interface that conforms to the Ordering and Billing Forum/Telecommunications Interface Forum (“OBF/TCIF”) national guidelines. Ameritech’s EDI Gateway supports the ordering and provisioning of both resale services and UNEs. It enables the CLECs to electronically submit local service requests to Ameritech, receive acknowledgments, confirmations and completion status utilizing the CLEC user’s interface. CLECs can integrate the EDI ordering gateway with the EDI/CORBA pre-ordering interface to provide an integrated pre-ordering and ordering system.

¹³ While subsequent sections of this affidavit refers to “ordering interface(s)”, “ordering functionality”, and “ordering issues”, as discussed above, some “provisioning-type” functionality can be difficult to distinguish and may also be included. Pure provisioning interfaces and applicable processes (e.g., assigning facilities) are managed by Ameritech’s legacy systems, where CLEC and Ameritech retail orders are processed indiscriminately as discussed more fully in the “Provisioning” subsection of my affidavit.

115. Ameritech's EDI Gateway currently supports OBF LSOG Version 4 with modifications to accommodate many of the Version 5 enhancements. The March 2001 deployment LSOG Version 4 was a result of CLEC/Ameritech collaboration, and was a commitment made in the Joint Report. New versions/releases, such as LSOG Version 5, will be deployed in accordance with the Ameritech Change Management Process, described below. Further, some of Ameritech's support for electronic (EDI) ordering of complex service has been implemented in advance of industry guidelines. Much of Ameritech's support for electronic (EDI) ordering of complex service was implemented in advance of guidelines, and will be updated to be consistent with the guidelines once they are available.
116. For resale, Ameritech's EDI Gateway currently enables CLECs to perform conversion, new connect, changes of service, outside move, and disconnect order requests. With certain exceptions as documented in Attachment F, orders for resale services flow through electronically to Ameritech's legacy (back office) systems. National guidelines for providing CLECs with an EDI capability for complex services have been developed and implemented by Ameritech. Ameritech has committed to updating its interface to support newly adopted OBF/TCIF guidelines via the Change Management Process.
117. While national guidelines have yet to be fully developed for the ordering of all UNEs, Ameritech has taken a proactive approach to incorporate the completed OBF/TCIF national guidelines into the Ameritech EDI Gateway. As a result, Ameritech has developed its EDI Gateway to receive CLEC orders for unbundled local loops, number portability and switch ports. Ameritech's EDI Gateway also supports all UNE

combinations defined by OBF, including Loop with Port (or POTS UNE-Platform), Loop, Loop with Number Portability and Number Portability.

118. Ameritech's EDI and Enhanced LEX interfaces provide the capability for CLECs to electronically supplement orders, as well as electronically receive error notifications, FOCs, SOC's, and other status notifications as described later in this document.

Ameritech has provided CLECs with up-to-date documentation, such as the Enhanced LEX User Guide (found on the CLEC web site), that provides the necessary information to effectively process supplements electronically.

119.

Enhanced LEX

120. Local service request EXchange ("Enhanced LEX") is a graphical user interface developed for CLECs by SBC/Ameritech. Enhanced LEX was designed to operate with Internet Explorer™ versions 4.x and 5.x and is based upon national Ordering and Billing Forum ("OBF")/LSR guidelines currently using Local Service Ordering Guidelines ("LSOG"), Version 4. It allows CLECs to electronically create and transmit resale service and UNE local service requests to Ameritech. Enhanced LEX also enables CLECs to receive acknowledgments and notification of error details from Ameritech, to track FOC and SOC status, and to view loss notifications.

121. Enhanced LEX is an option for CLECs that wish to utilize national guidelines ordering formats but do not have or do not wish to establish EDI capability. Enhanced LEX supports the same activity types of orders as Ameritech's EDI Gateway for resale services and UNEs. Specifically, for resale services, Enhanced LEX currently enables the CLECs to perform: new connect with basic directory (straight line) listings, change of

service, disconnect, outside move, conversion with change, and conversion as is orders. For UNEs, Enhanced LEX allows CLECs to submit orders for unbundled local loops, number portability and switch ports. Enhanced LEX supports UNE combinations defined by OBF, including Loop with Port, Loop with Number Portability, and Number Portability. After being introduced into the CLEC Joint Testing Environment on January 17, 2001, Enhanced LEX became generally available in Ameritech on March 24, 2001. As of May 10, 2001, Ameritech has issued 6,461 user IDs to CLECs for access to Enhanced LEX.

NDM / UNIX Telis

122. Ameritech accepts electronic orders for local interconnection trunks and dedicated facilities using the Access Services Request (“ASR”) process. Ameritech is in compliance with OBF Version 22 of the ASR, which conforms with FCC requirements for electronic ordering of unbundled transport, and has announced that it will be moving to Version 23 in June. Second Louisiana Order ¶ 206. Both Network Data Mover (“NDM”) and UNIX Telis are electronic means of submitting orders to Exchange Access Control and Tracking (“EXACT”), which is the same system used by Ameritech retail service representatives for ordering comparable retail products. With NDM, the CLEC or interexchange carrier (“IXC”) creates a file using its own software loaded onto its own PCs that formats the ASR information according to industry guidelines. This file is then electronically sent to Ameritech and loaded to EXACT. Ameritech acknowledges the receipt and sends electronic confirmations. With Telis, the CLEC or IXC dials into the Ameritech UNIX machine, which maintains the software, and sends the order to EXACT when the carrier types a submit request. As with NDM, Telis sends electronic

confirmation. The ASR/NDM process is currently being used by IXC's for the ordering of access services from Ameritech. From May 2000 through April 2001, CLECs submitted over 255,000 ASRs (not including supplements) electronically via NDM/UNIX Telis, of which approximately 72,000 were for local services in the state of Michigan.

123. If the carrier chooses not to utilize NDM or UNIX Telis, the ASR can be manually faxed to the Ameritech Local Service Center and Ameritech service representatives will manually type the order into EXACT. Please refer to the affidavit of Justin Brown for a discussion of manual processes.

ACIS and EXACT

124. Based on a FCC Merger Condition¹⁴, a CLEC can request access to Ameritech's internal service order system for the direct entry of service orders for a period of 30 months from November 8, 1999. To date, no CLECs have requested access to either ACIS or EXACT.

Products and Services and Order Types

125. Ameritech's ordering interfaces support a wide range of products and services, and order types. CLECs have the opportunity to transmit electronically almost any local service order they wish to place with Ameritech. Using the EDI interface, CLECs may order:

- Resale Basic Exchange Service
- Resale Private Line Service
- Resale ISDN PRI Service
- Resale Base Rate Service
- Resale DID Services
- Resale Foreign Exchange Services
- Resale Coin Services
- Resale Centrex Service
- Resale ISDN BRI Service
- Resale Advance Digital Trunking Services
- Resale DS1, DS3 (Line Side) Services
- Resale PBX Services
- Resale Off-Premise Extensions
- Basic Ports

¹⁴ Applications of Ameritech Corp. and SBC Communications Inc. for Consent to Transfer Control of Corporations Holding Commission Licenses and Lines Pursuant to Section 214 and 310(d) of the Communications Act and Parts 5, 22, 24, 25, 63, 90, 95, and 101 of the Commission's Rules, CC Docket No. 98-141, Memorandum Opinion and Order, 14 FCC Rcd 14712 (1999).

- Centrex Line Ports
- DID Trunk Ports
- PRI Trunk Ports
- DS1 Network Ports
- Basic Loops - ISDN, xDSL, PBX, and DS1
- Stand-alone Number Portability
- Directory Listings
- Analog Trunk Ports
- BRI Line Ports
- DS1 Trunk Ports
- Loop with Port Combinations
- Loop Transport Combinations
- Number Portability with Loops

Directory Listings

126. As discussed in the affidavit of Robin Kniffen-Rusu, Ameritech’s white pages directories are published by a subsidiary, Ameritech Advertising Services (“AAS”), which is separate from its wireline telephone network operations subsidiary, Ameritech. For retail services, Ameritech obtains its directory services from AAS. Similarly, for its UNE products that include a white pages listing, Ameritech obtains that listing from AAS. For example, Ameritech provides CLECs a white pages listing with its Unbundled Local Switching (“UNE Port”) product. When a CLEC leases a UNE port from Ameritech, Ameritech then transmits a request to AAS to list the associated telephone number in its white pages directory.
127. AAS provides an EDI interface over which facilities-based CLECs may order and maintain white pages listings for their end user customers served via unbundled loops.
128. During the MPSC-sponsored OSS collaboration in Case U-12320, Ameritech committed to enhancing its EDI ordering interface to accept orders for directory listings associated with unbundled loops and forwarding those orders to AAS. CLECs will have a choice, then, of managing the directory listings of their end user customers directly using the interfaces offered by AAS or sending the directory listings orders with their unbundled loop orders to Ameritech to be forwarded to AAS. This enhancement is described in the Joint Report.

Digital Subscriber Loops

129. For information on the ordering of DSL-capable loops, please refer to the affidavit of Mike Silver.

VIII. ORDERING AND PROVISIONING PROCESSES AND NOTICES

130. Once a CLEC has transmitted an order to Ameritech, the order is processed by the interface software previously described. This software properly routes transactions between CLECs and Ameritech's back office systems. It also translates the CLEC's order into the internal service order format used by Ameritech's service order systems, and translates responses from Ameritech's systems back to the CLEC. As part of the translation process, this interface software checks the received order for proper format and data content. In Ameritech, this interface software is implemented in the Mechanized Order Receipt ("MOR") system.

Processing Flow

Mechanized Order Receipt

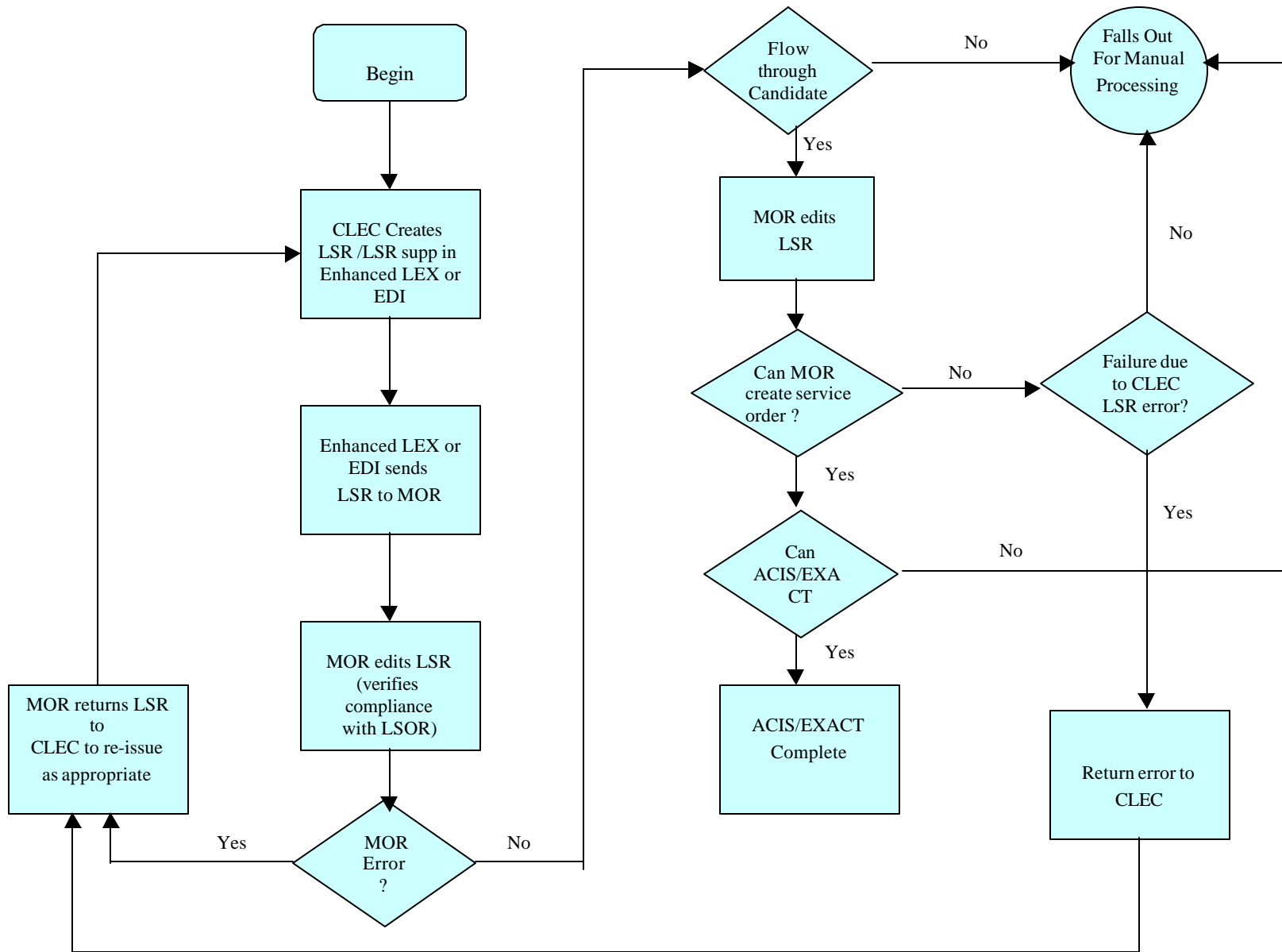
131. Before a service order is created, the LSR submitted through Enhanced LEX or EDI must pass edits, which check for valid data entries and formats as well as conditions between various fields. CLEC LSR training and business rule documentation, as specified in Ameritech's Local Service Ordering Requirements ("LSOR"), cover the necessary requirements for submitting accurate and complete LSRs. For more information on CLEC training, please refer to "CLEC OSS Training" in Section XIII of my affidavit.
132. MOR is the system that receives LSRs from Enhanced LEX and EDI and performs an editing process on the LSR information. Once the LSR reaches MOR, the resulting process flows are identical, regardless of the LSR's originating interface (Enhanced LEX

or EDI). The first of the MOR edits are based on LSR field entries as required by OBF and Ameritech's internal business rules. If the LSR fails these MOR edits, MOR returns an error message(s) to the CLEC via Enhanced LEX or the EDI Gateway, and the CLEC may correct the error and resubmit the LSR. MOR errors are listed in Ameritech's LSOR in section 5.7.

133. Once a service request passes the MOR edits, MOR then determines whether the LSR is "flowthrough-eligible". MOR has a mechanized means of creating service orders for many products and types of orders, but not all. A service order type is flowthrough-eligible if it has the potential to flow through without manual intervention. If the LSR is not flowthrough-eligible, it falls out for manual handling. Please refer to the affidavit of Justin Brown for a discussion of Ameritech's manual handling processes. On the other hand, if the service request is flowthrough-eligible, it is automatically forwarded to the service order creation process in MOR. A list of flowthrough-eligible services is provided as Attachment F.
134. MOR then attempts to create a service order from the entries on the LSR. MOR also uses information from additional tables to obtain data that is not required on the LSR but is necessary for service order creation. MOR processes the LSR through its logic and attempts to create the service order. If MOR cannot create a service order because the LSR fails a service order edit, MOR sends an error message to the CLEC, and the CLEC must correct the error and resubmit the LSR. These service order errors are among those listed in Ameritech's LSOR, Section 5.7. In the unlikely event MOR cannot create a service order because of a non-fatal MOR error (e.g., a MOR table discrepancy), the LSR falls out to the LSC for manual handling.

135. If the LSR is flowthrough-eligible and passes all MOR edits, MOR will create a service order. When that service order is successfully entered into ACIS or EXACT, an FOC is returned to the CLEC. Please refer to the “ACIS and EXACT Distribution” section of my affidavit for a more detailed discussion of the ACIS and EXACT distribution processes.
136. MOR-created service orders (LSRs that pass all MOR edits) may still fail an ACIS edit, and consequently “fall out” for manual processing. Like MOR, ACIS has its own edits for service orders. Ameritech has already identified and reproduced the majority of applicable ACIS edits as MOR edits. Additional edits are moved up-front (into MOR) with a EDI/MOR release based on priority, just as new MOR edits are typically created for new product or service offerings. Details about future edits, which will be electronically returned to the CLECs via MOR, are included in electronically distributed Accessible Letters to the CLECs. CLECAM00-026, dated July 6, 2000, which described the addition of 13 MOR error messages, may be found on CLEC Online. The service order ACIS edits that are translated and programmed in MOR edits can and should also be programmed by the CLEC into its own side of the EDI Gateway. A visual representation of Ameritech’s Enhanced LEX and EDI flow through and LSR editing process can be found on the following page.

MOR PROCESS



ACIS and EXACT Distribution

137. As mentioned above, when a LSR is flowthrough-eligible, passes all MOR edits, and MOR creates an order, that order is distributed through ACIS or EXACT for downstream processing. The Ameritech stages of order completion allow a CLEC to determine the status of its orders. For example, for a POTS line when all of the service orders for a CLEC request are entered into the Ameritech ACIS system, an FOC is returned to the CLEC. FOCs are discussed in more detail in the “Firm Order Confirmation” section of my affidavit. The order is in Originating (“O”) status and remains in Originating status until the date the order is physically completed. Physically completed means that the order flowed through the provisioning systems and was provisioned when no fieldwork is involved or, when appropriate, a technician is dispatched to complete the necessary fieldwork.
138. Once the work is physically completed, the order is sent over ACIS or EXACT distribution, which puts the order into Completion (“C”) status. The Completion phase is accomplished mechanically by ACIS and EXACT for no field work orders and by the technician and the Service Order Completion Center for orders requiring fieldwork.
139. Ameritech’s Customer Information System (“ACIS”) or Carrier Access Billing System (“CABS”) billing system will receive the completed service order and either Post (“P”) the order for billing the CLEC or put the order into Error (“E”) status. Once the order posts to ACIS or CABS, depending on the type of order, the order will drop from ACIS’s or EXACT’s pending order database and be archived. If the order errors, the LSC will make the necessary corrections to the service order and will redistribute the order. The order will then be sent to ACIS or CABS that evening for another attempt at posting. A

CLEC can access the Pending Order Status transaction to track the status of its service orders through the various stages of completion.

Flow Through

140. The FCC defines flow through as “the percentage of orders that an incumbent LEC processes electronically through its gateway and accepts into its back office systems without manual intervention (i.e., without additional human intervention once the order is submitted into the system).”¹⁵ Flow through “applies solely to the OSS ordering function, not the OSS provisioning function. In other words, Order Flow Through measures only how the competing carrier’s order is transmitted to the incumbent’s back office ordering system, not how the incumbent ultimately completes that order.” Performance Measurements Proposed Rulemaking, ¶ 71. Once an order is created and reaches Ameritech’s legacy systems, the process is the same for wholesale as it is for retail. After any order (retail or wholesale) reaches ACIS or EXACT, all orders are treated equally and Ameritech’s same systems and resources are used to accomplish the back-end tasks.
141. Attachment F provides a detailed view of the types of orders (both resale and unbundled network elements) that flow through Ameritech’s Enhanced LEX and EDI Gateway and those types of orders that are not eligible to flow through. Ameritech has prioritized its flow through development based primarily upon services with the expected highest order volumes, as forecasted by the CLECs and as determined from monitoring actual ordering volumes. As a result, for example, Ameritech implemented flow through for UNE-P business lines in early 2000, and for DSL and Line-sharing in December 2000 based on

¹⁵ Notice of Proposed Rulemaking, Performance Measurements and Reporting Requirements for Operations Support Systems, Interconnection, and Operator Services and Directory Assistance, 13 FCC Rcd 12817, 12850 ¶ 72 (1998) (“Performance Measurements Proposed Rulemaking”).

expected volumes of orders for those products. Of course, EDI flow-through is not possible until a CLEC has fully developed and tested its side of the EDI application, i.e. unless an order is received electronically and error-free, it cannot be made to flow through.

142. In accordance with the decision of the Michigan PSC, Ameritech's flow through performance measurement (PM #13) is defined as "the number of orders that flow through Ameritech's ordering systems without manual intervention, divided by the total number of flowthrough-eligible orders¹⁶." Manual rejects of electronically submitted LSRs¹⁷ do not count as failed flow through and are excluded from the flow through performance measurement when the reject results from CLEC errors. In addition, based on the FCC definition of flow through mentioned in paragraph 136 above, orders that fall out for manual handling after ACIS distribution¹⁸ do not count as failed flow through. For a more detailed discussion of flow through performance measurements, refer to the affidavit of Salvatore Fioretti.

143. Ameritech and CLECs, as part of the MPSC's OSS collaborative process, agreed to a process for managing further enhancement of Ameritech's flow through capabilities over the next twenty-four months. This process is described in the attached Joint Report in Part II, Section C, and began in April 2001 with the issuance by Ameritech of an updated flow through exceptions matrix, which is Attachment F. Subsequent steps include collaborative discussion with CLECs, and the creation of an enhancement project plan

¹⁶ Flow through-eligibility is discussed in the "Mechanized Order Receipt" section of my affidavit.

¹⁷ For an explanation of the electronic return of manual reject notifications, refer to the "Notices and Status" section of my affidavit.

¹⁸ For an explanation of ACIS and EXACT Distribution, refer to that section of my affidavit, below.

and flow through improvement targets by Ameritech. The priority list of enhancements to flow through provided by CLECs during the collaborative discussions will for the basis for the twenty-four month plan. Ameritech will report its progress on this plan quarterly to the MPSC. Additionally, Ameritech has made flow through a candidate topic of discussion at its Change Management meetings.

144. For a visual representation of the Enhanced LEX and EDI flow through process, please refer to the “Ameritech MOR Process” Flow Chart immediately following the “MOR” discussion below.

Notices and Status

145. There are several response and status transactions provided by Ameritech to enable to the CLEC to track its order through the ordering and provisioning process, beginning with the Firm Order Confirmation, (“FOC”) which lets the CLEC know that its order has been fully edited and has begun the provisioning process, and ending with the Service Order Completion (“SOC”), sent to the CLEC once provisioning is completed. All statuses and notices are available to a CLEC through both the EDI and Enhanced LEX interfaces.

Firm Order Confirmation

146. Ameritech provides electronic FOCs and SOCs for those LSRs submitted electronically. An FOC is returned to the CLEC when all orders for a request are created and entered into ACIS or EXACT.
147. If a CLEC electronically submits a complete and accurate, flowthrough-eligible LSR via Ameritech’s EDI or Enhanced LEX, it will receive a FOC in less than two hours, and often within minutes. If the above conditions are not met (complete, accurate, flowthrough-eligible LSRs), Ameritech will provide a FOC on most electronically

submitted simple service requests within 5 hours. The MPSC approved as nondiscriminatory this 5-hour FOC benchmark for 95% of the electronically submitted LSRs for simple residence and business, and switch ports of quantities less than 250, and for UNE loops in quantities less than 100.

148. The Michigan PSC also approved as nondiscriminatory a 24-hour FOC benchmark for electronically submitted LSRs for complex business orders (1-200 lines) and for manually submitted LSRs for simple residence and business, complex business, UNE loops (1-49 loops), and switch ports. A 48-hour FOC benchmark was approved for electronically and manually submitted LSRs for complex business orders with greater than 200 lines and UNE loop orders with greater than 50 loops.

Reject Notifications

149. Ameritech mechanically returns reject notifications on LSRs submitted via Enhanced LEX or EDI if the LSR fails MOR edits. In addition, when manual rejects, resulting from an ACIS error or non-fatal MOR error, prevent an order from distribution, the LSC is able to electronically return those manually-initiated reject notifications to CLECs. The latter electronic reject notifications are possible because Ameritech has developed a graphical user interface for MOR that can be used by the LSC to view and manage the requests that flow through MOR. Ameritech has not and does not have the practice (followed in Bell Atlantic) of correcting and processing orders containing errors instead of rejecting them. *Id.* ¶ 166 and n.516.
150. Since a service order's ability to flow through the system without manual handling depends upon the accuracy of the data entered by a CLEC, CLECs that properly train their service representatives and program their side of the EDI interface will help to

ensure correct data submission. Indeed, the FCC has found that LSR rejections may “be properly attributed to competing carriers that...choose not to integrate interfaces, do not adequately train and manage their employees, or do not invest in the necessary systems.” Bell Atlantic New York Order ¶ 167. The process of CLEC interface programming is based on translating the service order requirements in Ameritech’s LSOR to the data entry requirement of the LSR. When a CLEC takes this additional step, the CLEC’s accuracy rates will improve. Historical data on various CLECs reveals that the CLECs’ rejection rates vary widely. Rejection rates for individual CLECs utilizing EDI vary significantly. The FCC has stated that such wide variation in order rejection rates strongly implies CLEC responsibility for the rate at which orders are rejected. Id. ¶ 167. As further confirmation of this, the following table demonstrates the variance in order reject rates over time and between CLECs: (PM #9)

REJECT RATE	September	October	November	December	January	February
CLEC	%	%	%	%	%	%
CLEC A	21.23	7.80	4.22	9.34	11.06	12.86
CLEC B	45.08	21.79	16.14	28.24	16.77	15.83
CLEC C	32.76	35.07	34.85	37.27	38.03	35.56
CLEC D	19.61	13.54	10.53	25.62	19.85	18.61

151. One source of LSR rejects is a failure of the CLEC to include a valid end customer address. In order to reduce the number of CLEC LSR rejects, and although the national guideline would require CLECs to include the end customer address on virtually every order, Ameritech had eliminated the address requirement for certain order types. For those order types, Ameritech determines the end customer address through other means.

As one of the enhancements implemented as a result of the MPSC OSS collaborative, and described in the Joint Report, Ameritech removed the address requirement on additional order types, including orders for the High Frequency Portion of the Loop (“HFPL” or line sharing).

Provider-Initiated Response

152. After the FOC is provided to the CLEC, an order passes on to multiple systems and work groups for the appropriate provisioning activities. As these activities are completed, it is possible that certain of the Ameritech-assigned information provided to the CLEC via the FOC may need to be changed. In those situations, rather than using a manual notification to the CLEC, Ameritech has implemented an electronic notification, the Provider-Initiated Response (PIR). Since this transaction is implemented in EDI using what is known as an EDI 865 transaction, and because it is not sent in response to a CLEC transaction but is initiated by Ameritech, it is sometimes referred to as an “unsolicited 865”.
153. The PIR was created and implemented by Ameritech in advance of industry standards to provide a means for Ameritech to insure that the CLEC was electronically informed of any change to information that had been assigned to an order. CLECs have asked during various collaborative activities at differing times for Ameritech to make changes to the format, content, and process for the sending of PIR transactions to simplify the CLEC processing of these transactions. Most recently, as part of the collaborative meetings in Case No. U-12320 and documented in the Joint Report, Ameritech committed to making PIR-related enhancements as requested by the CLECs. Specifically, Ameritech agreed to:

- Provide the CLEC order number and order version number of the most recently processed version in the PIR
- Review any pending CLEC order supplements to a given order before sending any PIR associated with that order in case the supplement would obviate the need to send the PIR
- Code the PIR transactions in a way that would provide a clear indication of the underlying reason for the change conveyed in the transaction

154. These changes were implemented in March 2001 as they were described in the Joint Report.

Jeopardy Notifications

155. Ameritech provides electronic jeopardy notices to CLECs in parity with the jeopardy notices Ameritech provides to its retail operations. Over three years ago, Ameritech implemented a process whereby its backend systems provide mechanical feeds via MOR to Enhanced LEX and EDI for jeopardy situations. Although Ameritech is not necessarily required to actively provide electronic jeopardy notices (Bell Atlantic New York Order ¶ 185.), all applicable OBF-standard jeopardies can be mechanically returned via MOR GUI to CLECs submitting orders through Enhanced LEX or EDI. Accessible Letter CLECAMS01-051, dated April 20, 2001, found on CLEC Online, details the jeopardy notifications provided to CLECs. They are:

Jeopardy Code	Jeopardy Message
1A	Facilities Shortage
1B	Scheduling/Work Load
1C	Customer Not Ready
1D	No Loop Available
1E	End User Not Ready
1F	NSP Missed Appointment
1G	No Access to End User Prem
1J	Special Construction
1K	Natural Disaster
1P	Other
1Q	Assignment Problem
1W	Facilities Required
1Y	No Central Office Equipment Available

Service Order Completions

156. As mentioned in the “ACIS Distribution” section of my affidavit, once the work for the service order is physically completed, the order is sent over ACIS distribution, which puts the order into “Completion” status. The Completion phase is accomplished mechanically by MOR when all orders for a request are completed.
157. Ameritech’s performance measurement for SOC is based on the standard to return SOC on 97% of Mechanized Completions Returned within One Hour of Completion in ACIS for both Enhanced LEX and EDI. More details on these measurements and other performance measurements can be found in the affidavit of Salvatore Fioretti. Refer to Justin Brown’s affidavit for more information on all manual processes.

Loss Notifications

158. The Loss Notification transaction is used by Ameritech to notify a CLEC when Ameritech completes an order received from another service provider to change the provider on a service previously billed to the first CLEC. For example, CLEC A is providing service to a customer using resale POTS service. That customer chooses to change local service providers to CLEC B. CLEC B would send an LSR to Ameritech to cause the customer’s service to be transferred to CLEC B. Once that order was complete,

at the same time the SOC is sent to CLEC B, Ameritech sends a Loss Notification to CLEC A. This helps to prevent situations where both CLEC A and CLEC B would bill the same customer at the same time.

Pending Order Status

159. In addition to providing the variety of proactive status transactions previously discussed, Ameritech provides electronic OSS functions with which the CLEC can inquire into the status of an order in progress. The first of these functions, Pending Order Status, provides CLECs with “real time”, read-only access to review pending (not completed) service order data that has been entered and accepted for processing. Although it is an ordering/provisioning transaction and not a pre-ordering transaction, due to its “real time” nature, the Pending Order Status transaction is accessed from Enhanced Verigate or the EDI/CORBA pre-ordering interface. Pending Order Status enables CLECs to check the status of service orders and view a copy of the service order. CLECs can inquire into the status of the service order by entering a service order number, working telephone number, purchase order number or their company code.
160. The Pending Order Status inquiry transaction displays the status of CLEC orders relative to the ACIS and EXACT distribution process. (For more details on “ACIS and EXACT Distribution”, please refer to that section of my affidavit.) The CLEC can determine if the order is:
- **Originated** – New order has been issued.
 - **In Error** – Order has an error that must be fixed before it can post to the customer’s account.
 - **Canceled** - Order has been canceled.
 - **Hold** - Order has been placed on hold.
 - **Revised** - Order has been revised.
 - **Completed** – Order has been typed as work completed.

- **Pending** – Order is pending.
- **Posted** – Order completed and dropped to billing.

A CLEC can also view the provisioning status of its service orders by using the Provisioning Order Status inquiry transaction, generally available as of March 24, 2001. For more information on “Provisioning Order Status”, please refer below to that section of my affidavit.

161. In addition, a CLEC utilizing the Pending Order Status inquiry transaction can determine whether its LSR flowed through to ACIS without manual intervention via the field titled “Typist ID”, which shows two sets of information. The first Typist ID identifies the origination input typist (CLEC service representative) and the second Typist ID identifies the origination distribution typist. If no manual intervention is involved, the two sets of Typist IDs would be the same. On the other hand, if manual intervention were necessary, the two sets of Typist IDs would not match and the second Typist ID would indicate the LSC service representative who created the order in ACIS.
162. Pending Order Status provides the CLEC with capabilities that are more than equivalent to Ameritech’s retail operations for order tracking. With Order Status, CLECs have order tracking capability for Ameritech’s entire five-state region from a single access, whereas in Ameritech’s retail operations, service representatives may have to access ACIS and/or EXACT multiple times for multiple states. Of course, CLEC service representatives can have absolute parity with Ameritech retail service representatives if they too utilize ACIS and/or EXACT to track status of their orders.

Provisioning Order Status

163. Once a service order is created and the provisioning process begins, there is indisputable parity with provisioning for Ameritech’s retail orders. The identical legacy systems used

to provision Ameritech orders are also used to provision CLEC orders. Once a wholesale order reaches these back office (legacy) systems, it is processed indiscriminately with retail orders. Once a CLEC LSR is converted into one or more service orders and is passed to Ameritech's back-end systems, all service orders are treated equally. At this point in the order flow, CLEC and Ameritech orders are indistinguishable.

164. The Provisioning Order Status ("POS") inquiry is an online transaction that is included within the functionality of Ameritech's pre-ordering interface, accessible via both the Enhanced Verigate GUI and EDI/CORBA. The POS inquiry transaction provides a read-only view of the current provisioning status for pending (non-completed) service orders. CLECs make inquiries by entering a working telephone number, service order number, purchase order number, or company code. The provisioning information includes applicable status information, dispatch information, customer address information, demarc information, and notes/remarks about the provisioning of the service order. In addition, bulk workload information may be displayed (if applicable). The POS inquiry transaction was made generally available to CLECs on March 24, 2001 as part of Ameritech's LSOG 4 upgrade/enhancement release.
165. The POS inquiry differs from the Pending Order Status inquiry in that POS displays the status of an order as it relates to the provisioning/dispatching process. Thus, the CLEC can determine if its order is:
- Canceled – The order has been canceled,
 - Pending Auto Complete – The order is a "non-field visit" order awaiting auto-completion,

- Pending Word – The order is awaiting issue of a Word document which identifies additional needed equipment,
- Pending Facility Assignment – The order is pending facility assignment,
- Pending Screen – The order has failed the job logging process and is awaiting human attention,
- Pending Load – The order has passed through the job logging process and is in the dispatch work pool,
- Pre-assigned – The order is pre-assigned to a technician but not dispatched,
- Dispatched – The order has been dispatched to a technician and is being worked,
- Jeopardy – The order is removed from the dispatch pool and is non-workable (placed in jeopardy status), or
- Completed – The order has been completed.

IX. TRANSACTION FLOWS

166. This section explains how the pre-ordering and ordering/provisioning systems described above operate in practice to provide nondiscriminatory access to CLECs. For a visual representation of Ameritech’s EDI process flow for UNE orders, please refer to the “Ameritech EDI Process Flow Chart for UNE Orders” provided below. A description of the EDI process for UNE orders immediately precedes the flow chart. A description of the Enhanced Verigate/Enhanced LEX process for UNE orders immediately follow the flow chart. The final descriptions in this section are of the EDI and Enhanced Verigate/Enhanced LEX processes for Resale orders.

UNE Process Via EDI/CORBA Pre-Ordering and EDI Ordering

167. A CLEC creates the LSR via its own EDI interface utilizing Ameritech's EDI/CORBA pre-order functions. EDI/CORBA provides a convenient gateway that allows a CLEC to acquire all pre-order information from a single source and in real time, using the CLEC's negotiation system and without a dual entry issue.
168. As shown in the process flow diagram, a CLEC service representative transmits the completed LSR via the CLEC's own EDI Gateway to Ameritech's EDI Gateway. Ameritech's EDI Gateway sends the LSR to MOR, which edits incoming local service requests received from EDI and Enhanced LEX. MOR edits the LSR for appropriate data and conditions. An illustration and detailed explanation of this editing process is provided in the "MOR" section of this affidavit.
169. MOR sends the LSR to MOR-TEL, and to ACIS or EXACT, if applicable.
170. MOR-TEL stores the LSR and displays a flow through indicator if the LSR was also sent to ACIS or EXACT. MOR-TEL is used by LSC service representatives to view LSRs and reports generated during the processing of CLEC requests. For more information about the role of MOR-TEL, see the affidavit of Justin Brown.
171. If the LSR is not flowthrough-eligible (the LSC service representative determines this by reviewing LSRs in various MOR-TEL reports), the LSC service representative will manually create the order in EXACT (for Loops) or in ACIS.
172. If the service requested on the LSR contains no errors and is flowthrough-eligible, MOR sends the LSR to ACIS or EXACT. (See Attachment F for a list of flowthrough-eligible services and order types.) This process is explained in detail and an illustration provided in the "MOR" section of my affidavit.

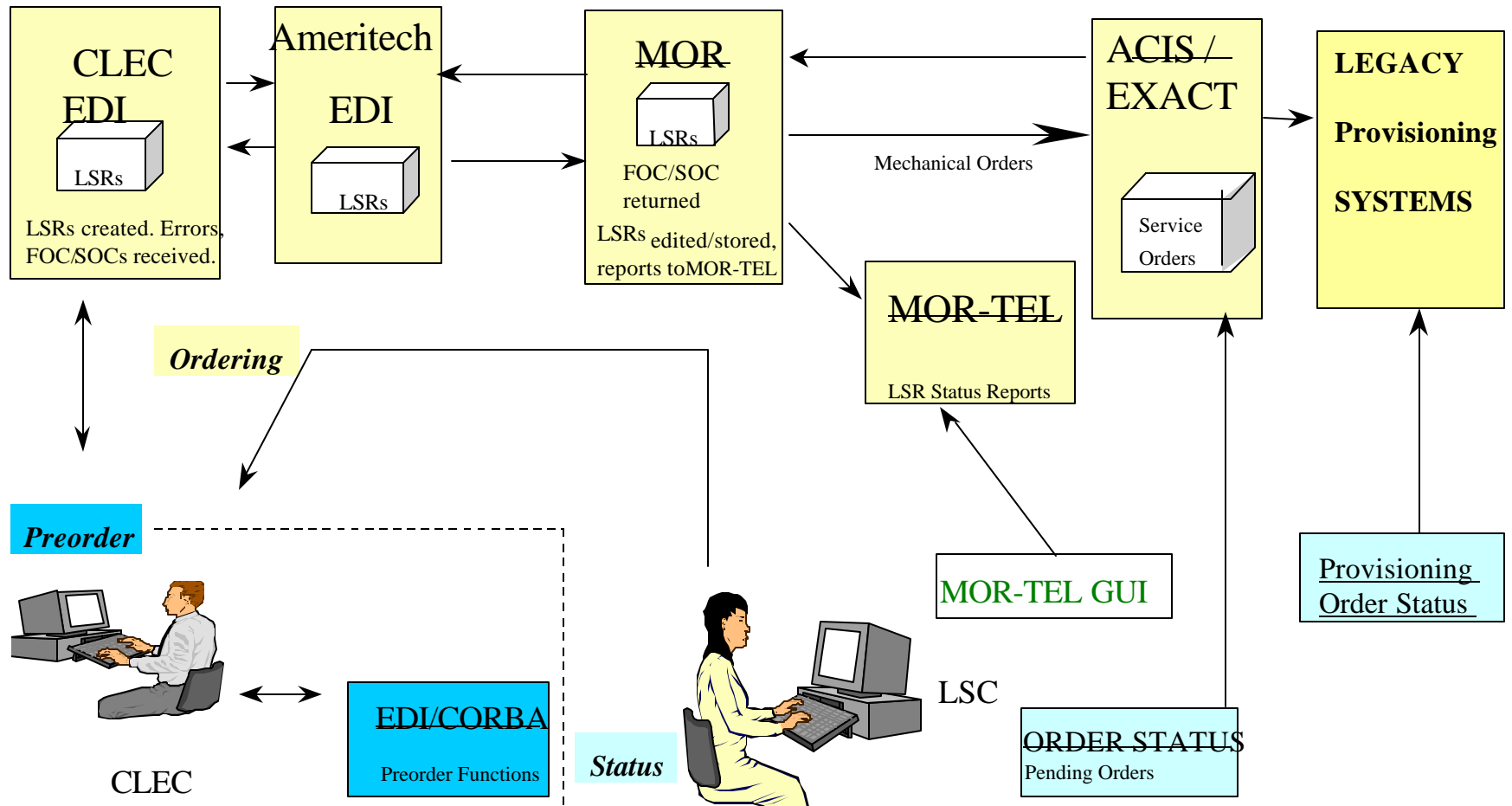
173. If MOR cannot create a service order because of an error in the received LSR, MOR electronically returns an error message to the CLEC. MOR errors are listed in the LSOR and are detected in the process of creating the service order. As with any MOR-detected error, the CLEC must correct the error and resend the LSR. If MOR cannot create a service order because of an unexpected error, MOR sends the LSR to a work queue in MOR-TEL for the LSC to review. An LSC service representative then determines the cause of the error.
174. If the error was caused by the CLEC (for example, the CLEC submitted an incorrect or incomplete LSR), the LSR is rejected via MOR-TEL by the LSC. MOR-TEL allows the LSC service representative to input a reject notification manually that is then transmitted into MOR to produce an electronic return that mimics the automatic, system-generated EDI reject notifications. These reject notification messages are detailed in the LSOR. For a discussion of the manual reject process in detail, refer to the affidavit of Justin Brown.
175. If the error was caused by Ameritech internal table errors or internal processes not related to CLEC input on the LSR, the LSC service representative will create the service order in EXACT (Loops) or in ACIS.
176. Once the service order is created in ACIS or EXACT, an FOC is sent electronically from MOR to EDI or LEX. Once the service order completes in ACIS or EXACT, an SOC is sent from ACIS or EXACT to MOR and then to EDI or LEX. Ameritech has committed to return a SOC within 1 hour of ACIS completion. For more information on FOC and SOC performance measurements, refer to the affidavit of Salvatore Fioretti.)

177. By using Pending Order Status throughout this process, the CLEC service representative can check the status of service orders, view a service order, or verify that a service order has been completed.

Ameritech EDI Process

UNE ORDERS

(Revised 4-01)



UNE Process Via Verigate and Enhanced LEX

178. The flow for a UNE order submitted through Enhanced Verigate and Enhanced LEX is identical to that of EDI/CORBA and EDI with one exception. That is, Enhanced Verigate and Enhanced LEX are accessed using a web browser. (There is no CLEC gateway required for accessing these pre-order and order systems.)
179. Once the service request is passed to MOR, all operations are identical with those requests submitted through EDI.

Resale Process Via EDI/CORBA and EDI, and Via Verigate and Enhanced LEX

180. Resale service requests submitted via EDI/CORBA and EDI or via Enhanced Verigate and Enhanced LEX are handled in the same manner as service requests for UNE orders. The same MOR and MOR-TEL processes apply.

Ordering and Provisioning Performance Measurements

181. Ameritech provides performance measures on its OSS interfaces to show efficiency and nondiscriminatory access. As further described in the affidavit of Salvatore Fioretti, Ameritech provides the following ordering and provisioning performance measures:
- OSS Interface Availability (PM #4)
 - Percent FOCs Returned within “x” Hours (PM #5)
 - Average Time to Return FOC (PM #6)
 - Percent Mechanized Completions Returned within 1 Hour of ACIS Completion (PM #7)
 - Percent Mechanized Completions Returned within 1 Day of Work Completion (PM #7.1)

- Average Time to Return Mechanized Completions (PM #8)
- Percent Rejects (PM #9)
- Percent Mechanized Rejects Returned within 1 Hour (PM #10)
- Percent Manual Rejects Received Electronically and Returned within 5 Hours (PM #10.2)
- Mean Time to Return Mechanized Rejects (PM #11)
- Mean Time to Return Manual Rejects that are Received Electronically via Enhanced LEX or EDI (PM #11.1)
- Mechanized Provisioning Accuracy (PM #12)
- Order Process Percent Flow Through (PM #13)

X. MAINTENANCE AND REPAIR

182. In this section I describe the maintenance and repair interfaces that Ameritech makes available, which enable a requesting carrier to access the same functions that are available to Ameritech's retail representatives for requesting maintenance and reporting troubles. Competing carriers may electronically access Ameritech's maintenance and repair functions for UNE-Loop, UNE-P, and resale through the Electronic Bonding Trouble Administration interfaces described below. These interfaces flow directly into Ameritech's back-end OSS and enable competing carriers to perform the same functions, in the same manner, as Ameritech's retail operations.
183. Maintenance and repair involves the exchange of information, which gives CLECs the capability to request repair of resale services and unbundled network elements, and to check on the status of these trouble reports. Ameritech provides CLECs with several options for requesting maintenance and reporting trouble. CLECs can call the LOC, as

discussed in more detail in the affidavit of Justin Brown. Ameritech also provides CLECs with a choice of two electronic interfaces for access to its OSS maintenance and repair capabilities. These interfaces are the Electronic Bonding Trouble Administration Graphical User Interface (“EBTA/GUI”) application and the Electronic Bonding Trouble Administration Interface (“EBTA”).

184. The FCC has emphasized that an RBOC must provide competing carriers with equivalent access to all maintenance and repair OSS functions the RBOC provides to itself. Bell Atlantic New York Order ¶ 211. Ameritech meets the FCC requirement because Ameritech’s two Trouble Administration maintenance and repair interfaces flow directly into Ameritech’s back end systems, thus allowing CLECs access to all of the same maintenance and repair functionalities available to Ameritech retail operations, for the same services, in the same manner. Both Trouble Administration interfaces are capable of testing plain old telephone service (“POTS”) and POTS-like UNE lines. With EBTA/GUI, Ameritech offers CLECs access to the same back office systems available to Ameritech’s own retail customers for maintenance and repair of the same services as approved by the FCC. Second Louisiana Order ¶ 152. With EBTA, Ameritech offers CLECs an application-to-application interface that the CLEC can integrate into its own back office systems. In addition, Ameritech’s EBTA has been enhanced to incorporate national standards for local service testing.
185. The table below lists the interfaces available to Ameritech and CLECs for maintenance and repair functions and what capabilities are available in each system. Ameritech retail service representatives utilize Work Force Administration (“WFA”) and Loop

Maintenance Operations System (“LMOS”), while the two Trouble Administration interfaces are available for CLEC use.

	WFA/LMOS	EBTA/GUI	EBTA
Issue trouble reports for resale POTS, resale special circuits, UNE Loops, UNE Ports, UNE analog line side Port and 2-wire 8db analog loop where combined by Ameritech, Interoffice Message Trunks, Interoffice Carrier systems	X	X	X
Request and receive Mechanized Loop Test (“MLT”) for POTS services and the UNE combination	X	X	X
Check status on an opened trouble report	X	X	X
Modify an opened trouble report	X	X	X
View a list of open trouble reports	X	X	
View a list of closed trouble reports within the last 120 days	X	X	

Electronic Bonding Trouble Administration/Graphical User Interface (“EBTA/GUI”)

186. EBTA/GUI is a Ameritech-developed graphical user interface that has been used by Ameritech wholesale customers, such as payphone and wireless service providers, and by IXC’s for maintenance and repair administration. EBTA/GUI was enhanced and made available to CLECs so they may electronically submit and determine the status of trouble reports. In addition, EBTA/GUI has the capability of initiating a Mechanized Loop Test (“MLT”) and receiving the test results for resold POTS lines without initiating a trouble report. This capability includes MLT testing for bundled analog switch ports and 2-wire 8db analog loops (POTS-like UNE combinations), and is available whether Ameritech or the CLEC performs the combination. The MLT capability is not available for other

forms of UNE components since MLT is only capable of testing POTS and POTS-like combinations.

187. The EBTA/GUI MLT test results provide a Direct Current (“DC”) test that will reflect the ohms readings of the Tip to Ring, Tip to Ground, and Ring to Ground; and the Alternating Current (“AC”) readings for the same three measures. These readings allow the CLEC to verify that the loop is balanced or to determine whether trouble is in the loop or in the wiring and equipment beyond the network interface device at the end user’s premises. The test also provides a capacitance reading so that the CLEC can determine the loop’s distance from the central office. The test results also provide the MLT verification code and an English statement, such as “Test OK”.
188. The EBTA/GUI application flows through electronically to Ameritech’s back office systems. When the CLEC issues a trouble report, the EBTA/GUI application interfaces through the EBTA system to the back office systems to perform that function. As the status of an electronically reported trouble report changes, status transactions automatically are sent back to the CLEC via the EBTA/GUI application. There are no manual interventions in the trouble administration process that creates trouble reports for resale services or UNEs when CLECs utilize the EBTA/GUI interface.
189. EBTA/GUI is an Ameritech-proprietary interface. However, the interface utilizes fields and definitions as defined by Electronic Communications Implementation Committee (“ECIC”) and the American National Standards Institute (“ANSI”) T1.227 and T1.228 standards, including fields such as Trouble Report Format Definitions, Trouble Type Codes, Trouble Status and Trouble State Codes. The capability of requesting and viewing MLT tests on POTS and POTS-like UNE combinations was developed in

advance of the finalization of standards by ECIC with regard to test results. This proves once again that Ameritech has developed its interface capabilities and made them available to CLECs ahead of national standards.

190. To date, most CLECs have opted to submit trouble reports by calling the LOC. However, some CLECs are using EBTA/GUI extensively. In the first quarter of 2001, CLECs using the EBTA/GUI successfully submitted over 15,500 trouble tickets.

Electronic Bonding Trouble Administration

191. The FCC has stated that if a BOC that offers competitors substantially the same means of accessing maintenance and repair functions, as Ameritech does with EBTA/GUI, the BOC is not required to provide an integratable application-to-application interface for maintenance and repair. Bell Atlantic New York Order ¶ 215. Nevertheless, Ameritech offers EBTA, an application-to-application interface developed to incorporate national standards, based on ANSI T1M1.227/228 for trouble reporting and obtaining status updates. EBTA is the system through which the EBTA/GUI interface exchanges data with the backend systems, LMOS and WFA. EBTA enables CLECs to submit trouble reports, and to receive trouble status updates and closure information. With EBTA, a CLEC has the opportunity to integrate its side of the EBTA application interface with its own back office systems in the same manner that Ameritech has integrated its side of the EBTA application interface with its own back office systems. Thus, Ameritech's EBTA provides flow through capability for CLECs. For example, when a request to create a trouble report is sent by the CLEC, the trouble report will be opened in Ameritech's back office system with no manual intervention by Ameritech. Due to the complexity and the information technology resource requirements of developing an EBTA application

interface, larger CLECs are the most likely candidates to utilize the Ameritech EBTA interface. Small and medium size CLECs tend to remain in a manual mode or utilize the EBTA/GUI application.

192. EBTA is in operation today for trouble administration of interexchange access services and local services. EBTA is being utilized by AT&T, Sprint, and MCI WorldCom for interexchange access services. In addition, MCI WorldCom and Sprint are in production, and using EBTA with Ameritech for electronic trouble reporting for local service. AT&T and McLeod have begun the implementation process of using EBTA for local service through discussions with Ameritech.
193. Although there is not a relevant limit on the number of transactions EBTA can handle, response times for back-office systems that EBTA accesses could be affected by greatly increased transaction volumes. Therefore, transaction volume increases and any corresponding impact on response time will continue to be monitored by Ameritech to determine when system capacity should be increased.
194. The process for establishing an EBTA interface generally follows a set pattern. After a CLEC has expressed interest in establishing an Electronic Bonding interface for local exchange service, Ameritech provides the CLEC with a generic Joint Implementation Agreement ("JIA"), also known as a Generic Implementation Guideline ("GIG"). This JIA is the starting point for discussions with the CLEC regarding the data elements to be exchanged over the interface and various operational attributes of the interface, such as hours of availability. Should the CLEC require any deviation from the generic implementation, a CLEC-specific JIA is created, and a Joint Operations Plan ("JOP") is

developed. The JOP would specify the time-line for and begin the following sequence of processes:

- Installation of Circuits between the CLEC's Gateway and Ameritech's EBTA Gateway,
- Network Testing,
- Stack to Stack Testing,
- Gateway to Gateway Testing,
- End to End Testing,
- Network Verification Test, and
- Operational Readiness Test.

195. Ameritech has developed performance measurements for maintenance and repair functions. The affidavit of Salvatore Fioretti describes the specific performance measurements in detail

XI. BILLING

196. The Commission has required in prior section 271 orders, that a BOC provide competing carriers with complete and accurate reports on the service usage of competing carriers' customers in substantially the same time and manner that it provides such information to itself, and wholesale bills in a manner that gives competing carriers a meaningful opportunity to compete.¹⁹ Ameritech provides competing carriers with billing information through Daily Usage Files (DUFs), which itemize the daily usage of competing carrier customers, and through carrier bills, which are monthly invoices

¹⁹ See *SWBT Kansas/Oklahoma Order* at para. 163.

incorporating charges for all products and services Ameritech provides to a competing carrier.²⁰ These are the same mechanisms that Ameritech uses to provide billing information to its retail operations.²¹

197. Ameritech provides CLECs with a choice of multiple options for obtaining electronic access to billing information. These options are: 1) Ameritech Electronic Bill Service (“AEBS450”) and EDI 811 for resale and for switch-based UNEs (Line Ports), 2) Carrier Access Billing System (“CABS”) Bill Data Tape (“BDT”) for Loops, Trunk Ports, and Transport UNEs, and 3) Usage Extract Feed, also known as Daily Usage Feed (“DUF”), for switching usage records. All of these interfaces are used to provide Ameritech’s bill detail information to CLECs, and specific information available from these interfaces can also be used by a CLEC to bill its end user customers. The affidavit of Denise Kagan describes the billing process and systems in more detail. Ameritech has developed performance measurements for billing completeness and accuracy. The affidavit of Salvatore Fioretti describes the specific performance measurements in detail.

XII. OSS CHANGE MANAGEMENT

198. OSS Change Management is the process of planning, coordinating, monitoring, and communicating OSS changes within an organization. It standardizes the procedure by which a change is requested, and the process by which it is assessed for technical and business impact. Standards for review, assessment, approval, and scheduling processes are established. The objective of OSS Change Management is to facilitate change while

²⁰ See *Bell Atlantic New York Order*, 15 FCC Rcd at 4075, para. 226.

²¹ See *Verizon Massachusetts I Application* at 52; *Verizon Massachusetts I McLean/Wierzbicki Decl.* at para. 92.

ensuring that standard methods and procedures are followed, thereby eliminating or minimizing possible negative impacts of the change on service level commitments.

Ameritech/CLEC Interface Change Management Process

199. As part of the merger conditions, SBC is implementing a uniform electronic OSS across all 13-states. Associated with that effort and in compliance with a merger condition, SBC and the CLECs embarked on developing a 13-State Change Management Process (CMP) in November of 1999. SBC/Ameritech Order ¶ 382. Agreement was reached among the parties and the various regulatory bodies were informed on the agreement in March of 2001. The 13-State Plan was officially implemented in the Ameritech region in March of 2001, although Ameritech began implementing many aspects of the new process in the fall of 2000. CMP documents are posted on Ameritech's CLEC Online web site so that CMP documentation is readily accessible to competing carriers.
200. The Ameritech/CLEC Interface Change Management Process documents the process by which Ameritech will notify CLECs of changes to OSS interfaces, the introduction of new interfaces, and the retirement of existing interfaces. It also provides for the identification and resolution of CLEC issues associated with the CMP. The CMP is a process that applies to all pre-ordering, ordering/provisioning and maintenance and repair electronic interfaces specific to end user ordering.
201. The revised CMP divides changes into two categories:
 - 1) **Category One** (Gateway) includes changes to gateway applications (such as EDI for ordering and EDI/CORBA for pre-ordering).
 - 2) **Category Two** ("GUI") is solely for changes to GUIs where the change is specific to a GUI (e.g., enhancements to the print capability in Enhanced LEX).

202. In an effort to make Ameritech's CMP as "CLEC-friendly" as possible, the revised 13-state CMP contains specific timeframes for release management with lengthy notice and comment periods. This allows CLECs to have opportunities for meaningful input in the CMP going forward. Ameritech's CMP team (discussed below) is responsible for ensuring that Ameritech meets all its commitments in this regard. The CMP for Category One interfaces includes the following provisions and responsibilities (and includes specific time frames for each provision listed below):

- Ameritech maintains a high-level, 12-Month Development View of planned enhancements and shares this view with the CLECs quarterly at CMP meetings.
- Ameritech provides a high-level view of upcoming changes in a Release Announcement delivered to CLECs via an emailed Accessible Letter approximately six months in advance of a release.
- If a CLEC identifies additional issues or requires clarification, the CLEC must send a written response to its Ameritech Account Manager or the Ameritech Change Management Point of Contact.
- Ameritech reviews all CLEC responses.
- Ameritech provides written answers/clarifications to CLEC questions via Accessible Letter. Ameritech's answers will be shared with all CLECs, unless the questions were specifically identified as "private" by a CLEC.
- Ameritech sends the Initial Release Requirements to CLECs via another Accessible Letter. The CMP specifies exactly what items the Initial Release Requirements notification will contain (and includes time frames for CLEC joint testing).

- If a CLEC identifies issues or requires clarification (including issues involving the planned implementation timeline and testing window), the CLEC sends a written response to its Ameritech Account Manager.
- Ameritech reviews all responses to the Initial Release Requirements.
- Ameritech provides written answers to CLEC questions via an emailed Accessible Letter. Ameritech's answers will be shared with all CLECs unless any questions were specifically identified as "private."
- Ameritech sponsors a walk-through of the Initial Requirements for CLECs with Ameritech Subject Matter Experts ("SMEs") in attendance.
- Any changes to the Release Requirements that occur as a result of submitted questions/issues, or as a result of discussion in the walk-through, will be distributed to all CLECs in the Final Requirements Accessible Letter. The CMP specifies exactly what will be included in the Final Release Requirements.

203. Ameritech has implemented procedures that do not allow CLEC-impacting changes to be made outside of the Change Management Process:

- Ameritech follows notification guidelines for ALL changes made to the interfaces that affect the CLECs.
- Ameritech notifies the CLECs of the proposed changes via an Accessible Letter.
- If possible, all changes are scheduled for one of the future quarterly releases.
- If the changes are of an urgent nature, and the standard notification guidelines cannot be followed, Ameritech will request an "exception to the process".
- Ameritech documents the proposed changes and proposed release date(s) and distributes them via an Accessible Letter.

- Ameritech requests CLEC comments and issues.
- If all CLECs agree to the changes, the changes are implemented as described in the Accessible Letter.

204. Except for dates and timeframes that had already passed when it became effective, the 13-state CMP document was effective for the March 24, 2001 EDI/MOR LSOG 4 release and will be effective for all future activity. CLECs tested in accordance with the timeframes specified in the Final Release Requirements; the actual testing timeframe was consistent with the CLECs' customized test plans. All issues discovered during the testing process were resolved to the satisfaction of the CLECs. Several changes to the Final Requirements occurred late in the process; however, the CLECs were notified of the changes and given the opportunity to comment and object. The most conclusive evidence that the revised CMP worked as intended for the March 24, 2001 release is shown by the fact that no CLEC found it necessary to call for a go/no-go vote (described below), which would have allowed CLECs to suspend implementation of the release. The March 24, 2001 EDI/MOR release was implemented without incident.
205. For the March 24, 2001 EDI/MOR LSOG 4 release, the Final Requirements were updated multiple times for a variety of valid reasons. These updates effected various clarifications and minor enhancements. Ameritech discussed these changes at CMP meetings or explained its intent to include these items in Accessible Letters, following the process outlined in the CMP (Section 6.3), which states that "any agreement to deviate from the normal CMP shall be agreed to unanimously by qualified CLECs and Ameritech." CLECs offered no objections to the changes detailed in the CMP meetings and Accessible Letters.

206. The CMP also addresses the Category Two (“GUI”) change process in a similar manner. However, the process for GUIs is somewhat different from the process for application-to-application gateways. Gateways such as EDI involve system programming by both Ameritech and CLECs to exchange data in a way to integrate such data with internal OSS. By contrast, with non application-to-application interfaces, i.e. GUIs, Ameritech provides all the programming; therefore, notification periods can be shorter, while still allowing enough time for CLEC service centers to accommodate the change. The details for the Category Two Change Management Process can be found in section 3.5 of SBC Competitive Local Exchange Carrier (CLEC) 13-State Interface Change Management Process (“CMP Document”), which may be found on the Ameritech CLEC web site.
207. The CMP addresses emergency situations (i.e., emergency releases and emergency implementation date changes), exceptions to the CMP, training, and CLEC joint testing (see below). In addition, the CMP outlines an Outstanding Issue Solution process (discussed below) that includes a provision for dispute voting (see below). Finally, the CMP addresses a Change Request process whereby CLECs may recommend interface changes. Ameritech maintains a log of these CLEC-initiated requests for changes and provides status of each at the monthly CMP meetings. In deciding whether to include a CLEC’s Change Request in requirements, Ameritech will consider such factors as feasibility, cost and cost reduction, and user benefits.

Outstanding Issue Solution and Dispute (Go/No-Go) Voting

208. Within Ameritech’s Change Management Process are guidelines for Outstanding Issue Solution (“OIS”) and dispute voting. One provision the CLECs successfully sought to include in the revised CMP was the go/no-go vote for release implementation. If for any

reason (e.g., because of lack of sufficient notice, outstanding issues, etc.) the CLECs do not feel comfortable with deploying a release, this provision gives CLECs an opportunity to delay the release. In addition, the go/no-go vote option makes the CMP more CLEC-friendly by giving all affected CLECs a voice in making the decision to go forward with release implementation. In essence, if a change management dispute cannot be resolved through discussion, the go/no-go vote option is the ultimate form of the escalation process recommended by the FCC.

209. The OIS process may be invoked after final release requirements are issued, at the conclusion of joint testing, and during the retirement of interfaces, as well as at other points in the process as described in Section 7.0 of the CMP. A CLEC may initiate the OIS process by providing Ameritech with written notification of an outstanding issue. This notice will include the disputing party's reason(s) for raising the issue and any alternative recommendations. The CLEC initiating the OIS shall provide a bridge number for a conference call with its initiation notice. Ameritech will publish a summary of all CLEC dispute(s), which will include Ameritech's position on those issues. No later than one day before the scheduled call, Ameritech will notify the CLECs (via email) that there is a dispute along with the date, time and bridge for the voting call.
210. If the parties are unable to reach a solution through discussion, a dispute vote may be called by a quorum of qualified CLECs. Discussion on the voting call may include:
- Dialogue for opposing views
 - Impacts of a "No" vote on the remainder of the release or other connected releases (If dispute involves release implementation)
 - Discussion of options

211. The vote by qualified CLECs during the call will resolve the question. CLECs are considered “qualified to vote” based on the appropriate change category related to the vote (e.g., change to existing interface, introduction of new interface, or retirement of interface) as specified in the CMP. Further explanation of the OIS voting process and the criteria for qualification may be found in section 7 of the CMP Document, which may be found on Ameritech’s CLEC web site.
212. The March 2001 EDI/MOR release provided the first opportunity to implement the revised CMP’s OIS and dispute voting processes. However, Ameritech’s CMP team and release testers and managers were able to deploy the release without any outstanding issues for the CLECs. In fact, the eligible CLECs did not consider it necessary to call for a go/no-go vote and the release was implemented as scheduled without incident.

EDI Joint Testing

213. CLEC Acceptance testing, which is a testing period immediately prior to a new OSS interface release being placed into production, is performed by the CLECs jointly with the Ameritech test team. CLEC testing verifies that the new system software is ready for production and that all the CLEC test cases execute successfully based upon system specifications. This validates that the CLECs understood the business requirements and incorporated them successfully into their systems. Ameritech also encourages CLECs to perform regression testing on the current version(s) of software during this period. Upon the successful completion of CLEC testing, the new application (or software release) is ready to be implemented into production.
214. Ameritech’s OSS Customer Support team is also integrally involved in EDI release testing with the CLECs. Ameritech’s Joint CLEC Release Test Plan Template (“RTP”),

which may be found on CLEC Online. The RTP lays out the responsibilities for each participant of the joint release testing, including the CLEC, the Ameritech Test Team (of which the OSSCS is a member), and the CLEC Account Teams.

215. A detailed explanation of the role the OSSCS team plays in EDI release testing can be found above in the “CLEC EDI Implementation” subsection of my affidavit. For the Implementation testing, the OSSCS is Ameritech’s lead and for Release testing, the OSSCS is a member of the test team. As a member of the Ameritech Test Team, the OSSCS team provides assistance in many areas, ranging from helping CLECs build test cases to resolving issues assigned by the Test Team Lead.
216. For example, during release testing Ameritech discusses the testing process with each respective CLEC, including the review of entrance and exit criteria, test scenarios (including regression testing, if requested), expected errors, and time frames. Daily conference calls are held between Ameritech and CLEC testing teams while testing is conducted to discuss next steps and test results. Problems that occur during testing are analyzed to determine root causes and to determine which company needs to fix the issue. Once a fix is instituted, Ameritech and the CLEC retest the test case. Meanwhile, testing proceeds with other test cases as both parties continue efforts to resolve any outstanding issues. At the conclusion of the release testing, the CLEC submits a statement that the test has been successfully completed.
217. Ameritech and any interested CLEC negotiated EDI release testing associated with the March 24, 2001 pre-ordering and ordering interface release:

- Each testing party met with Ameritech and agreed upon its own set of test scenarios that were included in the test, the applicable entrance and exit criteria, and a test schedule.
- A customized test plan was documented for each of the CLECs that participated in the testing.
- Ameritech made testing available in accordance with the timeframes specified in the Final Release Requirements.
- Ameritech and the CLECs reached agreement on the results of testing without requiring the use of the Outstanding Issue Solution Process (described below).

Versioning

218. In the CMP, Ameritech has committed to support versioning in EDI, which permits a CLEC user to operate in a production environment based on existing requirements while the transition is made to new requirements. Ameritech's approach to implementing versioning was negotiated as part of the SBC 13-state CMP collaborative process. This is a practical example of Ameritech's flexibility and willingness to compromise with CLEC's to meet their business needs.
219. Specifically, Ameritech will support three versions of software at all times for its EDI Ordering and EDI/CORBA Pre-Ordering interfaces. The last dot release of the retired LSOG will be supported until the next LSOG is implemented. The other two versions supported will either be the latest two dot versions or in the case of initial implementation of an LSOG, the new LSOG and the next to last dot release of the retired LSOG. Sunset of the oldest LSOG will occur on the implementation date of the newest LSOG version. Under this plan, as agreed to by the CLECs during the course of developing the CMP,

Ameritech will version as described below. If LSOG 4 is being implemented and the interface is currently on LSOG 2.3, before implementation the versions available to the CLEC would be LSOG 2.3, LSOG 2.2 and LSOG 1.3 (the last dot release of LSOG 1). When LSOG 4 is implemented, LSOG 1.3 would be retired and LSOG 2.3, LSOG 2.2 and LSOG 4 would be available. When LSOG 4.1 is implemented, the CLECs could use LSOG 2.3 (which will be supported until the NEXT major LSOG release), LSOG 4 and LSOG 4.1.

	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
LSOG 1.3												
LSOG 2.2												
LSOG 2.3												
LSOG 4.0												
LSOG 4.1												
LSOG 4.2												
LSOG 4.3												
LSOG 5												
KEY		<u>Sunrise</u>			<u>Sunset</u>							

220. Ameritech will retire the oldest LSOG version to new CLEC entrants once the last “active” CLEC using that LSOG version has successfully migrated to the subsequent version.
221. In the time period before Ameritech moves to the Uniform OSS platform as defined in the SBC/Ameritech Uniform and Enhanced OSS Plan of Record, (*SBC/Ameritech Merger Order*, CC Docket No. 98-141, ASD File No. 99-49), Ameritech will maintain Issue 7 through the implementation of the Uniform OSS platform. After implementation of the common platform, all regions will be supported by three versions as defined in the 13-state CMP.

Ameritech's Change Management Meetings

222. Ameritech currently schedules monthly Change Management meetings, although the interval between these meetings may change in the future. CLECs and other interested parties are notified of all Change Management meetings via Accessible Letter and are given the option to call in or attend meetings in person. As an additional means of informing CLECs about changes, Ameritech has developed a 12-Month Development View ("View"). This document provides a high-level overview of interface modification or enhancement projects tentatively scheduled in the next 12 months. Ameritech distributes the View to all CLECs via Accessible Letter and shares its current View with CLECs in quarterly Change Management meetings in an effort to encourage planning and promote meaningful discussions. In some cases, these discussions may lead to changes in the View by incorporating CLEC requests into future OSS modifications or enhancements.
223. In addition to the 12-Month View discussion, Ameritech actively solicits input from CLECs for agenda items at the monthly Change Management meetings. Accessible Letters, sent to notify CLECs of change management meetings, may be found on Ameritech's CLEC web site. The letters ask for confirmation of attendance and request input to the agenda. Ameritech takes CLEC input on change management issues very seriously, and will continue to provide interested CLECs with timely notification to help to establish the agenda for the meetings. Bell Atlantic New York Order ¶ 124.
224. Ameritech includes an Action Item Register with each month's CMP meeting minutes. This log facilitates the tracking of Change Management meeting action items and reminds all participants of the status of outstanding issues.

225. In some cases, CMP meeting discussions on the 12-Month View may lead to changes in the Plan, as Ameritech incorporates CLEC requests into future OSS modifications or enhancements.
226. Ameritech evaluates all CLEC requests for enhancements to its OSS. Typically, if the enhancement request benefits the entire CLEC community, Ameritech plans and prioritizes system work to introduce such an enhancement as part of periodic system releases without any special charge to the requesting CLEC. Ameritech's OSS Customer Support team, in conjunction with IS Call Center personnel, project managers, and software professionals then assist and provide documentation of these enhancements to CLECs that utilize Ameritech's interfaces. All enhancements are coordinated through the Change Management Process and, as mentioned above, requests for these enhancements can be discussed at the meetings.
227. Besides the CMP meetings mentioned above, there are additional avenues for the CLECs to raise and discuss issues and to request changes either in sidebar meetings, audio conferences, during testing or through the CLEC's Account Manager. The venues mentioned above allow CLECs a substantial role in and the opportunity for meaningful input to the Change Management Process. Bell Atlantic New York Order ¶ 106.
228. Through the Change Management Process, Ameritech supports various sidebar meetings to address CLEC requests. Ameritech/SBC hosted several weeks of Plan Of Record (POR) meetings in 2000 and in 2001. During these meetings, OSS and business rules details were collaboratively worked out and agreed upon. In addition to the POR meetings, CMP sponsored several conference calls on the topic of OSS business requirements and documentation and on the EDI testing process.

XIII. CLEC OSS TRAINING

229. The Industry Markets organization is the business unit within SBC/Ameritech responsible for serving CLECs as customers, including providing such functions as account management, training and service center operations. Ameritech's training classes and workshops, and its training organization are discussed in detail in the CLEC OSS Training section of this document. Prior to attending an OSS class, the CLEC can review course descriptions, which are available on the CLEC web site in the "Education" section of the handbook. Ameritech offers formal classroom training to CLECs that have elected to utilize Ameritech's OSS. This training is conducted at Ameritech's Learning Center located at 350 North Orleans in Chicago, Illinois. Depending on the chosen application(s), the training is either required or optional for the CLEC. Training is required for applications that affect Ameritech's network.
230. All classes and workshops are "Train the Trainer" format. OBF standards and format as well as regional requirements are utilized in the development of each course to assist CLECs in customizing coursework that is appropriate for their employees. The expectation of the "Train the Trainer" format is that CLEC employees will return to their businesses with the take-home information provided in each class and workshop and in turn, train their employees as appropriate. Take-home materials include the Instructor Guide and the Student Guide or Student Workbook. The training classes and materials focus on interface operation so that CLECs may integrate the training materials into processes within their internal supporting methods and procedures for complete service representative training. To enable CLECs to continually update their OSS training curricula, updated job aids for OSS classes are available to CLECs online via Ameritech's secure web site.

231. Any errors in Ameritech's training materials are corrected as identified on an on-going basis and training materials are revised as appropriate. If the CLEC inquires about information not included in the training material, the CLEC is directed to its Account Manager. This process is documented in the Instructor Guides. The Account Manager provides the feedback on such contacts to Industry Markets' Area Manager-CLEC Training, who will then determine how course materials may need to be modified.

Training Process Responsibilities

232. The Area Manager-CLEC Training in Ameritech's Industry Markets organization is dedicated to Ameritech's CLEC education needs and leads a team of 21 people to develop, deliver, and refine an increasing variety of OSS classes and workshops. The CLEC training team consists of a Performance Consultant, Scheduler, Course Designers, Instructors, and a Records Clerk. All team members have defined roles:

- **Performance Consultant** ensures that directions from Industry Markets Area Manager CLEC Training are followed, including ensuring that assigned responsibilities of other training team members are completed in a timely manner, and assists Course Designers with course development.
- **Manager CLEC Training** manages the CLEC Training program in the Ameritech region including interacting with the Account Teams and coordinating course design, delivery and scheduling.
- **Scheduler** coordinates the instructor's schedules, develops and provides draft schedules to the Area Manager CLEC Training for approval and posting to the CLEC online web site.

- **Course Designers** develop the training material, incorporating input from Ameritech Product SMEs as well as internal CLEC support groups.
- **Instructors** teach the courses. There are currently two OSS Instructors in the Ameritech region. These instructors also teach workshop courses. The instructors are screened by the Performance Consultant for OSS experience either as an Instructor or for “real-world” experience in use of Ameritech’s OSS interfaces. If an instructor has no “line” experience with interfaces, that instructor is certified by teaching “internal pilot classes” to Ameritech’s own SMEs. In some cases, new instructors are assigned the responsibility of assisting with coursework design for OSS, which helps to increase their working knowledge of Ameritech’s OSS. In addition, these instructors provide supplemental training to support groups such as Local Service Centers. Instructor performance is monitored by the Area Manager-CLEC Training, who regularly attends training, and by the Performance Consultant.
- **Records Clerk** inputs registrations on the internal course schedule and forwards the registrations to the Scheduler where class logs are created.
- **Senior Records Clerk** creates electronic registration confirmations that are forwarded to Account Managers, who in turn forwards the confirmations to the registered CLEC student.

233. The Ameritech Account Managers also have defined roles in the CLEC training process. The Account Managers assist the CLECs in registering for the appropriate OSS classes. The Account Managers’ responsibilities include: providing the CLEC the appropriate Memorandum of Agreement (“MOA”) in order to reserve seats in OSS classes, ensuring

that enrollment forms are completed accurately, and providing these documents to Industry Markets, which records the registrations and forwards them to the Scheduler.

All enrollment is first-come, first-served to enable equal access to classes by all CLECs.

234. Ameritech currently offers five OSS classes with 5 class days of training. Total training days for the nineteen workshops that are currently offered is 25 days. The combined total class days of OSS classes and workshops are therefore 30 days of training. Ameritech will continue to add OSS classes and workshops as necessary to meet the needs of its CLEC customers. Current classes are constantly updated to reflect new resale offerings and system updates. In addition to formal class-work, CLECs have access to teams from the Local Service Center, OSS Support, the Mechanized Support Center and the IS Call Center to help resolve specific questions related to order entry and Ameritech's OSS offerings.

235. Training schedules for OSS classes as well as workshops are posted in the CLEC Education section of the CLEC Online web site. These classes are available to CLECs who have a negotiated interconnection or resale agreement with OSS language.

236. The series of OSS classes offered to CLECs are:

- CLEC Electronic Bonding-Trouble Administration II
- CLEC Electronic Transmission of ASRs.
- CLEC LEX -WEB-UNE,
- CLEC LEX -WEB-Resale
- CLEC Enhanced Verigate

The series of workshops offered to CLECs are:

Resale Workshops:

- Resale Services I,
- Resale Services II,
- Directory Listings
- LSR
- Centrex

- ISDN
- Message Source Voice Mail - Resale
- Resale Maintenance Administration

Facilities-Based Workshops:

- UNE
- UNE-P
- Billing
- Sub Loops -UNE
- Dark Fiber -UNE
- Line Sharing-HFPL -UNE
- Message Source Voice Mail - UNE P
- Local Interconnection
- LNP
- Broadband Service

Resale/Facilities-Based Workshops:

- New Entrant Carrier.

Feedback on CLEC Training

237. CLEC students at the end of each OSS class complete a Customer Satisfaction Survey.

Feedback from the survey forms is used for resource utilization, scheduling classes, determining mechanization needs and for planning purposes. All surveys are reviewed and appropriate action is taken.

XIV. CONCLUSION

238. Ameritech provides to CLECs a comprehensive set of OSS interfaces. Ameritech interfaces have experienced commercial transaction volumes over an extended period. These interfaces have been enhanced as a result of the exhaustive eleven-month OSS collaborative conducted by the MPSC, and are being subjected to a comprehensive review by KPMG. These interfaces support robust functionality in the areas of pre-ordering, ordering and provisioning, maintenance and repair, and billing. For those CLECs wishing to enjoy the benefits of system integration, Ameritech provides

application-to-application interfaces, while making GUI interfaces available for those CLECs who are instead interested in minimizing their interface investment.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on _____, 2001.

Mark Cottrell

Strategic Director-Long Distance Compliance/OSS

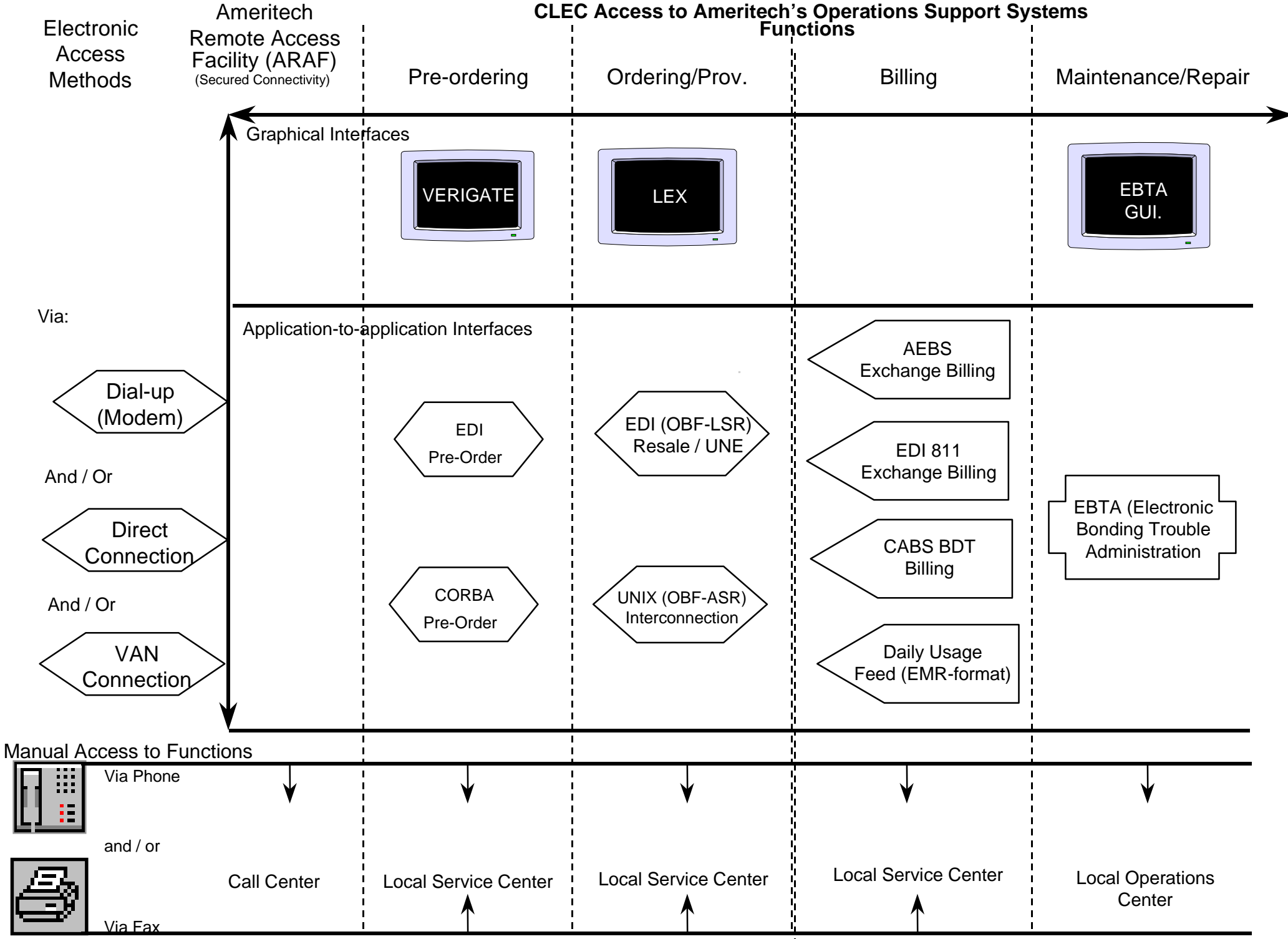
STATE OF ILLINOIS
COUNTY OF COOK

Subscribed and sworn to before me
this ___ day of _____, 2001.

Notary Public

My commission expires:

Cottrell Affidavit - Attachment A



SBC CLEC Supported Hours Of Availability

Category/Interface	Mon - Fri	Saturday	Sunday	Time Zone
Pre-Order				
EDI/CORBA	06:00 - 22:00	07:00 - 19:00	none	central
Enhanced Verigate	06:00 - 22:00	07:00 - 19:00	none	central
AEMS	06:00 - 22:00	07:00 - 19:00	none	central
TCNET	06:00 - 22:00	07:00 - 19:00	none	central
Ordering/Provisioning				
EDI Ordering Gateway ¹	00:00 - 01:00	00:00 - 01:00	00:00 - 01:00	central
	06:00 - 23:59	06:00 - 23:59	06:00 - 23:59	
Enhanced LEX ¹	00:00 - 01:00	00:00 - 01:00	00:00 - 01:00	central
	06:00 - 23:59	06:00 - 23:59	06:00 - 23:59	
EDI Issue 7 Gateway	06:00 - 23:00 ²	07:00 - 19:00	none	central
Telis to ARIS/EXACT	05:00 - 23:00	05:00 - 18:00	none	central
Enhanced Verigate	06:00 - 22:00	07:00 - 19:00	none	central
Maintenance & Repair				
Electronic Bonding Trouble Administration (EBTA)	00:00 - 22:30	00:00 - 22:30	04:00 - 23:59	central
	23:30 - 23:59	23:30 - 23:59		
Electronic Bonding Trouble Administration GUI (EBTA/GUI)	00:00 - 22:30	00:00 - 22:30	04:00 - 23:59	central
	23:30 - 23:59	23:30 - 23:59		

¹ Processing hours are: M-F 06:00 - 23:59, SA 07:00 - 19:00, SU none

² Processing of inbound files ends at 23:00. Outbound files are processed until 23:59

Cottrell Affidavit – Attachment C

The following table list many of the documents posted on Ameritech’s CLEC web site, <https://clec.sbc.com>. These documents are a number of documents specifically for CLECs making use of Ameritech’s electronic OSS interfaces, and represent only a small subset of the information available through the web site.

DOCUMENTATION POSTED ON THE CLEC WEB SITE
Basic Resale Ordering Guide
Bill Interface Guide
Billing Technical Interface Guide
Directory Closing Date Schedule
EDI 811 User Guide
EDI Issue 7 Data Matrices
Electronic Service Order Guide Issue 7 (ESOG)
Enhanced Verigate LSOG 4 User Guide
Interim Manual Ordering Guide
Line Sharing Manual
Local Service Exchange (LEX) guide
LSOG 4 SEF Ordering Requirements
LSOG 4 EDI Ordering Requirements
LSOG 4 SEF Pre-Ordering Requirements
LSOG 4 EDI Pre-Ordering Requirements
LSOG 4 T1M1.267 Uniform Interface Requirements
LSOG 5 13 State Ordering Requirements, Version 05.00
LSOG 5 SEF Ordering Requirements
LSOG 5 EDI Ordering Requirements

DOCUMENTATION POSTED ON THE CLEC WEB SITE
LSOG 5 13 state Pre-Order Initial Requirements Version 05.00
LSOG 5 SEF Pre-Ordering Requirements

LSOG 5 13 state Pre-Order Initial Requirements Version 05.00
LSOG 5 SEF Pre-Ordering Requirements
LSOG 5 EDI Pre-Ordering Requirements
LSOG 5 T1M1.267 Uniform Interface Requirements
LSPOR – Versions 2.4.0, 2.3.1 and Version 2.2.1
LSOR – Version 4.00 (03-24-01) and Version 04.02 (06-23-01)
Maintenance & Repair Escalation Procedures
Maintenance Interface Guide
Mechanized Customer Production Support Center Profile
Ordering & Provisioning Escalation Procedures
OSS Brochure
OSS Demo Schedule
OSS Escalation Matrix
OSS Interconnection Procedures
SBC Daily Usage Guide
SBC Joint CLEC Test Plan Template
SBC-LEC (13-State) – CLEC Testing M&P
TC Net Pre-Ordering User Guide

UNE Ordering Escalation Procedures
UNE Ordering Facility Modification and Construction
UNE Repair Escalation Procedures

Cottrell Affidavit – Attachment D-1

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FOR IMMEDIATE RELEASE

Focal Communications Announces Electronic Bonding With Ameritech

- Unbundled Loops for DSL Service Processed Using Mantiss Information's Proven Gateway -

CHICAGO, November 15, 1999 – Focal Communications Corporation (Nasdaq:FCOM), one of the fastest growing national competitive local exchange carriers (CLECs), today announced that it has implemented electronic bonding with Ameritech (NYSE:SBC), one of the world's largest and most successful communications companies. Using Mantiss Information's CLECware™ product suite, Focal has electronically processed unbundled loop orders for DSL (Digital Subscriber Line) service with Ameritech. Focal can also utilize the CLECware product suite to order unbundled loops for its HDSL2 deployment. Electronic bonding means that Focal's operations support system is connected on-line and in real time to Ameritech's operations support system. This gateway allows Focal to provision services faster and more efficiently.

“This joint effort with Ameritech and Mantiss is a significant step towards providing our sophisticated customer base with best of class DSL service and exceptional customer care,” said John Barnicle, chief operating officer of Focal. “Through Mantiss' superior OSS solutions, we are able to process orders in an efficient manner and avoid the costs associated with manual processes. This will enable us to provision and install unbundled loops at an accelerated pace.”

“I am pleased that this enhanced interconnection with Ameritech's system has been accomplished,” said Joset Wright, president, Ameritech Illinois. “Focal is among a growing number of CLECs that have established this type of connection with Ameritech's Operations Support Systems in recent months to provide better service to their customers. It is all part of our continuing commitment to open our local telephone network to other companies, which results in more competition, better service and ultimately lower costs for consumers.”

- more -

MC Attachment - D-1/1

"We are extremely pleased that Focal has chosen us as their nationwide OSS vendor. Working with Ameritech and other ILECs, Mantiss will play a strategic role in building Focal's OSS capabilities as they continue to expand their nationwide footprint," said Rachit Dhingra, CEO and co-founder at Mantiss.

With electronic bonding, Focal will submit orders, obtain firm order commitment dates and track the status of orders all on-line, leading to faster installations. In addition, the level of service Focal can offer its customers should be significantly enhanced.

Focal anticipates using its state-of-the-art, integrated back office systems and Mantiss' CLECware product suite to implement electronic bonding with other incumbent local exchange carriers (ILECs) nationwide.

About Focal

Focal Communications Corporation, headquartered in Chicago, is a national facilities-based communications provider that offers data, voice and colocation services to large corporations, Internet service providers and value-added resellers. Focal currently services 14 large, metropolitan markets and has announced plans to deploy service in a total of 20 markets nationwide by the end of year 2000, encompassing 50 metropolitan statistical areas. Additional information is available on Focal's Web site at www.focal.com.

About Ameritech

Ameritech is the premier provider of communications services in the Upper Midwest, with 13 million customers and more than 21 million access lines across Illinois, Indiana, Michigan, Ohio and Wisconsin. It is a company of SBC Communications Inc. (www.sbc.com), a global communications leader. Through its trusted brands -- Southwestern Bell, Ameritech, Pacific Bell, SBC Telecom, Nevada Bell, SNET and Cellular One -- and world-class network, SBC provides local and long-distance phone service, wireless and data communications, paging, high-speed Internet access and messaging, cable and satellite television, security services and telecommunications equipment, as well as directory advertising and publishing. In the United States, the company currently has 87.3 million voice grade equivalent lines, 10.3 million wireless customers and is undertaking a national expansion program that will bring SBC service to an additional 30 markets. Internationally, SBC has telecommunications investments in 22 countries. With more than 200,000 employees, SBC is the 14th largest employer in the U.S., with annual revenues that rank it among the largest Fortune 500 companies.

- more -

MC Attachment - D-1/2

About Mantiss

Mantiss is the leader in providing OSS and business-to-business e-commerce solutions to the deregulated telecommunications marketplace. Mantiss has extensive experience in designing and building OSS gateways for ILECs and deploying OSS solutions for CLECs. Mantiss was the first OSS vendor to enable electronic provisioning in the Ameritech region.

CLECware OSS is an integrated OE/OM, provisioning, customer care and OSS interconnection gateway that enables carriers to electronically provision voice and data services, reducing order error rates, and maintaining the highest level of service at the lowest cost. Mantiss also has a telecom consulting practice, which provides systems integration expertise.

Mantiss has a customer base of over 20 CLECs using CLECware nationwide including Cable, ISP, facilities-based and switch-less local carriers.

Organizations looking for more information about Mantiss products should call the company toll-free at 877-MANTISS or visit the company's web site www.mantiss.com.

Certain statements in this press release constitute “forward-looking statements” within the meaning of federal securities laws, and the Company intends that such forward-looking statements be subject to the safe harbors created thereby. The words “believes”, “expects”, “estimates”, “anticipates”, and “will be” and similar words or expressions identify forward-looking statements made by or on behalf of the Company. These forward-looking statements reflect the Company’s views as of the date they are made with respect to future events and financial performance, but are subject to many uncertainties and factors which may cause the actual results of the Company to be materially different from any future results expressed or implied by such forward-looking statements. Examples of such uncertainties and factors include, but are not limited to, the extent to which the Company can achieve “electronic bonding” with ILECs, the Company’s ability to timely and effectively provision new customers and the Company’s continued access to necessary capital. The Company does not undertake any obligation to update or revise any forward-looking statement made by it or on its behalf, whether as a result of new information, future events or otherwise.

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MC Attachment – D-1/3

Cottrell Affidavit – Attachment D-2

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FOR IMMEDIATE RELEASE

Mantiss Signs Up MCI WorldCom On CLECommerce™, Its Web-enabled Carrier to Carrier E-Commerce Network

MCI WorldCom Will Use CLECommerce to Interconnect with Ameritech and Pacific Bell

CHICAGO – November 22, 1999 – Mantiss Information Corporation today announced that MCI WorldCom has entered into a contractual agreement to use CLECommerce™, its Internet based ordering and provisioning network. MCI WorldCom has been using CLECommerce on a trial basis since September 9, 1999 and has successfully processed Local Service Request (LSR) transactions with Ameritech.

CLECommerce will provide MCI WorldCom with a single interface to exchange preordering and ordering transactions electronically with Ameritech, PacBell and other Incumbent Local Exchange Carriers (ILECs), regardless of the differences in their OSS interfaces, communications protocols or business processes. Mantiss maintains the OSS Interconnection infrastructure with the ILECs and other trading partners. Service providers such as MCIWorldCom access CLECommerce over the Internet to provision and manage the ordering of LSRs, ASRs, LNP and other transactions.

“We are very excited that MCI WorldCom has chosen our CLECommerce solution to interconnect with its ILEC trading partners,” said Rachit Dhingra, CEO of Mantiss. “We recognized early on that carriers like MCI WorldCom needed the ability to interconnect with multiple trading partners via a universal interface. As MCIWorldCom establishes relationships with newer trading partners and as its existing trading partners introduce new products and services, Mantiss will keep pace by introducing the necessary functionality into CLECommerce”.

ABOUT MANTISS

Mantiss is the leader in providing OSS and business-to-business e-commerce solutions to the deregulated Telecommunications marketplace. Mantiss has extensive experience in designing and building OSS Gateways for ILECs and deploying OSS solutions for CLECs. Mantiss has a customer base of over 20 CLECs using CLECware nationwide including Cable, ISP, Facilities based and switch-less local carriers. CLECware OSS is an integrated OE/OM, Provisioning, Customer Care and OSS Interconnection Gateway that enables carriers to electronically provision voice and data services, reducing order

MC Attachment D-2/1

error rates, and maintaining the highest level of service at the lowest cost. Mantiss also has a Telecom consulting practice, which provides systems integration expertise.

Organizations looking for more information about Mantiss products should call the company toll free at 877-MANTISS or visit the company's web site www.mantiss.com.

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**Mantiss and CLECware are registered trademarks of Mantiss Information Corporation. Other trademarks are held by their respective manufacturers.*

MC Attachment D-2/2

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Cottrell Affidavit – Attachment D-3

OSS Interconnection Solutions

UNE Overview

Product Overview

CLECware and CLECommerce OSS Interconnection™ are **order management** and **gateway** solutions that are specifically designed for Competitive Local Exchange Carriers (CLECs) purchasing Unbundled Network Elements from an Incumbent Local Exchange Carrier (ILEC). These solutions are **modular** and can be **integrated easily** with other operating systems.

Standard Pre-Ordering Tools:

- CSR Retrieval and Order Pre-Population
- Street Address Guide (SAG) Validation
- Loop Qualification & Service Availability

Ordering:

- LSR Order Submission and Order Status Tracking for Analog & Digital Unbundled Loops (Including Line Sharing & EELs)
- LSR Order Submission and Order Status Tracking for Local Number Portability (LNP)
- LSOA Transaction Submission to NPAC
- Order status monitoring and Maintenance Tools

Enhanced Pre-Ordering Tools:

- CSR Parsing & Auto-Population

Value-Added Features & Services:

- Customized Order Entry Tools
- Customized Reporting Tools
- Training
- ILEC/Internal OSS Integration
- OSS Interconnection Platform

The OSS Interconnection solutions offered by Mantiss include both a **licensed** solution (CLECware™) and an **ASP-hosted** solution (CLECommerce™) for Resale, UNE-P and UNE applications. In addition, the Pre-Ordering and Ordering modules can be **fully integrated** into a single screen so that pre-order information can be validated real-time and immediately populated on the service order.

Contact Information

To learn more about the suite of CLECware™ and CLECommerce™ solutions and services available from Mantiss, please contact us directly:

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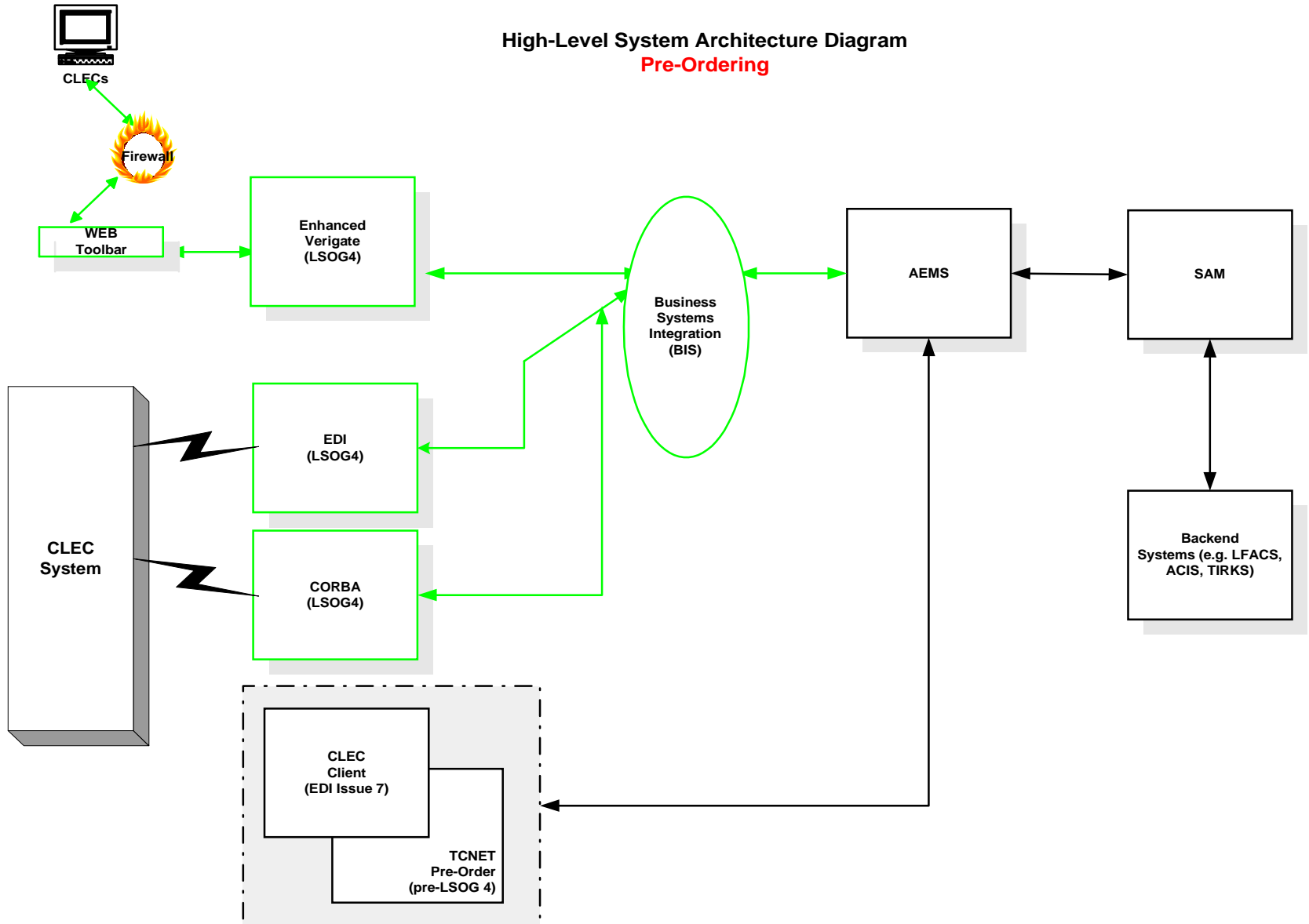
Mantiss


DYNEGY

Cottrell Affidavit - Attachment E

High-Level System Architecture Diagram

Pre-Ordering



Cottrell Affidavit - Attachment F

High-Level System Architecture Diagram

Ordering

