test environment but, instead, are literally hand carried through SBC's systems. As a result, the test environment cannot test either new flow-through capability or the impact of new releases and other changes on flow-through on SBC's side of the EDI gateway. Moreover, the artificial conditions used in the test environment create the possibility that problems will not be detected until actual production begins.

Despite these obvious deficiencies, SBC has made no plans or commitments to correct them in its SWBT and PB/NB service areas. Deployment of a test environment for the uniform application-to-application interface that mirrors the production environment is essential to realizing the goals set out by the FCC for uniform interfaces.

SBC Collaborative on OSS --

08-Apr-00

CLEC OSS Issues -- Master Issues List

08-Apr-00

PRE-ORDERING/ORDERING

Issue Number	Posted Date	SBC Area Involved	Issue To Be Resolved	Collaborative Discussion Records	Additional Documentation
1	27-Mar-00	AIT	Ameritech is required to provide corrected specifications for NC/NCI query/response		
2	27-Mar-00	AIT	Ameritech is required to provide corrected specifications for CFA query/response.		
3	27-Mar-00	AIT	Ameritech is required to provide corrected specifications for Feature/Service Availability query/response.		
4	27-Mar-00	ALL	Ameritech is required to provide corrected specifications for PIC/LPIC query/response.		
5	27-Mar-00	AIT	CLECs require the ability to acquire the NC/NCI assignments for specific loops.		
6	27-Mar-00	ALL	CLECs require SBC/Ameritech implementation of the fielded Customer Service Record		

7 *27-Mar-00* *ALL*
CLECs require data element synchronization for integrating pre-order and order information

8 *27-Mar-00* *ALL*
Why does SBC/Ameritech Address Validation by working telephone number for residential services only?

9 *27-Mar-00* *ALL*
What use will be made of CLLI inquiry/response information once SBC/Ameritech implements the CLLI inquiry transaction?

10 *27-Mar-00* *ALL*
The SBC/Ameritech Plan of Record establishes that the fielded CSR will not be uniform throughout the SBC footprint. What differences will exist that prevent uniformity throughout the SBC area?

11 *27-Mar-00* *AIT*
What processes will Ameritech employ to provide CLECs with directory listing information that relates to listings published for UNE-Loop end users?

12 *27-Mar-00* *ALL*
SBC advises of a line limitation that it will impose on Customer Service Record responses that it will provide to CLECs. What is this size limit, or when will the size limit be announced?

13 *27-Mar-00* *ALL*

What steps will SBC take to provide CLECs with a query to obtain valid PIC/LPIC entries at the local switch level of precision prior to the uniform application to application interface being available?

14 *27-Mar-00* *ALL*

What differences in legacy system (and/or database) information will be present in Loop Pre-Qualification query responses in the SBC regions?

15 *27-Mar-00* *AIT*

What TCNet changes will be made and when, to incorporate Loop Qualification information and queries and responses?

16 *27-Mar-00* *ALL*

What specific changes are to be made to the DSL Loop Qualification query/response transactions in 2000? What Change Management Notification will be made?

17 *27-Mar-00* *ALL*

For the Directory Listing query that SBC/Ameritech intends to implement, what information will be made available regarding White Pages directory information?

18 *27-Mar-00* *ALL*

For the Directory Listing query that SBC/Ameritech intends to implement, what information will be made available regarding Yellow Pages directory information? What Heading and Section information will be available?

19 *27-Mar-00* *ALL*

What size limitation will SBC impose that limits the information available to CLECs via the Directory Listing query?

20 *27-Mar-00* *ALL*

Why is SBC Dispatch Inquiry restricted to information about residential services only? What can be retrieved for business services?

21 *27-Mar-00* *ALL*

Will the SBC legacy system (database) provide the same information in all regions relative to the existence of cut-through facilities?

22 *27-Mar-00* *ALL*

Will the Due Date query/response provide a response for an available date for line/loop quantities greater than one?

23 *27-Mar-00* *ALL*

What are the planned order detail search criteria for Pending Order Status queries?

Uniform and Enhanced OSS Plan of Record

I. OVERVIEW 3

A. INTRODUCTION 3

B. SCOPE 3

C. PROCESS METHODOLOGY 3

II. PRESENT METHODS OF OPERATION (PMO) 7

A. PRE-ORDERING 7

Available Interfaces 7

EDI Message Flows 8

Functions 8

B. ORDERING 15

Available Interfaces 15

Ordering Message Flows 16

C. PROVISIONING 19

Functions 19

D. MAINTENANCE AND REPAIR 21

Available Interfaces 21

E. BILLING 24

Billing Data Tape (BDT) 24

Exchange Message Interface (EMI) 24

Electronic Data Interchange (EDI) 26

Online Viewing/GUI 26

Product Billing System Alignment 26

F. CONNECTIVITY 29

III. FUTURE METHOD OF OPERATION (FMO) 31

A. OVERVIEW 31

Standards 31

Development Timeline 32

Versioning 33

CLEC Joint Testing 33

B. PRE-ORDERING 34

Uniform Pre-ordering Message Flows 34

Uniform Pre-ordering Functions 35

C. ORDERING 41

Uniform Ordering Message Flow 41

Uniform Product Ordering 42

D. PROVISIONING 44
E. MAINTENANCE AND REPAIR 45
F. BILLING 49
Billing Data Tape (BDT) 49
Exchange Message Interface (EMI) 49
Electronic Data Interchange (EDI) 52
Online Viewing/GUI 52
Product Billing System Alignment 53
G. CONNECTIVITY 54
H. DOCUMENTATION 56
Current and Uniform Interface Documentation 56
I. TIMELINE 57
IV. GLOSSARY 62

I. OVERVIEW

A. Introduction

SBC/Ameritech currently makes a wide variety of Operational Support System (OSS) interfaces available to CLECs in its four service areas: Ameritech, Pacific Bell/Nevada Bell (PB/NB), Southwestern Bell Telephone (SWBT) and Southern New England Telephone (SNET). Although these interfaces all provide access to OSS functionality for pre-ordering, ordering, provisioning, maintenance and repair and billing services, there are regional differences in the interfaces and how they operate. Accordingly, as part of the October 8, 1999 SBC/Ameritech Merger Conditions, SBC/Ameritech agreed to develop and deploy commercially ready, uniform application-to-application and graphical user (GUI) interfaces for the support of these functions.

This Uniform and Enhanced OSS Plan of Record (POR) is the initial milestone of the three-phase process set out in the Merger Conditions for the development and deployment of uniform application-to-application and GUI interfaces that present telecommunications carriers that are users of the interfaces with the same version(s) of industry standards, data formatting specifications and transport and security specifications across the 13-State SBC/Ameritech Service Area.

B. Scope

The focus of this POR defines a plan for SBC/Ameritech to make available modified OSS, in accordance with the schedule and commitments outlined in the SBC/Ameritech Merger Conditions. These OSS include application to application interfaces and graphical user interfaces (GUIs) which support pre-ordering, ordering, provisioning, maintenance and repair and billing for resold services, individual Unbundled Network Elements (UNEs), including standalone Local Number Portability, and combinations of UNEs, and local interconnection trunks. While most of these interfaces are existing and currently in use, additional access to these OSS functions will be provided as a result as this plan.

Section II of this POR details the Present Method of Operation (PMO) for all existing OSS interfaces in the four SBC/Ameritech Service Areas. In Section III, the Future Method of Operation (FMO) of these interfaces, including plans for the development and deployment of modifications designed to ensure the availability of uniform, electronic OSS interfaces throughout the 13-State SBC/Ameritech Service Area, is specified.

Finally, there are a number of proprietary and/or retail interfaces that SBC/Ameritech makes available in its four service areas that are not addressed in the POR. These proprietary interfaces are to be retired and replaced by uniform interfaces that conform to industry standards and are implemented to support local market competition. Changes to these interfaces, including full retirement of the entire interface will be conducted according to the terms of the Change Management Process (CMP).

C. Process Methodology

This POR follows the framework established by the SBC/Ameritech Pre-Merger "OSS Process Improvement Plan".

The following steps were taken to create this plan:

- Subject matter experts representing all of the SBC/Ameritech service areas were assembled from various OSS business requirement areas and from Information Technology system and architecture areas.
- The PMO was documented for pre-ordering, ordering, provisioning, maintenance and repair and billing interfaces.
- The FMO interfaces and processes for pre-ordering, ordering, provisioning, maintenance and repair, and billing were identified and documented.
- An FMO implementation plan documenting the appropriate interface changes and associated timelines was documented.

The criteria for determining the future method of operation included, but was not limited to:

- Business requirements, including the number of actual current users, the volumes currently processed, the flow-through capability that already exists as well as the expected number of users and requests (i.e., future capacity requirements).

- Industry standards or guidelines, such as those published by T1, the Ordering and Billing Forum (OBF) and Telecommunications Industry Forum (TCIF).

- Downstream impacts of any changes, such as the effect that changes in the applications would have on methods and procedures.

- CLEC input, including the types of change requests CLECs are initiating, the discussions in change management meetings regarding developmental plans, CLEC specific feedback from the account teams, other OSS support personnel, training classes and CLEC forums.

- The architecture of SBC/Ameritech's current OSS, including available data and functionality.

- The current security methods including firewalls, addresses, passwords, and current CLEC access methods.

SBC/Ameritech will follow the three-phases identified in the SBC/Ameritech Merger Conditions. SBC/Ameritech will work collaboratively with CLECs and the FCC Staff to obtain written agreement on OSS interfaces, enhancements and business requirements identified in this POR and ultimately develop and deploy those agreed upon changes in accordance with the schedules contained within the Merger Conditions.

Standards

Multiple bodies are involved in the setting of standards and guidelines for the OSS interfaces used for communication between ILECs and CLECs. SBC/Ameritech actively participates in these organizations, and is supportive of the timely implementation of the standards and guidelines issued by them.

Forums and Committees of the Alliance for Telecommunications Industry Solutions (ATIS), the Ordering and Billing Forum (OBF), the Telecommunications Industry Forum EDI Service Order Subcommittee (SOSC), the Telecommunications Industry Forum Electronic Communications Implementation Committee (ECIC), and the T1M1 Committee are the industry-recognized bodies that issue standards and guidelines applicable to the interfaces used in the pre-ordering and ordering of resold local service and unbundled network elements. The OBF issues guidelines covering the pre-ordering and ordering transaction flows and associated data elements, the SOSC provides the guidelines for the implementation of those transactions in EDI, and T1M1 the implementation of pre-ordering transactions in CORBA.

Currently, the OBF is developing version 5 of its Local Services Ordering Guide (LSOG 5), which is targeted for release in final form on July 26, 2000. The SOSC is expected to release version 5 of the EDI Electronic Local Mechanization Specifications (ELMS 5) on October 30, 2000 dependent on the release by the OBF of LSOG 5. Version 4 (LSOG 4) was released April 9, 1999. ECIC has issued two standards applicable to pre-ordering via CORBA: T1.265-1999 approved April 1999, and T1.267-1999 approved August 1999.

ATIS committees also provide standards and guidelines applicable to the repair and maintenance, and billing functional areas. The T1M1 committee has issued two standards governing the data elements and operation of the repair and maintenance interface: T1.227a-1999 and T1.228-1995. The OBF Message Processing Committee maintains the Exchange Message Interface guideline. Version 17 of this guideline was issued in January 2000. Issue 9 of the EDI billing guideline, maintained by the TCIF EDI committee and built upon the ANSI X.12, version 4010 EDI standard was published in December 1998. Telcordia's Carrier Access Billing System (CABS) Billing Output Specifications (BOS) for Bill Data Tape (BDT), version 32, were published in April 1999.

In this plan, SBC/Ameritech is committing to implementing the most current versions of standards available in the industry today. Because of the evolving nature of industry standards, SBC/Ameritech will work with the CLECs through the change management process to determine whether more advanced versions of the industry standards should be implemented in the uniform interfaces instead of those proposed in this document. The CMP will also be used to determine the appropriate implementation of the selected standards versions, because a strict adherence to the standard might result in loss of existing functionality and because of the flexibility of implementation allowed within the standards and guidelines. These agreed-upon changes would be adopted for SBC/Ameritech's entire thirteen state serving area and would require region-specific transition plans.

Change Management

Each SBC/Ameritech service area has its own Change Management Process (CMP). These were developed collaboratively with the CLECs well before the SBC/Ameritech merger, and have each been in place since at least June 1999. These processes provide a means by which each regional company and the CLECs can work cooperatively to introduce changes to the OSS interfaces. These processes include specific intervals, such as when release specifications will be delivered to the CLECs for review and input.

A 13-state CMP is currently being addressed in a separate CLEC collaborative effort that began in November 1999 following the SBC/Ameritech merger close. The 13-state CMP is expected to be approved

by the CLECs by June 1, 2000 at the earliest. This Change Management Process, in its current draft form, is detailed in the attached document (see Attachment A). Once implemented as described in the CMP transition plan, SBC/Ameritech will use this process in lieu of the current service area processes. SBC/Ameritech is committed to using the CMP to deliver the changes identified in this POR.

SBC/Ameritech agrees that there needs to be a process that addresses business process changes, such as manual processes and forms, that fall outside the scope of the OSS CMP that is limited to changes to the interfaces. SBC/Ameritech is committed to putting in place by second quarter, 2000 a process by which changes can be addressed that involve operations, manual processes, performance measurements, product and service definitions and legacy systems, including the establishment of CLEC User Forums. Until these forums are established, SBC/Ameritech will address changes that lie in these categories within the framework of the existing SBC/Ameritech user forums. In addition, any process that controls changes to existing routines will be an open and clearly defined process.

II. PRESENT METHODS OF OPERATION (PMO)

The PMO for all existing OSS interfaces in the four SBC/Ameritech Service Areas are outlined in this section. The regional differences in these interfaces and the access they provide to OSS functionality for pre-ordering, ordering, provisioning, maintenance and repair, and billing are described, analyzed and compared.

A. Pre-ordering

Available Interfaces

The Southwestern Bell Telephone (SWBT), Pacific Bell/Nevada Bell (PB/NB), Ameritech and Southern New England Telephone (SNET) regions provide CLECs with application to application access to pre-ordering functions via Electronic Data Interchange (EDI), which has been selected by the Ordering and Billing Forum (OBF) as one of the methods for exchanging information between telecommunications companies regarding orders for local service. SWBT and PB/NB also provide application to application pre-ordering functions via Common Object Request Broker Architecture (CORBA).

SWBT and PB/NB have implemented EDI pre-ordering functions based on the Ordering and Billing Forum (OBF) Local Service Ordering Guidelines (LSOG) version 4, Telecommunications Industry Forum (TCIF) Electronic Data Interchange Local Mechanization Specification (ELMS) issue 4, and EDI ASC X12 version 4010. Ameritech and SNET offer EDI pre-ordering interfaces which were implemented prior to acceptance of industry guidelines, and utilize ASC X12 version 3072.

CORBA became an Electronic Communications Implementation Committee (ECIC) approved Industry Guideline for local service pre-ordering in September 1997. This approval provided two industry acceptable transport protocols for local pre-ordering, CORBA and EDI. CORBA was accepted as an alternative due to its fundamental ability to support interactive data exchange. CORBA is defined by the Object Management Group (OMG) and uses Interface Definition Language (IDL) data models as defined by the T1M1 committee of the Alliance for Telecommunications Industry Solutions (ATIS). T1.265-1999 covers the majority of pre-ordering functions and was approved April 1999. T1.267-1999 applies to the Customer Service Information (CSI) Inquiry and Directory Listings Inquiry and was approved August 1999.

SWBT and PB/NB have implemented CORBA pre-ordering functions based on the OBF LSOG version 4 and ANSI T1.265-1999, with security implemented in accordance with T1M1 T1.265 security. Ameritech and SNET have not made a CORBA-based pre-ordering interface available to CLECs.

In addition to the application to application interface using EDI/CORBA, the SWBT and PB/NB regions also provide pre-ordering functions via DataGate. DataGate is an SBC/Ameritech proprietary application to application interface implemented prior to the acceptance of industry guidelines.

Graphical User Interface (GUI) access to pre-ordering functions is provided to CLECs in the SWBT and PB/NB regions via the Verigate application. SNET provides GUI access to pre-ordering functions via W-CIWin. Ameritech provides GUI access to pre-ordering functionality via TCNet.

The following table summarizes the pre-ordering interfaces currently available in the SBC/Ameritech operating regions.

Pre-Ordering	SWBT	PB/NB	SNET	Ameritech
Industry App to App Gateway				
Application Name	EDI/CORBA	EDI/CORBA	MSAP	EDI
LSOG Version	4	4	NA	NA
Protocol / Version	EDI 9 / 4010	EDI 9 / 4010	EDI / 3072	EDI / 3072
Protocol / Version	CORBA / T1.265-1999, T1.267-1999	CORBA /T1.265-1999, T1.267-1999		
Proprietary App to App Gateway				
Application Name	DataGate	DataGate		
Proprietary GUIs				
Application Name	Verigate	Verigate	W-CIWin	TCNet

EDI Message Flows

The current application to application interfaces utilize ASC X12 transaction sets to pass EDI access information between requestor (CLEC) and provider (SWBT, PB/NB, Ameritech or SNET).

The SWBT, PB/NB and SNET regions utilize the 850, 855, and 997 transaction sets. A typical pre-ordering transaction begins when a CLEC submits an 850 transaction. When the 850 is received, a 997 transaction is immediately returned to the CLEC to communicate the receipt of the request. Responses, whether positive or negative, are returned to the CLEC via an 855 transaction. The CLEC may return a 997 transaction to communicate the receipt or rejection of the 855.

Ameritech utilizes the 850, 855, and 864 transaction sets. A typical pre-ordering transaction begins with the receipt of an 850 transaction from a CLEC. A 997 transaction is not used to communicate receipt of the 850. Responses, whether positive or negative, are returned to the CLEC via an 855 transaction or an 864 transaction. The 864 transaction is used to return Customer Service Information (CSI) to the CLEC. Ameritech does not require a CLEC to return a 997 transaction.

The following table provides a summary of the EDI transaction usage on the pre-ordering application to application interfaces in the SBC/Ameritech operating regions:

RECORD TYPE	SWBT	PB/NB	SNET	Ameritech
997	Acknowledgment	Acknowledgment	Acknowledgment	N/A
850	Initial Request	Initial Request	Initial Request	Initial Request
855	Response	Response	Response	Response (except CSI)
864	N/A	N/A	N/A	CSI Response

Functions

Pre-ordering capabilities allow for the exchange of certain information between SBC/Ameritech and CLECs about a given end user. This information enables the CLEC to submit a complete and accurate request to SBC/Ameritech for the provision of local service by the CLEC to the end user. This exchange of information is performed based on an inquiry and response process. The following pre-ordering capabilities are available to and used by CLECs in one or more SBC/Ameritech Service Areas.

Address Validation Inquiry

The Address Validation Inquiry enables the CLEC to verify that the end user address it intends to submit to SBC/Ameritech via the local service request is valid.

This inquiry is available in the SWBT and PB/NB service areas via the EDI/CORBA, DataGate and Verigate interfaces. Similarly, address validation is performed in the SNET service area via the application to application interface and W-CIWin. Ameritech provides this inquiry via the application to application interface and TCNet. In the SWBT and PB/NB service areas, working telephone number (WTN) may also be used to retrieve a valid residential service address. In addition to the address validation information, supplemental information (such as tax area codes and the primary NXX of the local service office) also is returned in each service area. The availability of supplemental information varies by service area because of differences in the OSS that perform the address validation inquiry.

Common Language Location Indicator (CLLI) Inquiry

This Inquiry provides the CLLI code associated with a telephone number, enabling the CLEC to submit the appropriate CLLI code on a local service request for stand-alone UNE switch port or a UNE loop and switch port combination.

This inquiry is available in the SWBT service area via the DataGate and Verigate interfaces. In the PB/NB service area, this same information is provided as part of the Feature/Service Availability Inquiry in DataGate and Verigate. This information is not provided electronically in the Ameritech and SNET service areas, but is instead provided to CLECs manually.

Connecting Facility Assignment (CFA) Inquiry

By retrieving a list of channel assignments, design-related information and work authorization information for leased DS1 and DS3 facilities, this inquiry enables a CLEC to verify the status of a connecting facility prior to submitting this information on a local service request.

In the SWBT and PB/NB service areas, this inquiry is available via the DataGate and Verigate interfaces. This transaction is not supported in the Ameritech and SNET service areas.

Customer Service Information Inquiry

This inquiry retrieves current end user customer service records. The information provided on the CSI is used to verify existing features and services prior to the submission of a local service request.

In the SWBT and PB/NB service areas, the Customer Service Information Inquiry allows for retrieval of records by either account telephone number (ATN) or individual working telephone number (WTN), and is available via the EDI/CORBA, DataGate and Verigate interfaces. In the Ameritech service area, this inquiry may also be performed by either account or working telephone number, and is available through the

application to application interface and TCNet. In the SNET service area, this inquiry only supports retrieval using account telephone number via the application to application interface and W-CIWin.

In the SWBT service area, responses are provided for accounts of up to 5,000 working lines on the application to application interfaces, and for up to 1000 working lines on the GUI. PB/NB provides responses for accounts containing up to 4 megabytes of data, and SNET up to 128 kilobytes of data. Ameritech provides responses for accounts up to 20,000 display lines. Requests for customer service records exceeding these parameters must be submitted to the local service centers for fulfillment manually.

In the SWBT, PB/NB, and SNET service areas, CLECs may retrieve Resale CSI when the end user account is owned by another CLEC. Ameritech does not permit CLECs to view CSI when it is owned by another CLEC.

Data Validation Files

Data Validation Files are available for the purpose of providing requesting CLECs with an alternate method of acquiring that pre-ordering information considered relatively static.

Street Address Guide, PIC/LPIC Codes and Feature/Service availability information is available via File Transfer Protocol (FTP) in the SWBT and PB/NB service areas. In the Ameritech service area, files containing directory names, class of service codes, USOC, community names, yellow page headings, feature/service availability, street address guides, and PIC/LPIC codes are available via Connect:Direct, CD-ROM and TCNet. Access to PIC/LPIC codes and product availability files can also be arranged via Connect:Direct. SNET provides a file containing valid directory yellow page headings downloaded from the CLEC web site.

Digital Subscriber Loop Pre-qualification Inquiry

This inquiry provides an indication of theoretical loop length and indication of local serving office locations where SBC/Ameritech has deployed ADSL. Ameritech only provides CLECs with a manual process (facsimile request/reply) with which to obtain information about the make-up of loops.

In the SWBT and PB/NB service areas, this inquiry is available via the DataGate and Verigate interfaces. Also provided in the SWBT service area is theoretical 26-gauge loop length and taper code information. This inquiry is not available in the Ameritech and SNET service areas.

Digital Subscriber Loop Qualification Inquiry

This inquiry provides specific, detailed loop make-up information for a loop to a specific address and provides information necessary to determine the suitability of that loop for xDSL services.

In all SBC/Ameritech service areas, loop qualification is a manual process using fax and/or E-mail.

Directory Listing Inquiry

This inquiry retrieves directory listing information associated with an end user telephone account.

The SNET service area provides this inquiry via the application to application interface and W-CIWin. This information is available as part of the Customer Service Information Inquiry via the EDI/CORBA and

DataGate application to application interfaces and the Verigate interface in the SWBT and PB/NB service areas. In the Ameritech service area, directory listings are available as part of the Customer Service Information Inquiry via the application to application interface and TCNet.

Dispatch Inquiry

This inquiry retrieves information indicating when the dispatch of an SBC/Ameritech technician is required for residential service ordered on a local service request. Dispatch is based on the existence of cut-through facilities and assists the CLEC in determining the due date that may be quoted to the their end customer..

This inquiry in the SWBT and PB/NB service areas is available via the EDI/CORBA, DataGate and Verigate interfaces. In the SNET service area, this information is provided as part of the Address Validation Inquiry. In the Ameritech service area, this information is provided as part of the Due Date Inquiry (see below).

Due Date Inquiry

This inquiry provides a listing of available premise visit dates. This information is used by the CLEC as one factor in establishing the due date that may be quoted to their end customer.

In the SWBT and PB/NB service areas, this inquiry is available via the EDI/CORBA, DataGate and Verigate interfaces. In the Ameritech service area, inquiry, reservation, confirmation and cancellation functions are supported via the application to application interface. In the SNET service area, the inquiry function is available via the EDI interface and W-CIWin.

All service areas return the next available due date. In addition to that date, twenty-seven alternate dates are returned in the SWBT service area, twenty-nine alternate dates are returned in the Ameritech service area, and four alternate dates are returned in the SNET service area. No alternate dates are returned in the PB/NB service area. In the SNET service area, a standard interval appropriate to basic local service is returned for non-dispatch orders. In the Ameritech service area, a non-dispatch, dispatch, or standard interval due date is returned based on available facilities, and customer order parameters.

Feature/Service Availability Inquiry

This inquiry provides information indication the availability of specific features and services at a particular local serving office switch.

In the SWBT and PB/NB service areas, this inquiry is available via the EDI/CORBA, DataGate and Verigate interfaces. The SWBT and PB/NB EDI/CORBA interfaces validate the availability of a single feature or service per transaction using the feature/service in Universal Service Order Code (USOC) format as input. Inquiries via the DataGate and Verigate interfaces return a list of available features/service USOCs retrieved by ten-digit telephone number in the SWBT service area. A list of USOCs and associated SOSC codes are retrieved using CLLI or NPA-NXX in the PB/NB service area using the Datagate and Verigate interfaces. In the SNET service area, a list of available features in terms of SOSC codes is provided via the application to application interface and W-CIWin. In the Ameritech service area, this information is provided from a Data Validation file in USOC format, and is also available via TCNet.

Network Channel/Network Channel Interface (NC/NCI) Inquiry

This inquiry allows the CLEC to validate Network Channel (NC) and Network Channel Interface (NCI) codes and their combinations prior to submitting a local service request.

In the SWBT and PB/NB service areas, this inquiry is available via the DataGate and Verigate interfaces. SNET does not currently support this inquiry. Ameritech does not currently support this inquiry, but information regarding valid NC/NCI codes is provided via CLEC ordering documentation on TCNet.

Pending Order Status Inquiry

This inquiry provides access to pending service order status and content prior to the conversion of an end-user account.

Utilizing the DataGate interface in the SWBT service area, access to a list of pending service orders is provided by working telephone number. Detailed service order information is provided when an inquiry containing working telephone number and service order number is processed. This functionality is also available in the GUI interface called Order Status for both the SWBT and PB/NB service areas. In that GUI, additional search criteria utilizing customer number and purchase order number are available to process a list of pending service orders and detailed service order information. SNET and Ameritech do not currently support this inquiry.

PIC/LPIC Inquiry

This inquiry provides a list of current Primary Interexchange Carrier (PIC) and IntraLATA Primary Interexchange Carrier (LPIC) codes for carriers providing service at a particular local serving office switch.

A list of PIC/LPIC codes is retrieved by ten-digit telephone number via the EDI/CORBA, DataGate and Verigate interfaces in the SWBT service area. A list is available by CLLI or NPA/NXX in the PB/NB service area. In the Ameritech service area, lists of PIC/LPIC codes are available using NPA/NXX through the application to application interface and via TCNet. Additionally, this information is available as part of the Data Validation Files. SNET does not currently provide this inquiry.

Telephone Number Availability

These functions allow available telephone numbers to be identified and held for use by a CLEC submitting a local service request:

- Inquiry - Provides a list of available telephone numbers for a given local serving office switch.
- Inquiry/Selection - Provides and holds a list of available telephone numbers for a given local serving office switch.
- Reservation - Allows available telephone numbers to be held until either the receipt of a valid local service request, cancellation of reservation/selection, or the end of a specified holding period.
- Confirmation - Confirms previously reserved or held telephone numbers.
- Cancellation - Allows the release of telephone numbers previously reserved or held.

This inquiry is available in the EDI/CORBA, DataGate and Verigate interfaces in the SWBT service area and supports inquiry/selection and cancellation. This inquiry is available in the same interfaces in the PB/NB service area and supports inquiry, reservation and cancellation. This inquiry is available in the Ameritech service area via the application to application interface and supports inquiry, reservation,

confirmation and cancellation. Via the application to application interface and W-CIWin in the SNET service area, this inquiry supports inquiry/selection, and cancellation.

The following table summarizes functionality currently available in each of the SBC/Ameritech service areas. Each row represents an inquiry offered in at least one service area. Unless otherwise noted, the Interface or GUI access options available by service area are shown in the heading.

Inquiry	**Existing Functionality and Interface(s) by Service Area**			
	SWBT **EDI/CORBA, DataGate, and Verigate**	**PB/NB** **EDI/CORBA, DataGate, and Verigate**	**SNET** **EDI and W-CIWin**	**Ameritech** **EDI and TCNet**
Address Validation	Numbered, Unnumbered, Unnamed, Descriptive inquiry	Numbered, Unnumbered, Unnamed, Descriptive inquiry	Numbered, Unnumbered, Unnamed, Descriptive inquiry	Numbered, Unnumbered, Unnamed, Descriptive inquiry
	WTN inquiry	WTN inquiry	---	---
Common Language Location Identifier (CLLI)	CLLI inquiry DataGate and Verigate	Information included as part of Feature/Service Availability	---	---
Connecting Facility Assignment (CFA)	CFA inquiry DataGate and Verigate	CFA inquiry DataGate and Verigate	---	---
Customer Service Information (CSI)	ATN inquiry	ATN inquiry	ATN inquiry	ATN inquiry
	WTN inquiry	WTN inquiry	---	WTN inquiry
Data Validation Files	SAG, PIC/LPIC, Features/Services	SAG, PIC/LPIC, Features/Services	Yellow Page Headings	SAG, PIC/LPIC, Features/Services, Yellow Page Headings, USOCs
	FTP, Direct:Connect, CLEC Web site	FTP, Direct:Connect, CLEC Web site	CLEC Web site	Direct:Connect, CD-ROM, CLEC Online Web site
DSL Loop Pre-qualification	Pre-qualification inquiry DataGate and Verigate	Pre-qualification inquiry DataGate and Verigate	---	---
DSL Loop Qualification	---	---	---	---
Directory Listing	Information included as part of CSI	Information included as part of CSI	ATN inquiry	Information included as part of CSI
Dispatch	Dispatch inquiry	Dispatch inquiry	Dispatch information included in Address Validation inquiry	Dispatch information included in Due Date inquiry
Due Date	Inquiry Next available due date and 27 alternate dates available Resale and Loop w/ Port	Inquiry Next available due date only Resale and Loop w/ Port	Inquiry Next available due date and 4 alternate dates available Non-dispatch, dispatch or standard interval	Inquiry Next available due date and 29 alternate dates available Non-dispatch, dispatch or standard interval EDI only
	---	---	---	Reservation
	---	---	---	Confirmation
	---	---	---	Cancellation

Inquiry	Existing Functionality and Interface(s) by Service Area			
	SWBT **EDI/CORBA, DataGate, and Verigate**	**PB/NB** **EDI/CORBA, DataGate, and Verigate**	**SNET** **EDI and W-CIWin**	**Ameritech** **EDI and TCNet**
Feature/Service Availability	Validation by individual Feature/Service EDI/CORBA List of Features/Services via DataGate and Verigate USOCs	Validation by individual Feature/Service EDI/CORBA List of Features/Services via DataGate and Verigate USOCs and SOSCs	List of Features/Services SOSCs	--- Features/Services via Data Validation File and TCNet USOCs
NC/NCI Validation	Validation inquiry DataGate and Verigate	Validation inquiry DataGate and Verigate	---	---
Pending Order Status	Pending inquiry DataGate and Order Status	Pending inquiry Order Status	---	---
PIC/LPIC List	Code inquiry	Code inquiry	---	Code inquiry
TN Inquiry	Inquiry/Selection 5 TNs	Inquiry 5 TNs	Inquiry/Selection 4 TNs	Inquiry 10 TNs EDI only
	---	Reservation 5 TNs	---	Reservation 1 TN
	---	---	---	Confirmation
	Cancellation	Cancellation	Cancellation	Cancellation

B. Ordering

Available Interfaces

Application to application access to Local Service Request (LSR)-based ordering functions is provided to CLECs in all SBC/Ameritech service areas via an EDI interface, which is the industry standard means of communication for the ordering of local services. The application to application interfaces in all SBC/Ameritech service areas currently run ASC-X12, Version 3072. SWBT, PB/NB and SNET have implemented LSOG Version 3, TCIF issue 8, whereas Ameritech is currently on LSOG Version 2, TCIF issue 7.

EXACT is the Access Service Request (ASR)-based industry application to application interface utilized in the SWBT, Ameritech and SNET service areas for ordering Unbundled Dedicated Transport (UDT) and Interconnection Trunks. Customer's Enhanced System for Access Requests (CESAR) is the ASR-based industry application to application interface utilized for the same purpose in PB/NB. Ameritech also allows the use of EXACT to order Loops. All service areas are currently on ASOG Version 21.

The LSR Exchange (LEX) system is a GUI available to CLECs for ordering LSR-based services in the SWBT and PB/NB service areas. SNET and Ameritech do not offer a GUI for LSR-based ordering.

Telis, an ASR-based GUI, is utilized in the SWBT, Ameritech and SNET service areas for ordering UDT and Interconnection Trunks. Ameritech also allows the use of Telis for ordering Loops, but has announced its intention to discontinue use of that interface for loop ordering. PB/NB provides CESAR/online as an ASR-based GUI, for ordering UDT and Interconnection Trunks and also provides the GUI Customer's Enhanced System for Access Requests – Interconnection Service Requests (CESAR-ISR), for ordering Loops, Number Portability, and Loop with Number Portability.

Companies may be on the same version/level of a given guideline, but the implementation may be different. Companies may have implemented some functions or products in advance of standards.

The following table summarizes the ordering application to application interfaces currently available in the SBC/Ameritech service areas.

ORDERING	SWBT	PB/NB	SNET	Ameritech
Industry Applications	EDI	EDI	EDI (MSAP)	EDI
LSOG Version	3	3	3	2
TCIF Issue	8	8	8	7
X12 Version	3072	3072	3072	3072
ASR	EXACT	CESAR	EXACT	EXACT
ASOG VER.	21	21	21	21

SWBT, PB/NB and SNET's implementation of LSOG 3 is not industry-compliant.

The following table summarizes the ordering GUI interfaces available in the SBC/Ameritech service areas.

GUIs	SWBT	PB/NB	SNET	Ameritech
LEX	X	X	-	-
LSOG VER.	3	3	-	-
CESAR ISR	-	X	-	-
ASOG VER.	-	21	-	-
TELIS	X	-	X	X
ASOG VER.	21	-	21	21
CESAR Online	-	X	-	-
LSOG VER.	-	NA	-	-

Ordering Message Flows

All SBC/Ameritech service areas utilize the standard 997, 850, 855, 860 and 865 transaction sets for the various functions associated with the EDI ordering of Local Services. The following describes the current environment and the differences between the service areas.

997 Transaction

All SBC/Ameritech service areas currently return a 997 transaction to the CLEC to acknowledge the receipt of a data transmission.

850/855 Transactions

A typical ordering transaction begins with a CLEC sending an 850 transaction. Positive or negative responses are returned to the CLEC via an 855 transaction to communicate the disposition of the request. If the request is error free, a positive response is sent in the form of a Firm Order Confirmation (FOC). If errors are detected, a negative response is sent in the form of error information detail. This process is the same in all service areas.

In the SWBT and PB/NB service areas, two types of errors, fatal or super fatal, may be encountered in a negative 855 transaction. Fatal errors are the most common and these are corrected by the CLEC sending an 860 transaction. Super fatal errors are such that the request could not be processed due to key fields being invalid or missing. These are corrected by the CLEC by sending another 850 transaction. In the SNET service area, when a negative response is received, regardless of the error type, the request is not processed and corrected 850 transactions are sent by the CLEC until the CLEC receives a positive 855 transaction.

In the Ameritech service area, when a negative response is received regardless of any error type, the request is not processed and another 850 transaction is sent until the CLEC receives a positive 855 transaction. Additionally in the Ameritech service area, a Purchase Order Advice is sent via an 855 transaction to acknowledge receipt of a request for Number Portability when more than 50 lines are included.

860/865 Transactions

The 860 transaction is used in all service areas for a CLEC to submit a change (supplement) to a request. SWBT, PB/NB and SNET require a "full refresh" of the request, meaning that all previous and changed information is included in the supplement. In the Ameritech service area, only changed

information is submitted on the 860 transaction. CLECs can also use the Supplement Line Activity (SLA) field to define on the supplement order if the line item is an Add Item, Delete Item, a Replace or a No Change.

Positive or negative responses are returned to the CLEC via an 865 transaction to communicate the receipt and acceptance or rejection of the supplement (860). Again if the request is error free, a positive response is sent in the form of an FOC. If errors are detected, a negative response is sent in the form of error information detail. To correct errors on an 860 transaction, another 860 transaction is sent. This is the same in all service areas.

In the SWBT and PB/NB service areas, the 860 transaction could also be a response by the CLEC to a negative 855 transaction due to errors on the original request (850).

In the Ameritech service area, the 865 transaction is also used to notify CLECs of customer impacting provider initiated changes. Additionally a Purchase Order Advice is sent via an 865 transaction to acknowledge receipt of a supplement for a change to a request for Number Portability when more than 50 lines are included.

The following table provides a summary of the EDI transaction usage on the ordering application to application interfaces in the SBC/Ameritech service areas.

RECORD TYPE	SWBT	PB/NB	SNET	Ameritech
997	Acknowledgment	Acknowledgment	Acknowledgment	Acknowledgment
850	Initial Request	Initial Request	Initial Request	Initial Request and subsequent version +1 until +850 is received
855	• FOC • Error Notice	• FOC • Error Notice	• FOC • Error Notice	• FOC • Error Notice • Purchase Order Advice
860	Supplements: • Initiate Change • Correct Errors on 850 record type • Correct Errors on 860 record type • Full refresh	Supplements: • Initiate Change • Correct Errors on 850 record type • Correct Errors on 860 record type • Full refresh	Supplements: • Initiate Change • Correct Errors on 860 record type • Full refresh on most products	Supplements: • Initiate Change • Changes only on supplement • Correct Errors on 860 record type
865	• FOC • Error Notice	• FOC • Error Notice	• FOC • Error Notice	• FOC • Error Notice • Customer impacting - provider initiated changes • Purchase Order Advice

Product offerings in all service areas were evaluated based on the following criteria: 1) whether the product is offered in a service area; 2) whether an OBF guideline exists for the product; and 3) whether the given product may be ordered electronically.

Many products were offered across all service areas. Other products were available in multiple service areas and in some instances, products were available in only one service area.

Currently in the instances where there are OBF guidelines in place for product families, all service areas utilize OBF standards with minor modifications. Standard LSOG forms are used, however field usage may be different based on service area-specific business rules and requirements. Additional fields may have been introduced in advance of standards. Fields that identify who the customer is, how the request is tracked, and what services and activities are being requested, vary across the service areas.

Some products, such as ISDN, CENTREX, and PBX for Resale and Unbundled Network Elements (UNE), have been implemented using forms designed based on OBF guidelines where possible. Field and data characteristics have been expanded to provide additional information for provisioning of the product.

In some instances, service area-specific ordering requirements have been implemented for both electronic and paper/fax input, and in other instances only paper/fax input is supported.

In the SWBT service area, white page listings for unbundled loops, unbundled switch ports, loop with port combinations, and Resale services can be requested via the current ordering application to application and GUI interfaces. Yellow page listings are arranged directly with the directory publisher, Southwestern Bell Yellow Pages, a separate subsidiary of SBC/Ameritech.

In the Ameritech service area white page listings associated with products that include a white page or basic yellow page listing, e.g. resale, unbundled loops, unbundled switch ports, and loop with port combinations may be ordered via the current EDI application to application interface. CLECs must establish a business relationship with the appropriate directory listings subsidiary to provide all other white or yellow page listings.

In the PB/NB service area, white page listings for unbundled loops, unbundled switch ports, loop with port combinations, and resale services can be ordered via the current application to application and GUI interfaces. Yellow page listings are arranged directly with the separate directory publishing subsidiary. CLECs also have the capability to enter listing information directly into the Listings Gateway.

In the SNET service area, white page listings for unbundled loops, unbundled switch ports, loop with port combinations, and resale services can be ordered via the current application to application and GUI interfaces. Yellow page listings arranged directly with the separate directory publishing subsidiary.

C. Provisioning

SBC/Ameritech provides various electronic capabilities that enable a CLEC to track the status of an order during the period between order placement and order completion. These capabilities are provided by SBC/Ameritech via the pre-ordering and ordering application to application and GUI interfaces. Those functions that are based on an inquiry/response model, e.g. a CLEC asking for and receiving status on a pending order, are accessed using the pre-ordering interface. SBC/Ameritech proactively sends order statuses, such as order completion, to the CLEC as the order is processed via the ordering interface.

Functions

Following are the various functionalities available to CLECs in the SBC/Ameritech service areas for tracking order status during the provisioning process.

Jeopardy Notification

When a situation is encountered in the provisioning of an order that could potentially cause the confirmed due date to be missed, a Jeopardy Notification is issued to the CLEC.

These notifications are provided via the transaction message flows in the ordering application to application interfaces in the SWBT and PB/NB service areas using the 865 transaction. This same notification is provided via the LEX GUI interface. Jeopardy notification is currently provided in the Ameritech service area via the ordering application to application interface using the 870 transaction. The SNET service area provides this notification via a manual process. Ameritech also provides unsolicited, non-standard 865 transactions which alert CLECs to changes that Ameritech has manually made to the CLEC local service request. These changes include changes to due dates, cable and pair assignments for loops and corrections to errors that Ameritech service center staff make in their manual processing of the CLEC orders.

Service Order Completion

Service Order Completion (SOC) is a notification to the CLEC that the work requested on a local service request has been completed.

The SWBT, PB/NB, Ameritech and SNET service areas all use the 865 transaction to return a SOC notification via the ordering application to application interface. This notification is also available via the LEX ordering GUI application in the SWBT and PB/NB service areas.

Loss Notification

Loss Notification is a notification to the CLEC that a change requested by another Telecommunications Carrier (TC) has been completed and, as a result, the Local Service Provider associated with a given telephone number has been changed.

Ameritech currently provides Loss Notification via the ordering application to application interface using the 836 transaction. The SWBT, PB/NB and SNET service areas provide equivalent notifications to CLECs using the Carrier Access Record Exchange (CARE) process.

Pending Order Status
This inquiry provides access to a list of pending service orders, and their status and content. This information is provided prior to the conversion of an end-user account for pre-ordering purposes, and prior to the service order posting in the billing system for monitoring order progress.

Utilizing the DataGate interface in the SWBT service area, access to a list of pending service orders is provided by working telephone number. Detailed service order information is provided when an inquiry containing working telephone number and service order number is processed. This function is also available in a GUI named Order Status in both the SWBT and PB/NB service areas. This function is not currently available in the Ameritech service area. CLECs may monitor the progress of their orders using an Interactive Voice Response (IVR) system made available by Ameritech. SNET does not presently support this function.

Posted Order Status
This inquiry provides access to posted service order status and content. The information provided represents completed service order status as posted to the billing system.

Access to this information is available in the Order Status GUI for the SWBT service area. A list of posted service orders or detailed service order information is provided when an inquiry containing customer number is processed. Detailed service order information is provided when an inquiry containing working telephone number, service order number or purchase order number is processed. PB/NB, Ameritech and SNET do not currently support this function.

Provisioning Order Status
This inquiry provides access to the service order provisioning information to determine the pending or dispatched status of a service order. The information provided presents the status of the order, such as whether it has been dispatched or notes regarding the order.

Access to this information is provided via the DataGate interface in the PB/NB service area by customer number, service order number or telephone number. Access to this information is also available via the GUI named Provisioning Order Status for both the SWBT and PB/NB service areas. Ameritech and SNET do not currently support this function.

The following table summarizes the provisioning functions currently available in the SBC/Ameritech service areas.

RECORD TYPE	SWBT	PB/NB	SNET	Ameritech
865	• SOC • Jeopardy Notice	• SOC • Jeopardy Notice	• SOC	• SOC
870	NA	NA	NA	Jeopardy Notice
836	• N/A – Handled via CARE process	• N/A – Handled via CARE process	• N/A – Handled via CARE process	• Loss Notification
Proprietary Message Event via DataGate	• Pending Order Status	• Provisioning Order Status	NA	NA
Graphical Data Provided via the Order Status and Provisioning Order Status GUIs	• Pending Order Status • Provisioning Order Status • Posted Order Status	• Pending Order Status • Provisioning Order Status	NA	NA