

ATTACHMENT 27: ACCESS TO OPERATIONS SUPPORT SYSTEMS (OSS)

1. INTRODUCTION

- 1.1 This Appendix sets forth terms and conditions for nondiscriminatory access to Operations Support Systems (OSS) "functions" to support the services, interconnection and UNES provided under this Agreement so that NAVIGATOR can perform pre-ordering, ordering, provisioning, maintenance/repair, and billing. Although this is a MISSOURI-specific agreement, SBC's OSS is based upon a 13-state platform. In order to access OSS for transactions in other SBC states, NAVIGATOR must have OSS terms and conditions in such state.
- 1.2 SBC Communications Inc. (SBC) means the holding company which directly or indirectly owns the following ILECs: Illinois Bell Telephone Company d/b/a SBC Illinois, Indiana Bell Telephone Company Incorporated d/b/a SBC Indiana, Michigan Bell Telephone Company d/b/a SBC Michigan, Nevada Bell Telephone Company d/b/a SBC Nevada, The Ohio Bell Telephone Company d/b/a SBC Ohio, Pacific Bell Telephone Company d/b/a SBC California, The Southern New England Telephone Company d/b/a SBC Connecticut, Southwestern Bell Telephone, L.P. d/b/a SBC Arkansas, SBC Kansas, SBC Missouri, SBC Oklahoma and/or SBC Texas, and/or Wisconsin Bell, Inc. d/b/a SBC Wisconsin.
 - 1.2.1 SBC MISSOURI - As used herein, SBC MISSOURI means Southwestern Bell Telephone, L.P. d/b/a SBC MISSOURI, the applicable SBC owned ILEC doing business in MISSOURI.
- 1.3 SBC MISSOURI has established performance measurements to illustrate non-discriminatory access. These measurements are represented in Appendix Performance Measurements.

2. DEFINITIONS

- 2.1 "LSC" means the Local Service Center (LSC) for SBC MISSOURI.
- 2.2 "LOC" means the Local Operations Center (LOC) for SBC MISSOURI.
- 2.3 "MCPSC" means the Mechanized Customer Production Support Center (MCPSC) for SBC MISSOURI.
- 2.4 "Service Bureau Provider (SBP)" - For purposes of this Agreement, Service Bureau Provider (SBP) is a company which has been engaged by NAVIGATOR to act on its behalf for purposes of accessing SBC MISSOURI's OSS application-to-application interfaces via a dedicated connection over which multiple CLECs' local service transactions are transported.

3. GENERAL CONDITIONS

- 3.1 Resale and Section 251 (c)(3) Unbundled Network Elements (UNE) functions, provided under this Agreement will be accessible via electronic interface(s), as described herein, where such functions are available. The Parties agree that electronic order processing is more efficient than manual order processing. During implementation the Parties will negotiate a threshold volume of orders after which electronic ordering is required. Once NAVIGATOR is submitting more than the agreed to threshold amount, but not later than twelve (12) months from the Effective Date of this Agreement, NAVIGATOR will no longer submit orders manually (and SBC MISSOURI shall not be required to accept and process manual orders) except when the electronic order processing is unavailable for a substantial period of time, or where a given order cannot be processed electronically.
- 3.2 When SBC MISSOURI introduces electronic interfaces, in accordance with the Change Management Process referenced in Section 3.15 below, those interfaces will be deemed

automatically added to this Attachment, upon request of NAVIGATOR unless SBC MISSOURI believes there are essential terms and conditions unique to the new interface that are not included in this Attachment. In such case, SBC MISSOURI shall use its good faith reasonable efforts to notify NAVIGATOR and propose such additional terms and conditions in sufficient time that the Parties, negotiating in good faith, may reach agreement on the amendment and have it become effective no later than the date the new interface is made available for use by Navigator.

- 3.3 When SBC MISSOURI retires interfaces in accordance with the Change Management Process referenced in Section 3.15 below, those interfaces will be deemed automatically deleted from this Attachment.
- 3.4 Proper Use of OSS interfaces:
 - 3.4.1 For SBC MISSOURI, NAVIGATOR agrees to utilize SBC MISSOURI electronic interfaces, as described herein, only for the purposes of establishing and maintaining Resale Services or UNEs through SBC MISSOURI. In addition, NAVIGATOR agrees that such use will comply with SBC MISSOURI's Data Connection Security Requirements as identified in Section 9 of this Appendix. Failure to comply with such security guidelines may result in forfeiture of electronic access to OSS functionality. In addition, NAVIGATOR shall be responsible for and indemnifies SBC MISSOURI against any cost, expense or liability relating to any unauthorized entry or access into, or use or manipulation of SBC MISSOURI's OSS from NAVIGATOR systems, workstations or terminals or by NAVIGATOR employees, agents, or any third party gaining access through information and/or facilities obtained from or utilized by NAVIGATOR and shall pay SBC MISSOURI for any and all damages caused by such unauthorized entry.
- 3.5 Within SBC MISSOURI regions, NAVIGATOR's access to pre-order functions described in 4.2.2 will only be utilized to view Customer Proprietary Network Information (CPNI) of another carrier's End User where NAVIGATOR has obtained an authorization for release of CPNI from the End User and has obtained an authorization to become the End User's Local Service Provider.
 - 3.5.1 In SBC MISSOURI regions, NAVIGATOR must maintain records of individual customers' authorizations for change in local exchange service and release of CPNI which adhere to all requirements of state and federal law, as applicable.
 - 3.5.2 Throughout SBC MISSOURI region, NAVIGATOR is solely responsible for determining whether proper authorization has been obtained and holds SBC MISSOURI harmless from any loss on account of NAVIGATOR's failure to obtain proper CPNI consent from an End User.
- 3.6 By utilizing electronic interfaces to access OSS functions, NAVIGATOR agrees to perform accurate and correct ordering including Resale and Section 251 (c)(3) UNE services, rates, and charges, subject to the terms of this Agreement and applicable tariffs dependent on region of operation. NAVIGATOR is also responsible for all actions of its employees using any of SBC MISSOURI's OSS systems. As such, NAVIGATOR agrees to accept and pay all reasonable costs or expenses, including labor costs, incurred by SBC MISSOURI caused by any and all inaccurate ordering or usage of the OSS, if such costs are not already recovered through other charges assessed by SBC MISSOURI to NAVIGATOR. In addition, NAVIGATOR agrees to indemnify and hold SBC MISSOURI harmless against any claim made by an End User of NAVIGATOR or other third parties against SBC MISSOURI caused by or related to NAVIGATOR's use of any SBC MISSOURI OSS.
- 3.7 In the event SBC MISSOURI has good cause to believe that NAVIGATOR has used SBC MISSOURI OSS in a way that conflicts with this Agreement or Applicable Law, SBC MISSOURI shall give NAVIGATOR written notice describing the alleged misuse ("Notice of Misuse"). NAVIGATOR shall immediately refrain from the alleged misuse until such time that NAVIGATOR responds in writing to SBC MISSOURI's Notice of Misuse, which shall be provided to SBC

MISSOURI within twenty (20) days after receipt of the Notice of Misuse. In the event NAVIGATOR agrees with SBC MISSOURI's allegation of misuse, NAVIGATOR shall refrain from the alleged misuse during the term of this Agreement.

- 3.8 The Dispute Resolution provisions of the General Terms and Conditions shall apply to any disputes which arise under this Article, including disputes related to the alleged improper use of or access to CPNI or any alleged non-compliance with SBC MISSOURI's security guidelines. Except as otherwise set forth in this Article, NAVIGATOR's liability for improper or unauthorized use of or access to SBC MISSOURI's OSS shall be governed by the Indemnification and Liability provisions of the General Terms and Conditions of the Agreement.
- 3.9 In the event NAVIGATOR does not agree that NAVIGATOR's use of SBC MISSOURI's OSS is inconsistent with this Agreement or Applicable Law as alleged by SBC MISSOURI, then the Parties agree to the following steps:
 - 3.9.1 If such alleged misuse involves improper access of pre-order applications to obtain CPNI in violation of this Agreement, Applicable Law, or involves a violation of the security guidelines contained herein, or negatively affects another OSS user's ability to use OSS, NAVIGATOR shall continue to refrain from using the particular OSS functionality in the manner alleged by SBC to be improper, until NAVIGATOR has implemented a mutually agreeable remedy to the alleged misuse. SBC may invoke the dispute resolution process in the Dispute Resolution provisions of the General Terms and Conditions to devise such remedy.
 - 3.9.2 To remedy the alleged misuse for the balance of the Agreement, Parties will work together as necessary to mutually determine a permanent resolution for the balance of the term of the Agreement.
- 3.10 Upon notice and good cause shown, SBC MISSOURI shall have the right to conduct an audit of NAVIGATOR's use of the SBC MISSOURI OSS. As used in this Section, the term "good cause" means that a reasonable person would consider that an audit of NAVIGATOR's use of the SBC MISSOURI OSS is justified under the circumstances that exist at the time SBC -MISSOURI elects to conduct such an audit. Such audit shall be limited to auditing those aspects of NAVIGATOR's use of the SBC MISSOURI OSS that relate to SBC's allegation of misuse as set forth in the Notice of Misuse. SBC MISSOURI shall give ten (10) days advance written notice of its intent to audit NAVIGATOR ("Audit Notice") under this Section, and shall identify the type of information needed for the audit. Such Audit Notice may not precede SBC -MISSOURI's Notice of Misuse. Within a reasonable time following the Audit Notice, but no less than fourteen (14) days after the date of the notice (unless otherwise agreed by the Parties), NAVIGATOR shall provide SBC MISSOURI with access to the requested information in any reasonably requested format, at an appropriate NAVIGATOR location, unless otherwise agreed to by the Parties. The audit shall be at SBC MISSOURI's expense. All information obtained through such an audit shall be deemed proprietary and/or confidential and subject to confidential treatment without necessity for marking such information confidential. SBC MISSOURI agrees that it shall only use employees or outside parties to conduct the audit who do not have marketing, strategic analysis, competitive assessment or similar responsibilities within SBC MISSOURI, or any SBC affiliate.
- 3.11 When Resale Service and Section 251 (c)(3) UNE order functions are not available via an electronic interface for the pre-order, ordering and provisioning processes, SBC MISSOURI and NAVIGATOR will use manual processes. Should SBC MISSOURI develop electronic interfaces for these functions for itself, SBC MISSOURI will make electronic access available to NAVIGATOR within the specific operating region.
- 3.12 The Information Services (I.S.) Call Center for the SBC MISSOURI region provides for technical support function of electronic OSS interfaces. NAVIGATOR will also provide a single point of contact for technical issues related to the NAVIGATOR's electronic interfaces.

- 3.13 SBC MISSOURI will provide NAVIGATOR with access to the interfaces during the hours of operation posted in the CLEC Handbook on the CLEC Website. Changes to hours of operation will be handled in accordance with the Change Management Process.
- 3.14 SBC MISSOURI shall provide support for the interfaces described in this Attachment. NAVIGATOR will provide a single point of contact for issues related to the interfaces. Each Party shall also provide to the other Party telephone numbers for resolution of problems in connection with pre-ordering, ordering, provisioning and maintenance of the services. SBC MISSOURI shall list the business days and hours for each call center in SBC MISSOURI's CLEC Handbook and notice any changes via Accessible Letter. Minimum hours of operation for each center shall be:
- IS Call Center: 7 days per week, 24 hours per day
- LSC[LECC is Connecticut so it is NA here] & MCPSC: Monday through Friday, excluding Holidays, 8:00 AM to 5:00 PM
- LOC – Maintenance: 7 days per week, 24 hours per day
- LOC – Provisioning: Monday through Friday, excluding Holidays, 8:00 AM to 5:00 PM
- The Parties shall ensure adequate coverage in its service centers during these minimum hours.
- 3.15 The Parties will follow the final adopted guidelines of “SBC 13 State Competitive Local Exchange Carrier (CLEC) OSS Interface - Change Management Process”, developed in collaboration with CLECs. This plan may be modified from time to time in accordance with the Change Management principles.
- 3.16 SBC MISSOURI will continue to maintain the editing capabilities of SBC MISSOURI's LEX and Verigate interfaces that enable NAVIGATOR to copy existing service and address information from Verigate and paste it into the appropriate fields in LEX and/or to copy data from field to field within LEX or from Verigate to LEX.
- 3.17 SBC MISSOURI and NAVIGATOR agree to work together in the Order and Billing Forum (OBF) and the Telecommunications Industry Forum (TCIF) to establish and conform to uniform industry standards for electronic interfaces for pre-order, ordering and provisioning. Neither Party waives any of its rights as participants in such forums in the implementation of the guidelines. To achieve system functionality as quickly as possible, the Parties acknowledge that SBC MISSOURI may deploy interfaces with requirements developed in advance of industry guidelines. Thus, subsequent modifications may be necessary to comply with emerging guidelines. NAVIGATOR and SBC MISSOURI are individually responsible for evaluating the risk of developing their respective systems in advance of guidelines and agree to support their own system modifications to comply with new requirements. In addition, SBC MISSOURI has the right to define Local Service Request (LSR) Usage requirements according to the General Section 1.0, paragraph 1.4 of the practices in the OBF Local Service Ordering Guidelines (LSOG), which states: “Options described in this practice may not be applicable to individual providers tariffs; therefore, use of either the field or valid entries within the field is based on the providers tariffs/practices.”
- 3.18 Due to enhancements and on-going development of access to SBC MISSOURI's OSS functions, certain interfaces described in this Appendix may be modified, temporarily unavailable or may be phased out after execution of this Appendix. SBC MISSOURI shall provide proper notice of interface phase-out as required by the Change Management Process.
- 3.19 NAVIGATOR is responsible for obtaining operating system software and hardware to access SBC MISSOURI OSS functions. All hardware and software requirements are specified in: “CLEC Hardware/Software Requirements for Access of SBC Uniform OSS Applications”, or any other documents or interface requirements subsequently generated by SBC –MISSOURI for any of its **regions**.

4. PREORDER INTERFACES & FUNCTIONALITY

- 4.1 SBC MISSOURI will provide real time access to pre-order functions to support NAVIGATOR ordering of Resale services and Section 251 (c)(3) UNE. The Parties acknowledge that ordering requirements necessitate the use of current, real time pre-order information to accurately build service orders. The following lists represent pre-order functions that are available to NAVIGATOR so that NAVIGATOR order requests may be created to comply with SBC –MISSOURI region-specific ordering requirements.
- 4.2 Pre-Ordering functions for Resale Services and UNEs include:
 - 4.2.1 Feature/Service Availability:
 - 4.2.1.1 Feature Inquiry provides SBC MISSOURI with feature and service availability by WTN, NPA/NXX, and CLLI Code (as applicable).
 - 4.2.1.2 PIC/LPIC Inquiry provides SBC MISSOURI Primary Interexchange Carrier (PIC) options for intraLATA toll and interLATA toll.
 - 4.2.2 Customer Service Information - CSI Inquiry:

Access to SBC MISSOURI retail or resold CPNI and account information for pre-ordering will include: billing name, service address, billing address, service and feature subscription, directory listing information, long distance carrier identity, and pending service order activity. NAVIGATOR agrees that NAVIGATOR's representatives will not access the information specified in this subsection until after the End User requests that his or her Local Service Provider be changed to NAVIGATOR, and an End User authorization for release of CPNI complies with conditions as described in section 3.5 of this Appendix.
 - 4.2.3 Telephone Number Inquiry:

SBC MISSOURI provides a Telephone Number Reservation Inquiry and a Cancel Reservation function.
 - 4.2.4 Scheduling Inquiry/Availability
 - 4.2.4.1 Due Date Inquiry provides next available dates for the End User (where available).
 - 4.2.4.2 Dispatch Inquiry provides information to indicate whether dispatch is required.
 - 4.2.5 Address Validation Inquiry:

SBC MISSOURI provides address validation function.
- 4.3 The following are Pre-Order functions specific to UNEs
 - 4.3.1 Loop Pre-Qualification and Loop Qualification Inquiry:

SBC MISSOURI provides pre-order loop qualification information specific to Section 251 (c)(3) UNE DSL capable or Line Shared loops consistent with the XDSL and Advanced Services OSS Plan of Record filed 4/3/00 and approved by FCC on 12/22/00.
 - 4.3.2 Common Language Location Indicator (CLLI) Inquiry:

SBC MISSOURI provides CLLI code inquiry function.
 - 4.3.3 Connecting Facility Assignment (CFA) Inquiry:

SBC MISSOURI provides a CFA inquiry function.
 - 4.3.4 Network Channel/Network Channel Interface (NC/NCI) Inquiry:

SBC MISSOURI provides a NC/NCI inquiry function.
- 4.4 Electronic Access to Pre-Order Functions
 - 4.4.1 Resale and Section 251 (c)(3) UNE Pre-order Interface Availability

- 4.4.1.1 Enhanced Verigate is the 13-state uniform pre-order GUI interface available in SBC MISSOURI to provide the pre-ordering functions listed in section 4.2. Enhanced Verigate is accessible via a web-based Toolbar.
 - 4.4.1.2 An industry standard EDI/CORBA Pre-ordering Gateway is provided by SBC MISSOURI. This pre-ordering gateway supports two structural protocols, EDI and CORBA, as recommended by the technical industry committees. EDI/CORBA is the 13-state uniform pre-order application-to-application interface that can be integrated with NAVIGATOR's own negotiation system and that supports both Resale services and UNEs.
 - 4.4.1.3 DataGate is a transaction-based data query system through which SBC MISSOURI provides NAVIGATOR access to pre-ordering functions. This gateway shall be a Transmission Control Protocol/Internet Protocol (TCP/IP) gateway and will, once NAVIGATOR has developed its own interface, allow NAVIGATOR to access the pre-order functions for Resale services and Section 251 (c)(3) UNE. DataGate follows industry guidelines, but is based on SBC MISSOURI's proprietary pre-ordering functionality.
 - 4.4.1.4 Consumer Easy Access Sales Environment (C-EASE): C-EASE is an ordering entry system through which SBC MISSOURI provides NAVIGATOR access to the functions of pre-ordering to order SBC MISSOURI consumer Resale services.
 - 4.4.1.5 Business Easy Access Sales Environment (B-EASE): B-EASE is an ordering entry system through which SBC MISSOURI provides NAVIGATOR access to the functions of pre-ordering to order SBC MISSOURI business Resale services.
 - 4.4.1.6 Service Order Retrieval and Distribution (SORD) is available for the pre-order function of viewing the CPNI, when SORD is used to order SBC MISSOURI Resale service.
- 4.5 Other Pre-order Function Availability
- 4.5.1 Where pre-ordering functions are not available electronically, NAVIGATOR will manually request this information from the LSC, dependent on operating region, for inclusion on the service order request.
 - 4.5.2 Data Validation Files are available for the purpose of providing requesting CLECs with an alternate method of acquiring pre-ordering information that is considered relatively static. Upon request, SBC MISSOURI will provide Navigator with any of the following Data Validation Files via Connect: Direct, CD-ROM, or downloadable via the pre-order GUI – Enhanced Verigate. Due to its size, the Street Address Guide (SAG) will be available only via Connect:Direct, and CD-ROM.
- Data Validation Files:
SAG (Street Address Guide)
Feature/Service Availability by Switch
Directory Names
Class of Service Codes
USOC (Universal Service Order Codes)
Community Names
Yellow Page Headings
PIC/LPIC (InterLATA/IntraLATA)

5. ORDERING/PROVISIONING

- 5.1 SBC MISSOURI provides access to ordering functions (as measured from the time SBC MISSOURI receives accurate service requests from the interface) to support NAVIGATOR provisioning of Resale services and Section 251 (c)(3) UNE via one or more electronic interfaces. To order Resale services and UNEs, NAVIGATOR will format the service request to identify what features, services, or elements it wishes SBC MISSOURI to provision in accordance with applicable SBC MISSOURI ordering requirements. SBC MISSOURI will provide NAVIGATOR access to one or more of the following systems or interfaces:
- 5.2 Service Order Request System Availability
- 5.2.1 SBC MISSOURI makes available to NAVIGATOR an Electronic Data Interchange (EDI) application-to-application interface for transmission of Local Service Requests (LSR) as defined by the OBF, consistent with SBC MISSOURI Local Service Ordering Requirements (LSOR), and via EDI mapping as defined by TCIF. In ordering and provisioning of Resale Services or UNEs, NAVIGATOR and SBC MISSOURI will utilize industry guidelines developed by OBF and TCIF EDI to transmit data based upon SBC MISSOURI's Resale Service and Section 251 (c)(3) UNE ordering requirements, dependent on operating region. In addition, Local Number Portability (LNP) will be ordered consistent with the OBF LSR and EDI process.
- 5.2.2 For SBC MISSOURI, web-based LEX is the 13-state uniform ordering GUI interface that provides access to the uniform ordering functions for Resale Services and UNEs. Web-based LEX is accessible via a web-based Toolbar.
- 5.2.3 For SBC MISSOURI, C-EASE is available for the ordering of consumer Resale services.
- 5.2.4 For SBC MISSOURI, B-EASE is available for the ordering of business Resale services.
- 5.2.5 For SBC MISSOURI, SORD interface provides NAVIGATOR with the ability to create Resale and Section 251 (c)(3) UNE orders as well as certain complex Resale and Section 251 (c)(3) UNE orders that cannot be ordered through Easy Access Sales Environment (EASE), Electronic Data Interchange (EDI) or Local Exchange (LEX).
- 5.2.5.1 For SBC MISSOURI region, SORD interface supports NAVIGATOR initiated modification of service orders submitted electronically by NAVIGATOR via the following SBC MISSOURI OSS applications: Business EASE, Consumer EASE or SORD (via DOES-Direct Order Entry System). NAVIGATOR should not use SORD to modify service orders issued electronically via LEX/EDI. In addition, NAVIGATOR should not use SORD to modify orders submitted manually to the LSC. The Parties agree that the following conditions are applicable to EASE and SORD generated service orders with errors corrected via SORD. If NAVIGATOR chooses to use SORD to issue orders and/or modify EASE generated orders, then NAVIGATOR becomes responsible for correction of all EASE and SORD service order errors that occur between order application and order completion. NAVIGATOR may need to call the LSC to obtain additional information. For terms and conditions for service order error correction within SORD, see section 5.3.3.
- 5.2.6 In ordering and provisioning Section 251 (c)(3) Unbundled Dedicated Transport and local interconnection trunks, NAVIGATOR and SBC MISSOURI will utilize industry ASR guidelines developed by OBF based upon SBC MISSOURI ordering requirements.
- 5.3 Provisioning for Resale Services and Section 251 (c)(3) UNE in SBC MISSOURI
SBC MISSOURI will provision Resale services and Section 251 (c)(3) UNE as detailed in NAVIGATOR order requests. Access to status on such orders will be provided via the following electronic interfaces:

- 5.3.1 For SBC MISSOURI, Order Status and Provisioning Order Status functionality is provided through the Enhanced Verigate interface which will allow NAVIGATOR to check service order status. In addition, in SBC MISSOURI pending orders can be viewed in SORD.
- 5.3.2 For EDI ordering, SBC MISSOURI will provide, and NAVIGATOR shall use, an EDI interface for transferring and receiving orders, Firm Order Confirmation (FOC), service completion, and, as available, other provisioning data and information.
- 5.3.3 For SBC MISSOURI, as detailed in section 5.2.5.1, the Parties agree that the following timelines are applicable to electronically generated service orders with errors corrected via SORD:
 - 5.3.3.1 Errors occurring between application and distribution must be corrected within five (5) business hours for a simple order and within twenty four (24) hours for a complex order;
 - 5.3.3.2 Error Service Order Image (ESOI) errors must be corrected within three (3) business hours.
 - 5.3.3.3 Service orders will be excluded from calculation of the results for all related performance measurements, described in Appendix Performance Measurements, if NAVIGATOR fails to correct service order errors within the timeframes specified in this Section 5.3.3.
- 5.3.3.4 Additionally, service orders with errors that occur after order generation, but prior to distribution will not qualify for an SBC MISSOURI issued FOC.

6. MAINTENANCE/REPAIR

- 6.1 Two electronic interfaces are accessible in each region to place, and check the status of, trouble reports for both Resale services and UNEs. Upon request, NAVIGATOR may access these functions via the following methods:
 - 6.1.1 In SBC MISSOURI, Electronic Bonding for Trouble Administration Graphical User Interface (EBTA-GUI) is the 13 state uniform GUI interface that allows NAVIGATOR to perform MLT, issue trouble tickets, view status, and view trouble history on-line.
 - 6.1.2 In SBC MISSOURI, Electronic Bonding Trouble Administration (EBTA) is the 13 state uniform application-to-application interface that is available for trouble report submission and status updates. EBTA conforms to ANSI guidelines T1:227:1995, T1.228:1995 and T1.262:1998, Electronic Communications Implementation Committee (ECIC) Trouble Report Format Definition (TRFD) Number 1 as defined in ECIC document ECIC/TRA/95-003, and all guidelines referenced within those documents, as mutually agreed upon by NAVIGATOR and SBC MISSOURI. Functions currently implemented include Enter Trouble, Request Trouble Report Status, Add Trouble Information, Modify Trouble Report Attributes, Trouble Report Attribute Value Change Notification, and Cancel Trouble Report, as explained in 6 and 9 of ANSI T1.228:1995. NAVIGATOR and SBC MISSOURI will exchange requests over a mutually agreeable X.25-based network.

7. BILLING

- 7.1 SBC MISSOURI will bill NAVIGATOR for Resold services and UNEs. SBC MISSOURI will send associated billing information to NAVIGATOR as necessary to allow NAVIGATOR to perform billing functions. At minimum SBC MISSOURI will provide NAVIGATOR billing information in a paper format, or via 18-track magnetic tape, as agreed to between NAVIGATOR and SBC MISSOURI. Such alternate bill media will be made available to NAVIGATOR consistent with the individual state tariff provisions.

- 7.2 Electronic access to billing information for Resale services will also be available via the following interfaces:
- 7.2.1 In SBC MISSOURI, NAVIGATOR may receive a mechanized bill format via the EDI 811 transaction set.
 - 7.2.2 For Resale Services in SBC MISSOURI, NAVIGATOR may receive Bill Plus™, an electronic version of its bill, as described in, and in accordance with, SBC MISSOURI's Local Exchange Tariff.
 - 7.2.3 For Resale Services in SBC MISSOURI, NAVIGATOR may also view billing information through the Bill Information interface. Bill Information will be accessible via SBC MISSOURI Classic Toolbar.
 - 7.2.4 In SBC MISSOURI, NAVIGATOR may receive a mechanized bill format via the EDI 811 transaction set.
 - 7.2.5 In SBC MISSOURI, NAVIGATOR may receive electronically a Daily Usage Extract. On a daily basis, this feed provides information on the usage billed to its accounts for Resale services in the industry standardized EMI format.
 - 7.2.6 SBC MISSOURI will provide Loss Notifications. This notification alerts NAVIGATOR that a change requested by another telecommunications provider has been completed and, as a result, the Local Service Provider associated with a given telephone number has been changed. It will be provided via the uniform ordering application-to-application interface using the EDI 836 transaction, and will also be available via the uniform ordering GUI interface, LEX.
- 7.3 Electronic access to billing information for Section 251 (c)(3) UNE will also be available via the following interfaces:
- 7.3.1 SBC MISSOURI makes available to NAVIGATOR a local Bill Data Tape to receive data in an electronic format from its CABS database. The local Bill Data Tape contains the same information that would appear on NAVIGATOR's paper bill.
 - 7.3.2 In SBC MISSOURI, NAVIGATOR may also view billing information through the Bill Information interface. Bill Information will be accessible via SBC MISSOURI Classic Toolbar.
 - 7.3.3 In SBC MISSOURI, NAVIGATOR will receive a Daily Usage Extract electronically, on a daily basis, with information on the usage billed to its accounts for UNEs in the industry standardized Exchange Message Interface (EMI) format.
 - 7.3.4 In SBC MISSOURI, NAVIGATOR may receive a uniform loss notification via EDI 836 transaction or via the uniform GUI interface, LEX. For UNEs this loss notification indicates when NAVIGATOR's End Users, utilizing SBC MISSOURI ports, change their Competitive Local Exchange Carrier.

8. REMOTE ACCESS FACILITY

- 8.1 NAVIGATOR must access OSS interfaces via a CLEC Remote Access Facility. For SBC SOUTHWEST REGION 5-STATE, the LRAF located in Dallas, TX will be used. The PRAF in Fairfield, CA handles the SBC-2STATE region. The ARAF, located in Chicago, IL, serves SBC MIDWEST REGION 5-STATE and the SRAF in New Haven, CT, handles the SBC CONNECTICUT region. Connection to these remote access facilities will be established via a "port" either through dial-up or direct connection as described in Section 8.2. NAVIGATOR may utilize a port to access SBC-13STATE OSS interfaces to perform the supported functions in any SBC-13STATE where NAVIGATOR has executed an Appendix OSS. OSS applications that are accessible through the Internet will also go through a secured Remote Access Facility.

- 8.2 For SBC MISSOURI, NAVIGATOR may use three types of access: Switched, Private Line, and Frame Relay. For Private Line and Frame Relay "Direct Connections," NAVIGATOR shall provide its own router, circuit, and two Channel Service Units/Data Service Units (CSU/DSU). The demarcation point shall be the router interface at the LRAF, PRAF, ARAF, or SRAF. Switched Access "Dial-up Connections" require NAVIGATOR to provide its own modems and connection to the SBC MISSOURI LRAF. NAVIGATOR shall pay the cost of the call if Switched Access is used. Connections via the Public Internet require NAVIGATOR to connect to an ISP of their choice and use one of the HTTPS URLs associated with access to SBC OSS via the public internet.
- 8.3 For SBC MISSOURI, NAVIGATOR shall use TCP/IP to access SBC MISSOURI OSS via the LRAF, ARAF, SRAF, and the PRAF. In addition, NAVIGATOR shall have one valid Internet Protocol (IP) network address per region. NAVIGATOR shall maintain a user-id / password unique to each individual for accessing a SBC MISSOURI OSS on NAVIGATOR's behalf. NAVIGATOR shall provide estimates regarding its volume of transactions, number of concurrent users, desired number of private line or dial-up (switched) connections, and length of a typical session.
- 8.4 For SBC MISSOURI, NAVIGATOR shall attend and participate in implementation meetings to discuss NAVIGATOR LRAF/PRAF/ARAF/SRAF access plans in detail and schedule testing of such connections.

9. DATA CONNECTION SECURITY REQUIREMENTS

- 9.1 NAVIGATOR agrees that interconnection of NAVIGATOR data facilities with SBC -MISSOURI data facilities for access to OSS will be in compliance with SBC MISSOURI's "Competitive Local Exchange Carrier (CLEC) Operations Support System Interconnection Procedures" document current at the time of initial connection to a RAF. The following additional terms in this Section 9 govern direct and dial up connections between NAVIGATOR and the PRAF, LRAF, ARAF and SRAF for access to OSS Interfaces.
- 9.2 Joint Security Requirements
 - 9.2.1 Both Parties will maintain accurate and auditable records that monitor user authentication and machine integrity and confidentiality (e.g., password assignment and aging, chronological logs configured, system accounting data, etc.).
 - 9.2.2 Both Parties shall maintain accurate and complete records detailing the individual data connections and systems to which they have granted the other Party access or interface privileges. These records will include, but are not limited to, user ID assignment, user request records, system configuration, time limits of user access or system interfaces. These records should be kept until the termination of this Agreement or the termination of the requested access by the identified individual. Either Party may initiate a compliance review of the connection records to verify that only the agreed to connections are in place and that the connection records are accurate.
 - 9.2.3 NAVIGATOR shall immediately notify the ISCC when a employee userid is no longer valid (e.g. employee termination or movement to another department).
 - 9.2.4 Both Parties shall use an industry standard virus detection software program at all times. The Parties shall immediately advise each other by telephone upon actual knowledge that a virus or other malicious code has been transmitted to the other Party.
 - 9.2.5 All physical access to equipment and services required to transmit data will be in secured locations. Verification of authorization will be required for access to all such secured locations. A secured location is where walls and doors are constructed and arranged to serve as barriers and to provide uniform protection for all equipment used in the data connections which are made as a result of the user's access to either the NAVIGATOR or SBC MISSOURI network. At a minimum, this shall include: access doors equipped with card reader control or an equivalent authentication procedure and/or device, and egress

doors which generate a real-time alarm when opened and which are equipped with tamper resistant and panic hardware as required to meet building and safety standards.

- 9.2.6 Both Parties shall maintain accurate and complete records on the card access system or lock and key administration to the rooms housing the equipment utilized to make the connection(s) to the other Party's network. These records will include management of card or key issue, activation or distribution and deactivation.

9.3 Additional Responsibilities of Both Parties

- 9.3.1 Modem/DSU Maintenance And Use Policy: To the extent the access provided hereunder involves the support and maintenance of NAVIGATOR equipment on SBC MISSOURI's premises, such maintenance will be provided under the terms of the Competitive Local Exchange Carrier (CLEC) Operations Support System Interconnection Procedures document cited above.
- 9.3.2 Monitoring: Each Party will monitor its own network relating to any user's access to the Party's networks, processing systems, and applications. This information may be collected, retained, and analyzed to identify potential security risks without notice. This information may include, but is not limited to, trace files, statistics, network addresses, and the actual data or screens accessed or transferred.
- 9.3.3 Each Party shall notify the other Party's security organization immediately upon initial discovery of actual or suspected unauthorized access to, misuse of, or other "at risk" conditions regarding the identified data facilities or information. Each Party shall provide a specified point of contact. If either Party suspects unauthorized or inappropriate access, the Parties shall work together to isolate and resolve the problem.
- 9.3.4 In the event that one Party identifies inconsistencies or lapses in the other Party's adherence to the security provisions described herein, or a discrepancy is found, documented, and delivered to the non-complying Party, a corrective action plan to address the identified vulnerabilities must be provided by the non-complying Party within thirty (30) calendar days of the date of the identified inconsistency. The corrective action plan must identify what will be done, the Party accountable/responsible, and the proposed compliance date. The non-complying Party must provide periodic status reports (minimally monthly) to the other Party's security organization on the implementation of the corrective action plan in order to track the work to completion.
- 9.3.5 In the event there are technological constraints or situations where either Party's corporate security requirements cannot be met, the Parties will institute mutually agreed upon alternative security controls and safeguards to mitigate risks.
- 9.3.6 All network-related problems will be managed to resolution by the respective organizations, NAVIGATOR or SBC MISSOURI, as appropriate to the ownership of a failed component. As necessary, NAVIGATOR and SBC MISSOURI will work together to resolve problems where the responsibility of either Party is not easily identified.

9.4 Information Security Policies And Guidelines For Access To Computers, Networks and Information By Non-Employee Personnel

- 9.4.1 Information security policies and guidelines are designed to protect the integrity, confidentiality and availability of computer, networks and information resources. Section 9.5 - 9.11 summarizes the general policies and principles for individuals who are not employees of the Party that provides the computer, network or information, but have authorized access to that Party's systems, networks or information. Questions should be referred to NAVIGATOR or SBC -MISSOURI, respectively, as the providers of the computer, network or information in question.

- 9.4.2 It is each Party's responsibility to notify its employees, contractors and vendors who will have access to the other Party's network, on the proper security responsibilities identified within this Attachment. Adherence to these policies is a requirement for continued access to the other Party's systems, networks or information. Exceptions to the policies must be requested in writing and approved by the other Party's information security organization.

9.5 General Policies

- 9.5.1 Each Party's resources are for approved business purposes only.
- 9.5.2 Each Party may exercise at any time its right to inspect, record, and/or remove all information contained in its systems, and take appropriate action should unauthorized or improper usage be discovered.
- 9.5.3 Individuals will only be given access to resources that they are authorized to receive and which they need to perform their job duties. Users must not attempt to access resources for which they are not authorized.
- 9.5.4 Authorized users must not develop, copy or use any program or code which circumvents or bypasses system security or privilege mechanism or distorts accountability or audit mechanisms.
- 9.5.5 Actual or suspected unauthorized access events must be reported immediately to each Party's security organization or to an alternate contact identified by that Party. Each Party shall provide its respective security contact information to the other.

9.6 User Identification

- 9.6.1 Access to each Party's corporate resources will be based on identifying and authenticating individual users in order to maintain clear and personal accountability for each user's actions.
- 9.6.2 User identification shall be accomplished by the assignment of a unique, permanent user id, and each user id shall have an associated identification number for security purposes.
- 9.6.3 User ids will be revalidated on a monthly basis.

9.7 User Authentication

- 9.7.1 Users will usually be authenticated by use of a password. Strong authentication methods (e.g. one-time passwords, digital signatures, etc.) may be required in the future.
- 9.7.2 Passwords must not be stored in script files.
- 9.7.3 Passwords must be entered by the user.
- 9.7.4 Passwords must be at least 6-8 characters in length, not blank or a repeat of the user id; contain at least one letter, and at least one number or special character must be in a position other than the first or last one. This format will ensure that the password is hard to guess. Most systems are capable of being configured to automatically enforce these requirements. Where a system does not mechanically require this format, the users must manually follow the format.
- 9.7.5 Systems will require users to change their passwords regularly (usually every 31 days).
- 9.7.6 Systems are to be configured to prevent users from reusing the same password for 6 changes/months.
- 9.7.7 Personal passwords must not be shared. A user who has shared his password is responsible for any use made of the password.

9.8 Access and Session Control

- 9.8.1 Destination restrictions will be enforced at remote access facilities used for access to OSS Interfaces. These connections must be approved by each Party's corporate security organization.
- 9.8.2 Terminals or other input devices must not be left unattended while they may be used for system access. Upon completion of each work session, terminals or workstations must be properly logged off.
- 9.9 User Authorization
 - 9.9.1 On the destination system, users are granted access to specific resources (e.g. databases, files, transactions, etc.). These permissions will usually be defined for an individual user (or user group) when a user id is approved for access to the system.
- 9.10 Software and Data Integrity
 - 9.10.1 Each Party shall use a comparable degree of care to protect the other Party's software and data from unauthorized access, additions, changes and deletions as it uses to protect its own similar software and data. This may be accomplished by physical security at the work location and by access control software on the workstation.
 - 9.10.2 Untrusted software or data shall be scanned for viruses before use on a Party's corporate facilities that can be accessed through the direct connection or dial up access to OSS interfaces.
 - 9.10.3 Unauthorized use of copyrighted software is prohibited on each Party's corporate systems that can be access through the direct connection or dial up access to OSS Interfaces.
 - 9.10.4 Proprietary software or information (whether electronic or paper) of a Party shall not be given by the other Party to unauthorized individuals. When it is no longer needed, each Party's proprietary software or information shall be returned by the other Party or disposed of securely. Paper copies shall be shredded. Electronic copies shall be overwritten or degaussed.
- 9.11 Monitoring and Audit
 - 9.11.1 To deter unauthorized access events, a warning or no trespassing message will be displayed at the point of initial entry (i.e., network entry or applications with direct entry points). Each Party should have several approved versions of this message. Users should expect to see a warning message similar to this one:

"This is a (SBC MISSOURI or NAVIGATOR) system restricted to Company official business and subject to being monitored at any time. Anyone using this system expressly consents to such monitoring and to any evidence of unauthorized access, use, or modification being used for criminal prosecution."
 - 9.11.2 After successful authentication, each session will display the last logon date/time and the number of unsuccessful logon attempts. The user is responsible for reporting discrepancies.

10. OPERATIONAL READINESS TEST (ORT) FOR ORDERING/PROVISIONING AND REPAIR/ MAINTENANCE INTERFACES

- 10.1 Prior to live access to OSS interface functionality, the Parties must conduct Operational Readiness Testing (ORT). SBC MISSOURI will participate with NAVIGATOR in Operational Readiness Testing (ORT) which will allow for the testing of the systems, interfaces, and processes for the pre-ordering, ordering and provisioning of **Section 251 (c)(3)** unbundled Network Elements or Combinations. ORT will be completed in accordance with a schedule mutually agreed to by the Parties. Such ORT will begin not later than three (3) months after the Effective Date of the Agreement.

11. OSS TRAINING COURSES

- 11.1 Prior to live system usage, NAVIGATOR must complete user education classes for SBC MISSOURI-provided interfaces that affect the SBC MISSOURI network. Course descriptions for all available classes by region are posted on the CLEC website in the Customer Education section. CLEC training schedules by region are also available on the CLEC website and are subject to change, with class lengths varying. Classes are train-the-trainer format to enable NAVIGATOR to devise its own course work for its own employees. Charges as specified below will apply for each class:

Training Rates	5 day class	4.5 day class	4 day class	3.5 day class	3 day class	2.5 day class	2 day class	1.5 day class	1 day class	½ day class
1 to 5 students	\$4,050	\$3,650	\$3,240	\$2,835	\$2,430	\$2,025	\$1,620	\$1,215	\$810	\$405
6 students	\$4,860	\$4,380	\$3,890	\$3,402	\$2,915	\$2,430	\$1,945	\$1,455	\$970	\$490
7 students	\$5,670	\$5,100	\$4,535	\$3,969	\$3,400	\$2,835	\$2,270	\$1,705	\$1,135	\$570
8 students	\$6,480	\$5,830	\$5,185	\$4,536	\$3,890	\$3,240	\$2,590	\$1,950	\$1,300	\$650
9 students	\$7,290	\$6,570	\$5,830	\$5,103	\$4,375	\$3,645	\$2,915	\$2,190	\$1,460	\$730
10 students	\$8,100	\$7,300	\$6,480	\$5,670	\$4,860	\$4,050	\$3,240	\$2,430	\$1,620	\$810
11 students	\$8,910	\$8,030	\$7,130	\$6,237	\$5,345	\$4,455	\$3,565	\$2,670	\$1,780	\$890
12 students	\$9,720	\$8,760	\$7,780	\$6,804	\$5,830	\$4,860	\$3,890	\$2,920	\$1,945	\$970

- 11.2 A separate agreement will be required as a commitment to pay for a specific number of NAVIGATOR students in each class. NAVIGATOR agrees that charges will be billed by SBC MISSOURI and NAVIGATOR payment is due thirty (30) days following the bill date. NAVIGATOR agrees that personnel from other competitive Local Service Providers may be scheduled into any class to fill any seats for which NAVIGATOR has not contracted. Class availability is first-come, first served with priority given to CLECs who have not yet attended the specific class.
- 11.3 Class dates will be based upon SBC MISSOURI availability and will be coordinated among NAVIGATOR, the NAVIGATOR's SBC MISSOURI Account Manager, and SBC MISSOURI Industry Markets CLEC Training Product Management.
- 11.4 NAVIGATOR agrees to pay the cancellation fee of the full price noted in the separate agreement if NAVIGATOR cancels scheduled classes less than two (2) weeks prior to the scheduled start date. NAVIGATOR agrees to provide to SBC MISSOURI completed registration forms for each student no later than one week prior to the scheduled training class.
- 11.5 NAVIGATOR agrees that NAVIGATOR personnel attending classes are to utilize only training databases and training presented to them in class. Attempts to access any other SBC MISSOURI system are strictly prohibited.
- 11.6 NAVIGATOR further agrees that training material, manuals and instructor guides can be duplicated only for internal use for the purpose of training employees to utilize the capabilities of SBC MISSOURI's OSS in accordance with this Appendix and shall be deemed "Proprietary Information" and subject to the terms, conditions and limitations of the Confidentiality provisions of the General Terms and Conditions.

12. OSS CHARGES FOR SYSTEM ACCESS AND CONNECTIVITY

- 12.1 To the extent SBC MISSOURI seeks to recover costs associated with OSS System Access and Connectivity, SBC MISSOURI shall not be foreclosed from seeking recovery of such costs via negotiation, arbitration, or generic proceeding during the term of this agreement.

13. MISCELLANEOUS CHARGES

- 13.1 For SBC MISSOURI region only, NAVIGATOR requesting the Bill Plus™, as described in 7.2.2, agrees to pay applicable tariffed rate, less Resale discount.

- 13.2 For SBC MISSOURI, NAVIGATOR requesting the billing function for the Daily Usage Extract which contains the usage billable records, as described in 7.2.5 and 7.3.3, agrees to pay established rates pursuant to Appendix Pricing.
- 13.3 Intentionally Left Blank
- 13.4 For SBC MISSOURI, should NAVIGATOR request custom development of an exclusive interface to support OSS functions, such development will be considered by SBC MISSOURI on an Individual Case Basis (ICB) and priced as such.

14. SERVICE BUREAU PROVIDER ARRANGEMENTS FOR SHARED ACCESS TO OSS

- 14.1 SBC MISSOURI shall allow NAVIGATOR to access its OSS via a Service Bureau Provider under the following terms and conditions:
- 14.2 Notwithstanding any language in this Agreement regarding access to OSS to the contrary, NAVIGATOR shall be permitted to access SBC MISSOURI OSS via a Service Bureau Provider as follows:
 - 14.2.1 NAVIGATOR shall be permitted to access SBC MISSOURI application-to-application OSS interfaces, via a Service Bureau Provider where NAVIGATOR has entered into an agency relationship with such Service Bureau Provider, and the Service Bureau Provider has executed an Agreement with SBC MISSOURI to allow Service Bureau Provider to establish access to and use of SBC MISSOURI's OSS.
 - 14.2.2 NAVIGATOR's use of a Service Bureau Provider shall not relieve NAVIGATOR of the obligation to abide by all terms and conditions of this Agreement. NAVIGATOR must ensure that its agent properly performs all OSS obligations of NAVIGATOR under this Agreement, which NAVIGATOR delegates to Service Bureau Provider.
 - 14.2.3 It shall be the obligation of NAVIGATOR to provide notice in accordance with the notice provisions of the Terms and Conditions of this Agreement whenever it established an agency relationship with a Service Bureau Provider or terminates such a relationship. SBC MISSOURI shall have a reasonable transition time to establish a connection to a Service Bureau Provider once NAVIGATOR provides notice. Additionally, SBC MISSOURI shall have a reasonable transition period to terminate any such connection after notice from NAVIGATOR that it has terminated its agency relationship with a Service Bureau Provider.
- 14.3 Notwithstanding any language in this Agreement regarding Performance Measures to the contrary, SBC MISSOURI shall not be obligated to pay liquidated damages or assessments for noncompliance with a performance measurement to the extent that such noncompliance was the result of actions or events beyond SBC MISSOURI's control associated with third-party systems or equipment including systems, equipment and services provided by a Service Bureau Provider (acting as NAVIGATOR's agent for connection to SBC MISSOURI's OSS) which could not be avoided by SBC MISSOURI through the exercise of reasonable diligence or delays or other problems resulting from actions of a Service Bureau Provider, including Service Bureau provided processes, services, systems or connectivity.

15. APPLICABILITY OF OTHER RATES, TERMS AND CONDITIONS

- 15.1 Every interconnection, service and network element provided hereunder, shall be subject to all rates, terms and conditions contained in this Agreement which are legitimately related to such interconnection, service or network element. Without limiting the general applicability of the foregoing, the following terms and conditions of the General Terms and Conditions are specifically agreed by the Parties to be legitimately related to, and to be applicable to, each interconnection, service and network element provided hereunder: definitions, interpretation, construction and

severability; notice of changes; general responsibilities of the Parties; effective date, term and termination; fraud; deposits; billing and payment of charges; non-payment and procedures for disconnection; dispute resolution; audits; disclaimer of representations and warranties; limitation of liability; indemnification; remedies; intellectual property; publicity and use of trademarks or service marks; no license; confidentiality; intervening law; governing law; regulatory approval; changes in End User local exchange service provider selection; compliance and certification; law enforcement; no third party beneficiaries; disclaimer of agency; relationship of the Parties/independent contractor; subcontracting; assignment; responsibility for environmental contamination; force majeure; taxes; non-waiver; network maintenance and management; signaling; transmission of traffic to third parties; customer inquiries; expenses; conflicts of interest; survival; scope of agreement; amendments and modifications; and entire agreement.