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UNBUNDLED LOCAL SWITCHING

Unbundled Local Switching

Overview

Product Description

Unbundled Local Switching (ULS) provides unbundled access to Ameritech's End Office switches, including their switching features and functions. With ULS, the individual unbundled loops of Competitive Local Exchange Carriers (CLECs) can connect to Ameritech's end offices. ULS also provides unbundled access on a line-by-line basis to currently-provided and/or technically feasible functionality of that switch. Unbundled switch ports use the same types of circuitry and have the same capabilities and quality used by Ameritech in the provision of its traditional bundled services.

ULS consists of these four basic components:

- Line-side Ports
- Trunk-side Ports
- Routing arrangements- either Custom Routing or standard routing via ULS with Shared Transport
- Switch Feature End Functions

Ameritech offers ULS as a separate Unbundled Network Element (UNE) from unbundled local loop transmission, unbundled dedicated transport, and other UNEs. The requesting CLEC can obtain access to the switching capabilities, functions, and features of the switch on a single-element or per-line basis. Ameritech offers unbundled access to local switching through line-side and trunk-side ports.

A ULS line-side port includes a combination of central office switch hardware and software that provides a dedicated physical connection between the Main Distribution Frame (MDF) and the switching equipment. A ULS line-side port provides access to the following basic functions of the switching components of Ameritech's network:

- Signaling
- Digit receipt
- Translations
- Routing
- Rating
- Call supervision

A ULS line-side port also includes a termination on the main (or other designated) frame, as well as a connection between the mainframe and switch line card.

With ULS, CLECs can cross-connect line-side ports to their loops or to those contracted by the CLEC through another loop provider. The CLEC ordering the ULS line-side port(s) must also follow established procedures to update the 911 database, since only that CLEC knows the end user's location.

ULS line-side ports include at a minimum:

- Switch Port Card
- Intraoffice cabling between the switch port card and the frame connection leading to the switch
- Termination on the frame

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Trunk-side ports include at a minimum:

- Trunk Port Card
- Intraoffice cabling between the trunk port card and the trunk termination at the cross-connect panel
- Termination at the trunk-side cross-connect panel

Basic Capabilities

ULS includes unbundled access to the available basic local switching functions and the basic capabilities of the switch, separate from the local loop and transport, which is equivalent to what Ameritech currently provides to itself and its own customers. These inherent functions and capabilities include, but are not limited to, the following:

- Basic call set-up (the switching functionality to connect line to line, line to trunk, trunk to trunk, and trunk to line)
- Directory numbers
- Dial Tone
- One White Pages listing per Directory Number (DN)--see Directory Listings for Unbundled Elements
- End Office signaling
- Access to Ameritech operator services (OS)--see Operator Services
- Access to 911 (E911)--see E911
- Access to all End Office features which are available for the type of port ordered and which are currently provided by Ameritech
- Access to End Office SSP functionality

Certain functions are available through either ULS line-side or trunk-side ports, as follows:

Line-side Port Functionality

- On-hook and off-hook detection
- Dial tone
- Digit reception and interpretation: Dial Pulse (DP) or Dual Tone Multi-frequency (DTMF)
- Network call routing to the called telephone number
- Audible ringing and power ringing
- Automatic Message Accounting (AMA) recording
- Disconnect detection
- Access to Ameritech's End Office switch-based services and features

Trunk-side Port Functionality

- Signaling including Digit Pulsing (DP), Multi-frequency (MF), Common Channel Signaling (SS7)
- Digit reception and interpretation
- Network routing toward terminating telephone number
- Answer detection and supervision signaling

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CLECs may request other basic functions of which the switch is capable by contacting the Ameritech account manager and initiating the Bona Fide request (BFR) process. CLECs may also request, via the BFR process, functions that are not currently provided by Ameritech but are loaded in the switch. If it is technically feasible to provide these additional capabilities, the CLECs will pay the applicable recurring and non-recurring costs of development, installation, provisioning, billing, and maintenance of such capabilities.

Basic Port Types

Line-side Ports

Ameritech provides access to ULS through a variety of unbundled local ULS line-side ports. Port types include the following:

- **Basic Port**--A loop start, line-side facility; includes PBX service.
- **Residence Only Basic Port (WI only)**--A residence only port which includes all vertical features except for Direct Station Hunt and Stop Hunt Key.
- **Ground Start Port**--A ground start, line-side facility
- **ISDN-Direct Port**--A line-side facility that provides an integrated voice/data communication capability for the transmission of circuit switched voice and data and packet switched signals on an incoming and outgoing basis using Integrated Service Digital Network (ISDN) architecture.

Centrex Ports

Each type of Centrex line port listed below must be associated with a Centrex Common Block to which a CLEC subscribes. A common Block consists of distinct grouping of Centrex system features and functions required for each CLEC's end user requesting Centrex.

- **Centrex Basic Port**--A line-side access to ULS associated with a Centrex Common Block.
- **Centrex Attendant Port**--A line-side access to ULS associated with Meridian Centrex console.
- **Centrex EKL (Electronic Key Line) Port**--A line-side access to ULS associated with electronic key telephone sets.
- **Centrex ISDN Port** (including circuit switched/alternate circuit switched voice and data services)--A line-side access to ULS associated with basic rate ISDN architecture.

These line-side ports provide access to functions within the End Office switch, as well as to the various line-side features of the switch. ULS can also switch local traffic to and from each of these types of ports, whether to an Ameritech end user or to end users of a ULS purchaser. Variations in the end office switching equipment used to provide service in specific locations may cause differences in the operation of ULS.

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Trunk-side Ports

Unbundled Local Switching ports provide access to trunk-side port connection, by which a variety of trunk port types may be accessed. Each ULS trunk-side port type is associated with particular functions and features. These trunk port types include the following:

- **Direct-In-Dial (DID) Trunk Port**--Permits calls dialed from the public network to reach a specific number served by end user premises equipment without the assistance of an attendant. DID otherwise provides for unique identification of calls based on digits sent to the end user premises equipment by the central office with provisioning at the DS0 level.
- **ISDN Prime (23B+D) Trunk Port**--Provides a digital telecommunication service that provides CPE PBX and Host Computer access to a wide variety of switched services. These switched services include local voice calling, WATS, 800 service and Circuit Switched Data. Prime will allow connection of many of these services via a single central office connection, allowing CPE PBXs and Host computer devices to connect to central office services in bulk quantities, instead of an online or services-by-service basis. Each ISDN Prime trunk port provides access via 1.544 Mbps central office termination.
- **Digital Trunk Port (DS1)**-- Provides integrated digital trunk access via a 1.544 Mbps central office termination. This arrangement furnishes the equivalent of twenty-five (25) terminations and is offered in a base capacity of 24. The Digital Trunking Port may be used to determine certain PBX services and may provide DID, WATS, and 800 Service. This trunk port is also compatible with the Ameritech Digital Trunking Service port. Non-integrated service is not provided because it includes multiplexing, and a multiplexer is not part of the switch.
- **ULS Custom Trunk Port**--Provides a DS1 level, for digital trunk access via a 1.544 Mbps central office termination. This arrangement furnishes the equivalent of 24 individual network access lines. ULS Custom Trunk Ports are used to terminate facilities used in completion of ULS Custom Routed calls.

Note: For Wisconsin (WI) only. ULS Custom Trunk Port provided at DS0 level, 1/24th capacity.

A ULS Custom trunk-side port is a dedicated trunk side connection to ULS that carries incoming or outgoing calls to or from other unbundled local switching trunk-side ports or line-side ports. Incoming calls from the trunk wide of the switch enter through trunk-side ports and may be switched to a line-side port with line-side capability, unless the CLEC has requested to block or restrict the incoming call receipt capability.

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Features

ULS includes access to the basic calling features, which are available within Ameritech's local switches on an unbundled per port basis. CLECs can request the activation of these features, including Custom Calling, Custom Local Area Signaling Service (CLASS), available with the port type ordered. CLECs should refer to Rate Structures for the appropriate tariff, which provides a detailed list of these features.

The monthly recurring rate of the port includes the vertical features associated with the type of port ordered. The exception is the Wisconsin Residence Only Line Port, which doesn't include the Direct Station Hunt and Stop Hunt Key features. CLECs may request via Bona Fide Request (BFR) other basic functions of the switch that are not currently provided by Ameritech or loaded in the switch. If such request is technically feasible to provide these additional capabilities, the CLEC will pay the applicable recurring and non-recurring costs of development, installation, provisioning, billing, and maintenance of such capabilities.

See Attachment 1 – [AIT UNE Features](#)

See [Call Trace for Illinois and Ohio](#) for additional details

Centrex Features

Centrex Simultaneous Ring – CSR ON

Description

Centrex Simultaneous Ring One Number (CSR ON) is an optional Centrex station features that will extend the reach of a subscriber's Centrex station number (aka Pilot Number) by ringing the customer's Centrex station plus one additional telephone number (aka Member Number) simultaneously whenever the Centrex station number is dialed.

Switch Limitations

- At this time, the service will be limited to Nortel DMS 100 switches in the SBC Midwest Region and where equipment, features and facilities are available.
- Pilot Lines cannot be hunting lines.
- Not offered on Grandfathered classes of service.
- The Member Number cannot be a Ported TN or a Multiple Appearance Directory Number (MADN). (These are Nortel switch CSR limitations.)
- The pilot number and the member number must both be intra switch numbers.

Hunting

Not applicable.

Feature Limitation

CSR ON customers will not be provided access to a user interface. The service will ring only one additional number. This service will always be in the active state. If the customer desires to change the simultaneously number to be rung, or to turn the service on/off, it must be managed via an SBC Service Order.

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Feature Characteristics

When the Centrex Simultaneous Ring feature is in the active state, both telephone numbers on the CSR ON list will ring simultaneously whenever the Centrex station number is dialed. Once the call is answered by either the Pilot or member number, ringing will cease on both lines and the call will be directed to the line which answered.

Operation

For Centrex Simultaneous Ring –CSR ON

Feature Operation

- Caller dials a Centrex Station number subscribing to CSR.
- Subscribing Centrex Station number rings and simultaneously the other number/numbers will ring.
- Once the call is answered, ringing stops on all the other numbers.

The CSR ON feature will always be in the active state.

Services

Remote Call Forwarding (RCF) Service for UNE-P via the Resale Environment – Job Aid



C:\Documents and
Settings\ca2419\My I

International Blocking Service (IBS)

IBS will provide blocking of international direct dialed calls from business and residential POTS lines. This service will be established for UNE-P Business (COS = PU1) and Residence (COS = PU7).

The USOC RBVXC will be used with the appropriate FID which is the Line Class Code (LCC).

Feature Description

- IBS blocks international calls (011+).
- IBS with international dial around, for both residential and business lines, was blocked for the 1A, 5E and DMS100 switch-types.
- IBS with international dial-around, for both residential and business lines, was not blocked for Siemens switch-type.
- IBS with domestic dial-around, for both residential and business lines, was not blocked for the 1A, 5E, DMS100 and Siemens switch-types.
- IBS is prohibited with any other blocking services (e.g. 900/976, Toll Restriction Service (TRS) allows the blocking of all long distance calls (intra and inter) as well as

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international dialing (IBS). IBS and TRS cannot exist together). NOTE: One blocking USOC per order.

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Restrictions/Limitations

- IBS is not available in any DMS10 central office.
- One blocking USOC per order.

UNE-P ECF

[SBC policy for invoking Emergency Call Forwarding \(ECF\) in the ULS environment.](#)

Terms, Conditions, and Limitations

To be eligible to obtain ULS services from Ameritech, CLECs must meet certain requirements and conditions. The following requirements must be met before a carrier can order ULS from Ameritech:

- CLECs must have physical collocation in place before ordering ULS.
- ULS is available to CLECs for the purpose of providing telecommunications services to its customers. The CLEC has the sole responsibility of obtaining any state or federal certification authorization required for it to provide service.
- CLECs must provide a Representation of Authorization, which is their representation to Ameritech that they have obtained authority from each end user to act as the official agent on behalf of that service provider. The CLEC must provide proof of such authority to Ameritech upon request. If a discrepancy occurs and the CLEC cannot/does not produce proper agency authorization, restoral charges will be applied.
- For CR, the dedicated facilities must be in place before any ULS work can be completed.
- Pre-ordering requirement: CLECs must submit a completed Unbundling Customer Questionnaire 30 days in advance of ordering ULS. This questionnaire enables Ameritech to update systems and tables so the CLEC can be established as a customer in the internal systems, to provide ordering and maintenance contact information, and to provide general information such as carrier specific information, desired implementation date, tax status, electronic interface requirements, etc.
- Submit a completed ULS Routing Questionnaire in advance of ordering ULS. All Custom Routing requests have negotiated intervals. This questionnaire enables Ameritech to establish and complete the necessary translations work to record and bill ULS usage for standard Ameritech routing or customized routing arrangements.

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Note: CLECs should coordinate the above pre-ordering procedures with Ameritech account/service managers, in order to ensure coordination between facilities, routing, and the ports.

In addition, the following service requirements also apply to ULS:

- For any ULS trunk port, the CLEC must have adequate DS1 capability to serve its customers.
- The CLEC is solely responsible for ensuring that its own and/or others' switches and CPE equipment are compatible with the services that are being requested for use.
- A CLEC is solely responsible for providing or arranging for the provision of 9-1-1 capability to its end user (Additional information can be found in 9-1-1 Service).

The following restrictions / limitations apply to ULS:

- ULS will not be available in exchanges where Ameritech is not the primary toll carrier.
- ULS will not be available in exchanges where Ameritech does not provide intrastate / InterLATA service.
- ULS will not be available in exchanges where Ameritech is the primary toll carrier but not the dial tone provider.
- Non-Integrated ISDN is not available since the multiplexer is not part of the switch.
- Discounts and optional payment plans do not apply to ULS.

Some calling features are not compatible or fully compatible with other features. The Line Feature Interaction Conflicts Matrix details feature compatibility.

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Order Information

Pre-Ordering

SBC mechanized pre-ordering Operational Support System (OSS) is available to assist the CLECs on obtaining pre-ordering information. However, certain orders require a manual pre-ordering transaction before an LSR can be submitted successfully. The manual pre-ordering process is described in detail under the [Pre-Ordering](#) section of this handbook.

When performing a manual pre-ordering transaction, fill in the LSR request as completely as possible using EDI/WebLEX. When the needed manual pre-ordering information is filled out, save the LSR request. Print a copy of the request and fax it to SBC along with the [Manual Pre-Ordering Information Cover Sheet](#). SBC will fax back the needed pre-ordering information so the CLEC can successfully submit a firm LSR.

The tables at [Manual Pre Ordering Scenarios](#) describe scenarios that require a manual pre-ordering transaction. They show the required fields that need to be populated during the manual pre-ordering transaction to ensure successful return of provisioning information.

Forecasting

The CLEC's provision of local exchange service will bring changes in traffic loads carried by Ameritech's network. To provide adequate capacity to carry this traffic, Ameritech needs to be apprised of the CLEC's port quantities and predicted traffic volumes so that, Ameritech can plan capacity and overall network facilities. Without this information, Ameritech may not be able to meet call volume demands.

Ameritech requests that CLECs provide a five-year forecast of their anticipated ULS volume, using the Ameritech Unbundled Local Switching Forecast Matrix. The CLEC should provide the first year's data by quarter. Subsequent years should be provided on an annual forecast. Should any significant changes occur which would supersede the original forecast, Should any significant changes occur which would supersede the original forecast submitted by the CLEC, Ameritech requests that CLECs provide that information as soon as possible.

Customer Service Record (CSR) Retrieval-- the Customer Service Record (CSR) is an Ameritech document that contains detailed information regarding the services Ameritech currently offers the customer. CLECs may request the CSR to facilitate adding or changing existing services. To request a CSR see How to Request a Customer Service Record (CSR). The CSR provides the CLEC and the Ameritech Local Service Center with a common document to support the charges on the CABS bill. This document is used during service order negotiations and in verifying the accuracy of the billing. The CSR is printed monthly with the CABS bill invoice, whether service order activity has occurred or not.

Note: CSR retrieval does not apply to the Custom Routed ULS Trunk Port from CABS.

Street Address Guide (SAG) Validation--The Street Address Guide (SAG) contains detailed street address information regarding the addresses and NPA NXXs served by Ameritech. Request for the Street Address Guide (SAG) can be found in the Pre-ordering section of this handbook.

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Central Office Feature Availability--Central Office Feature Activation is provided via the Online Pre-Ordering Guide.

Note: This does not apply to the Custom Routed ULS Trunk Port.

Telephone Number Selection--Telephone Number Selection is provided via a phone call or electronically via EDI Transaction. Details regarding the EDI Transaction procedures can be found in the Electronic Service Ordering Guide (ESOG).

Note: This does not apply to the Custom Routed ULS Trunk Port.

Ordering Requirements

Ordering Method

Ordering for ULS trunk ports begins with the CLEC completing the Access Service Request (ASR). The ASR provides information to Ameritech for provisioning the service, establishing an account, and billing the CLEC for service. The Ameritech Local Service Center serves as a single point of contact for CLECs for ordering and billing issues related to ULS. The logistics of the Ameritech Local Service Center are:

**Ameritech - Interconnection Services
Local Service Center
804 North Milwaukee Street
Milwaukee, Wisconsin 53202
1-877-728-1200
Days of Operation: Monday through Friday
Hours: 7 AM - 5 PM Central Standard Time**

Note: Prior to ordering ULS, be sure to submit a completed Unbundling Questionnaire containing the required information for ULS, including ordering, maintenance, billing, and daily usage feed details.

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CLECs can order Unbundled Local Switching (ULS) from Ameritech 3 different ways:

- **Manually via Fax:** Manually via Fax using LSOR "X" LSC Manual forms
- **Electronically via EDI**
- **Electronically via**

Custom Routed ULS Trunk Ports must be ordered electronically via the ASR.

The CLEC is responsible for establishing the electronic interface with Ameritech. These interfaces provide for electronic exchange of documentation and data to facilitate the preparation of an order, including due date, order confirmation, design layout record, and as requested other technical details concerning the service. Both types of electronic interfaces support electronic transmission of the service order directly to the Ameritech Local Service Center. CLECs may transfer ULS electronic service orders through the following:

- EXACT: an application-to-application interface
- TELIS-PC or TELIS-UNIX: personal computer interfaces

BDS-TELIS is a program that supports electronic versions of the ASR by allowing users to fill out ASR records online and prepare them for electronic transfer. It also allows CLECs to create data reports and maintain shortcut tables.

Service Requests

CLECs order ULS via the Access Service Request (ASR). CLECs may obtain blank copies of the ASR from the Alliance for Telecommunications Industry Solutions (ATIS) at www.atis.org/atis/clc/obf/obfdocs.htm.

- **Administrative Section** contains information about the CLEC, the End User, and the CLEC's requested due date. Separate forms are required for each end user.
- **Bill Section** provides the billing name and address as well as a CLEC billing contact name and Telephone Number. This section also allows the CLEC to order magnetic tape.
- **Contact Section** lists the CLEC requesting the service and who is available to answer questions. The CLEC also uses this section to provide the name and telephone numbers of the CLEC's personnel who design and implement the service.
- **Product Specific Section** must accompany the administrative form. The following links provide examples of product specific forms and the specific fields which apply:

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LSR Information

See [LSR Examples](#) page organized by REQ Typ

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Class of Service and USOC Codes

Class of Service (COS) and USOC codes for use with ACIS

COS	State	Description
PU1	All	Basic Line Port
UXL	All	Ground Start, DID, and ISDN Prime Trunk Port
UYT	All	Digital Trunking Trunk Port
PUC	IL, OH	COPTS Coin Line Port
UBW	All	ISDN-Direct Port (Natl. & Custom)
U4M+X	All	ISDN Prime Trunk Port Riders
UEX+X	All	Centrex Basic, EKL, ISDN Attendant Console
PU7	WI	Residence Only Basic Line Port

Note: Class of service + codes:

D=DMS10, J=DMS100, S=Siemens, U=5E, and 2=1/1/A

Class of Service (COS) and USOC codes for use with CABS

COS	State	Description
URI	All	Custom Routing/ULS Trunk Port

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Port and Non-Recurring USOCs for use with ACIS

USOC	State	Description
NSR	All	LNP Surcharge
UGQ	All	Did Trunk Port Rider
U81	All	800 Rider Port (Digital Trunk Port)
UW1	All	WATS Rider Port (Digital Trunk Port) Outward
UPE	All	Ground Start Line Port
UW2	All	WATS Rider Port (Digital Trunk Port)
UHMOX	All	Digital Trunk Port PBX 1-Way Out Rider
UHM1X	All	Digital Trunk Port PBX 1-Way In Rider
U3X++	All	Centrex EKL and Basic Line Port
UHMCX	All	Digital Trunk Port PBX 2-Way Out Rider
UW7	IL only	Digital Trunk Port
U9Z	IN, MI, OH, WI	Digital Trunk Port
UZPZD	All	ISDN Prime Custom
UZOZD	All	ISDN Prime Natl.
SEPUS	All	NRC-DID Term Additional Rearrangement
NR9F6	All	NRC-Record Order Charge
NR9UE	All	NRC-Centrex System Feature Activation
NR9UV	All	NRC-Subsequent Service Order Charge
NR9UJ	All	NRC-ULS Billing Development/Implementation
REAJY	All	NRC-Centrex System Feature Charge/Rearrangement
REAKB	All	NRC-ISDN Prime T1 port-- Addition/Rearrangement
REAKD	All	NRC-Port Conversion Charge
CXCDX	All	DS1 X-connect
CXC9X	All	DS0 X-connect
UFEPW	All	NRC-Service Coordination Fee
UPR	All	Did Trunk Port
UZN	All	Additional TN
U2P	All	ISDN Direct Port (Natl.), Centrex ISDN Port
UDM	All	DID Trunk Port Number
UYC	IL	Basic COPTS Port
U5N	IL, OH	COPTS Coin Line Port
USFCB	All	System Feature Common Block
U6A	All	Centrex Attendant Console Line Port
UROPW	All	Custom Routing, Per New LCC, Per Switch
U0Z	All	Ground Start Line Port, 1-Way Out
U1Z	All	Ground Start Line Port, 1-Way In
UPZ	All	Ground Start Line Port, 2-Way
U1L	All	Basic Line Port, PBX 1-Way In
U0L	All	Basic Line Port, PBX 1-Way Out
UVL	All	Basic Line Port, PBX 2-Way
UPC	All	Basic Line Port
NR9UG	All	NRC-Initial Port Service Order Charge
UPO	All	Ground Start Loop Port

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UJR	WI	Residence Only Basic Line Port
NR93Y	WI	NRC-DS0 Subsequent Change Charge
NHCHG	All	UNE-P Migration - Line Side
NHCHH	All	UNE-P Migration - Trunk Port Side
NRMGO	All	Rebundled Svc - POTS/ISDN BRI Migration Chg
NRMGP	All	Rebundled Svc - POTS/ISDN BRI New Combination Installation Charge
NRMGQ	All	Rebundled Svc - POTS/ISDN BRI Disconnect Charge
NR9LK	All	Connection Charge - UNE-P POTS Residential per line

Note: the '++' in the Centrex line USOC U3X++ shown on the provisions chart equates to 12 USOCs for the Centrex Basic Line Port. The first '+' denotes type of restriction; the section '+' denotes type of switch card required (See below).

Switch Card Type

1 st Suffix	Description	2 nd Suffix	Description
A	Unrestricted	A	Card A-loop
B	Partial Restricted	B	Card B
C	Restricted	D	Card D
C	Restricted	E	Card E

Valid combinations of ULS USOCs

UEXAA	U3XAB	U3XAD	U3XAE
UEXBA	U3XBB	U3XBD	U3XBE
UEXCA	U3XCB	U3XCD	U3XCE

For a list of all vertical features USOCs, see Resale Products and Services. AIN-based features are generally not eligible for ULS. Examples of non-eligible AIN-based features include, but are not limited to the following:

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Non-eligible AIN-based features

AIN Service	AIN Acronym	USOC	FID
AIN 976	A976	TGR9X	
Account Codes	ACNT	TAMPA, AS3V1	
Ameritech Call Control	ACC	OC4	
Ameritech Privacy Manager	APM	WHO, WHO2X	
Custom CNAME	CCNAM	NHE, AS3NH	
Flexible Call Forward	FCF	ARG	
Name and Number Delivery Terminating	NNDT	CDOBT (future)	RCUA NNDT
Star Code Access-DMS 100	SCA	SQAV1	CFN
Star Code Access-EWSD	SCA	SQAVS	CFN
Star Code Access-5ESS	SCA	SQAV5	CFN
Talking Call Waiting	TCW	TW1	WTG

CABS

USOC	State	Description
NR9UV	All	NCR-Subsequent Service Order Charge
UROPT	All	ULS Trunk Port
UR9UG	All	NRC-Initial Service Order Charge
CXCDX	All	DS1 X-Connect
NR93Y	WI	NRC-DS0 Level Subsequent Trunk Order Charge

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NC/NCI Codes

To facilitate the ordering process, specific Network Channel (NC) and Network Channel Interface (NCI) codes should be included on all ordering forms. These codes will ensure that the enabling features for Ports, as well as the technical specification and parameters associated with Ports, are provided.

Following is a matrix illustrating the relevant ULS NC and NCI codes as well as applicable Service Codes Classes of Service and USOCs, by port type.

ULS Port	Service	CLCI	NC	NCI	COS	Line USOC
Basic Loop Start WI Res. Only	• Basic Line Port	FXNU	SNAL	02QC2.00E	PU1	UPC
	• PBX 2-Way	FXNU	SNAL	02QC3.00E	UXL	UVL
	• PBX 1-Way In	FXNU	SNAL	02QC3.00E	UXL	UIL
	• PBX 1-Way Out	FXNU	SNAL	02QC3.00E	UXL	UOL
	• Basic Res. Port (WI Only)	FXNU	SNAL	02QC2.00E	PU7	UJR
Basic Ground Start	• PBX 2-Way	FTNU	SNAL	02QC3.00C	UXL	UPZ
	• PBX 1-Way In	FTNU	SNAL	02QC3.00C	UXL	U1Z
	• PBX 1-Way Out	FTNU	SNAL	02QC3.00C	UXL	UOZ
COPTS Coin Basic COPTS	Coin Tone (IL & OH only)	LSNU	SNAL	02QC3.00T	PUC	U5N
	IL Only	LSNU	SNAL	02QC3.00T	PUC	UYC
Centrex	• Loop Start	CLNU	SNAL	02QC3.00E	UEX+X	U3X*A
	• Ground Start	CLNU	SNAL	02QC3.00E	UEX+X	U3X*B
	• Data Path (DMS only)	CLNU	SNAL	02QC3.00E	UEXJ4	U3X*D
	• Message Waiting Indicator Light	CLNU	SNAL	02QC3.00E	UEX+X	U3X*E
Centrex EKL	EDL (DMS only)	EBNU	SNAL	02QC3.00R	UEXJX	U3X*C
Centrex Attend	Attend Console (DMS only)	EBNU	SNAL	05QC3.00E	UEXJX	U3X*C
Centrex ISDN	National	IBSU@	UB--	02QC5.00S	UEX+X	U2P
ISDN Direct	National	IBSU@	UB--	02QC5.00S	UBW	U2P
ISDN Prime Trunk	• 23B+D Channels	#U	HCEI	04QB9.11	U4M+X	UZ#ZD
		#U	HCEU	04QB9.11	U4M+X	UZ#ZD
	• 23B Channels	#U	HCES	04QB9.11	U4M+X	UZ#ZD
	• 23B+Back Up	IDZU	YN-A	04QB9.11	U4M+X	TN1MX

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	Channels Riders: <ul style="list-style-type: none"> • Call-by-Call • 1-Way In • 1-Way Out • D-Channel 	IDZU IDZU DZZU	YN-A YN-A YN-A	04QB9.11 04QB9.11 04QB9.11	U4M+X U4M+X U4M+X	T151X T150X LTUDX
Digital Trunk	<ul style="list-style-type: none"> • SF,B8ZS, Integrated • SF,AMI, Integrated • ESF, B8ZS, Integrated • ESF, AMI, Integrated Riders: <ul style="list-style-type: none"> • 2-Way Comb. • DID • 1-Way Out • 1-Way In • WATS-Loop Start • WATS-Ground Start • 800 Loop Start • 800 Ground Start 	#U #U #U #U TGNU DINU TGNU TGNU WONU WSNU WXNU WINU	HCZD HC-D HCED HCDD UDG UDG- UDG- UDG- SNAL SNAL SNAL SNAL	04QB9.11 04QB9.11 04QB9.11 04QB9.11 04QB9.11 04QB9.11 04QB9.11 04QB9.11 02QC3.00E 02QC3.00C 02QC3.00E 02QC3.00C	UYT UYT UYT UYT UYT UYT UYT UYT UYT UYT UYT UYT UYT	U9ZorUW7 ^ U9ZorUW7 ^ U9ZorUW7 ^ U9ZorUW7 ^ UHM CX UGQ UHMOX UHMOX UW1/UW2 UW1/UW2 UB1 UB1
ULS Trunk	Custom Routing	#U	SD++	04QB9.11	UR1	UROPT
Direct Inward	DID	DINU	SMAT	02QC3.RVY	UXL	UPR

The following notes pertain to the information in the previous chart:

- The '@' sign in the CLCI column indicates the CLCI in Telephone Number format (CLT) except for Basic and Centrex ISDN which are in Serial Number format (CLS).
- The '#U' in the CLCI column indicates that a U follows the numbering range in the facility format (CLF) circuit ID (101U, 700IU, etc.).
- The '+' in the UEX+X in the Class of Service column equals D for DMS10, J for DMS100, S for Siemens, U for 5E, and 2 for 1/1/A.
- The '+' in U4M+X in the Class of Service column equals J,S or U.
- The '^' in the Line USOC column indicates to use U9Z for IN, MI, OH, and WI and UW7 for IL only.
- The '#' in UZ#ZD in the Line USOCs column equals Q for National protocol and P for Customer protocol.
- The '*' in U3X*(A/B/C/D) USOCs in the Line USOC column equals A for unrestricted, B for partial restricted, or C for Restricted.

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Breakdown of the first and second suffix in this USOC

1 st Suffix	Description	2 nd Suffix	Description
A	Unrestricted	A	Card A-loop
B	Partial Restricted	B	Card B
C	Restricted	D	Card D
C	Restricted	E	Card E

Specified Vanity Telephone Numbers

Product Description

A Specified Telephone Number (Vanity Number) is a TN specifically requested by a CLEC on behalf of their End User (EU).

Examples of Specified Vanity Telephone Numbers are:

- Numbers that are easy to remember
- Numbers with special meaning to the EU
- Particular combinations of numbers, such as 292-9292
- Word(s), like DIAMOND (342-6663)
- Combinations of numbers and letters, such as 672-R2D2 (672-7232)
- Types of business/service/profession, such as JANITOR (576-4867)
- Product Line, such as 4YRHAIR or 297-4727

Availability

Denial of Requests for Specified Vanity Telephone Numbers

CLECs (or EUs) who have been doing its own research for number availability may find a number which is not operating and request this number, believing it to be available. The request may be denied if the:

- Number may be reserved for other services
- Number bank may not yet be opened

Limitations

Restrictions on requests for Specified Vanity Telephone Numbers are:

- Number availability
- Approval by SBC (Profanity is not permitted)
- Requests for specific numbers which equate to words must use the alpha 'O,' number '6' (not zero)

UNBUNDLED LOCAL SWITCHING

Examples are:

- GOLF = 4653
 - JOSH = 5674
-
- It must not use numeric zero '0,' because the numeric zero is for 'Operator'
 - The prefix 911 is reserved for emergency services

Ordering

Specified Vanity Telephone Numbers (if available), are ordered using REQTYPs F or M.

All Regions

SBC recommends that CLECs first attempt to reserve Specified Vanity Numbers through the mechanized means available to them (Verigate, EDI or Corba). For specific instructions, refer to the **Enhanced Verigate User Guide** located in *User Guide/Tech Pubs/Pre-Ordering section/Telephone Number Inquiry & Reservation-Specified* section and the LSPOR.

SBC Midwest Region 5-State

If the CLEC has attempted to reserve the Specified Number mechanically but:

- Was unable to successfully reserve the number and
- The CLEC believes that the number is available for use

Or, if the CLEC chooses not to utilize the mechanized means available to them (Verigate, EDI or Corba), then:

The CLEC may submit the SBC Address Validation/TN Reservation Form, located in Forms & Exhibits/Manual Pre-Ordering Forms (refer to section 3).

Upon receipt of the TN (if available), the CLEC must submit the LSR manually.

For specific instructions, refer to Requests with Vanity Numbers (under 'Condition') in *Ordering/General Ordering UNE or Resale/LSOR Non-Mechanized Ordering*.

Due Date Intervals

The following table reflects the due date intervals for ULS orders. The intervals begin once Ameritech receives all necessary information from the CLEC. If CLECs change a pending order before its due date, the changes will be processed and the due date adjusted if the remaining interval on the order is less than the interval specified. Ameritech will attempt to meet the customer's request or install as soon as possible on, or after, the customer's requested date.

If a complete and accurate order is not received by 3 PM Central Standard Time, the due date will be moved out to the next business day.

The following intervals have been established for ULS ports:

Port Type	Due Date Interval
Basic Ports (1-15)	5 business days
Basic Ports (16 or more)	Negotiated

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Complex Ports	Negotiated
Feature Addition/Change/Rearrange	Standard Interval based on Feature

Note: Complex ports include ISDN Prime and Direct, Centrex, and Digital Trunking.

Note: All Custom Routed Trunk Ports are negotiated.

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Billing Information

Bill Type

The billing for ULS is supported by CABS (Carrier Access Billing System) and RBS (Resale Billing System).

There are two different CABS bills types that can be generated for ULS. The type of bill structure used is dependent upon the type of port, one for the trunk-side ports and one for the line-side ports. Both utilize CABS (Carrier Access Billing System).

The CABS billing for ULS includes the monthly ULS port charges, the minutes of use (MOU), and non-recurring charges.

The RBS (Resale Billing System) billing for ULS includes any local/toll charges, ABS (Alternate Billed Services) for UNE-P, and daily usage record charges. Daily usage files (DUF) are provided to the CLEC.

Note: Prior to ordering ULS, CLECs must submit a completed Unbundling Questionnaire containing the required information for ULS including ordering, maintenance, billing, and daily usage feed details.

Bill Format

CABS issues a paper invoice in standard format and a Customer Service Record to each CLEC. Both appear on multiple 8 ½ x 11 pages. Other mechanized delivery formats are available upon request. The CLEC may contact the Ameritech Account Manager for more details, including additional charges for mechanized delivery. For more information see TC Usage & Billing Guide

Daily Usage Files (DUF)

Ameritech will start sending the Daily Usage files to CLECs once the following conditions are met:

- CLEC has submitted a completed Unbundled Customer Questionnaire and has received confirmation from Ameritech that Questionnaire is complete and that the systems have been updated.
- TC has placed a valid order with Ameritech.
- This valid order has completed within all necessary Ameritech's system.

For information on Daily Usage Files see TC Usage & Billing Guide.

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Rate Structure

The following chart details each of the rate elements associated with providing ULS service. The chart simply indicates which rate elements apply and which rate elements have a monthly recurring charge and which rate elements have a one-time, non-recurring charge.

Rate Element	One-time, non-recurring Charge	Monthly Recurring Charge
ULS Custom Routing		
Per new line class code, per switch	X	
ULS Line Ports		
Basic, per port	X	X
Residence Only, per port (WI only)	X	X
Ground Start, per port	X	X
COPTS-coin, per port (IL, OH only)	X	X
ISDN-Direct, per port		X
per TN (ISDN Only)		X
ULS Trunk Ports		
DID		
Per Port	X	-
Per TN	-	X
Add/Rearrange each termination	X	-
ISDN-Prime		
Per Port	X	X
Per TN	-	X
Add/Rearrange each termination	X	-
Digital Trunking		
Per Port	X	X
Custom Routing		
New Line Class Code (LCC), per LCC per Switch	X	-
New Network Route, per Route, per Switch	X	-
OS/DA-AIN	X	-

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Rate Element	One-time, non-recurring Charge	Monthly Recurring Charge
ULS Trunk Port Standalone		
Per Port	X	Illinois Michigan Ohio Indiana
Per DS0 Termination	-	Wisconsin Only
Add/Rearrange per DSO Termination	Wisconsin Only	-
ULS Centrex Line Ports (must purchase a Common Block)		
Basic, per port	X	X
ISDN, per port	X	X
EKL, per port	X	X
Attendant Console, per port	X	X
ULS Centrex System Charges		
Common Block Establishment, each	X	
System Features, per common block	X	
System Feature Change/Rearrangement, per feature, per occasion	X	
System Feature Activation, per feature, per occasion	X	
ULS Service Charges Service Ordering Charges		
Initial Line Port, per occasion	X	
Initial Trunk Port, per occasion	X	
Subsequent, per occasion	X	
Record Order, per occasion	X	
Conversion Charges, change from one type of line-port to another, per each changed		
Cross-connection charge	X	
Line port, each 2-wire	X	
Trunk Port, each DS1	X	

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Rate Element	One-time, non-recurring Charge	Monthly Recurring Charge
ULS Service Coordination Fee		
Per Carrier Bill, per switch		X
ULS Usage		
Billing Development & Implementation Charge, per carrier per switch	X	
Per Minute-of-Use		X
Daily Usage Fee, per message		X

UNBUNDLED LOCAL SWITCHING

Attachment 1

AIT UNE Features

	AIT Matrix of Port Types available with the available features.			
	States: IL, IN, MI, OH, WI			
	Port Type & Features			
1	Line-side Basic Ports & Ground Start Ports			
	Call Waiting			
	Call Forwarding - Variable			
	Three-way Calling			
	Speed Calling			
	Automatic Callback			
	Repeat Dialing			
	Calling Screening			
	Caller ID			
	Busy Line Transfer			
	Busy Line Transfer / Customer Control Option			
	Alternate Answering			
	Alternate Answering / Customer Control Option			
	Message Waiting Tone			
	Easy Call			
	Special Delivery Feature			
	Multi-Ring Service			
	Direct Connect			
	Remote Access Call Forwarding (RACF) (Table of applicable CLLIs)			
2	Basic COPTS Line Port (IL Only)			
	Incoming Call Blocking			
	Outgoing Call Blocking			
	Outgoing Screening			
	Incoming Screening			
	International Blocking IDDD			
	976 Blocking			
	900/976 Blocking			
3	COPTS-Coin Line Port (IL & OH Only)			
	Incoming Call Blocking			
	Outgoing Call Blocking			
	Outgoing Screening			
	Incoming Screening			
	International Blocking IDDD			
	976 Blocking			
	900/976 Blocking			

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4	ISDN-Direct Port			
	Analog Line Appearance			
	Call Hold			
	Call Transfer			
	Called Number Display			
	Caller ID			
	Conference Calling - 3 Way			
	Denied Origination			
	Denied Termination			
	Hunting			
	Shared Call Appearance			
	Multiple Call Appearance			
	Additional Call Appearance			
	Additional Call Offering			
	Additional Multiple Call Appearance			
	Alternate Answer			
	Automatic Callback			
	Busy Line Transfer			
	Call Forwarding - Variable			
	Call Screening			
	Distinctive Ringing			
	Intercom Calling			
	Message Waiting Indicator			
	Repeat Dialing			
	Secondary Telephone Numbers			
	Station-Controlled Conference			
	Speed Calling - 8			
	Speed Calling - 30			
	Clear Channel Capability			
	Circuit Switched Voice & Circuit Switched Data			
	Centrex Ports: Basic, Attendant & Electronic Key	Basic	EKS	ISDN
5	Line (EKL) Ports			
	Voice Features	N/A		N/A
	Add On Module	N/A		
	Analog Line Pickups			
	Automatic Call Back	N/A		
	Automatic Dial	N/A		N/A
	Automatic Line Pre-select	N/A		
	Blind Transfer			
	Call Camp-On			
	Call Camp-On Selective			N/A
	Call Diverting			
	Call Forward of Call Waiting Calls			
	Call Forwarding - Busy			
	Call Forwarding - Variable	N/A		
	Call Forwarding per key			
	Call Forwarding Over Private Facilities			
	Call Hold			

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Call Park			
Call Pickup	N/A		
Call Request			
Call Request with Queue			
Call Transfer - All			N/A
Call Transfer (Inter-system) - Deluxe			
Call waiting/Cancel Call Waiting	N/A		
Called Number Display			
Caller ID			
Caller ID Intercom	N/A		
Calling name Display on Intercom	N/A		
Calling Reason Display			
CLASS Automatic Callback			
CLASS Call Screening			
CLASS Distinctive Ringing		N/A	N/A
CLASS Repeat Dialing			
CLASS Visual Message Waiting Indicator			
Conference Calling, 3 Way			
Consultation Hold			
Direct Connect Originating			
Direct Connect Originating with Delay			
Direct Inward Dialing (DID)			
Direct Outward Dialing (DOD)	N/A		
Direct Station Selection/Busy Lamp Field with Fast Transfer			
Directed Call Park			
Directed Call Pickup	N/A		
Directory Number Hunt with Call Waiting and Preferential Hunt	N/A		
Display Capability			
Distinctive Ringing and Call Waiting Tone			
End to End Signaling			
Equal Access for Inter-LATA Calling	N/A		
Executive Busy Override	N/A		N/A
Executive Busy Override - Exempt	N/A		
Executive Display Communications	N/A	N/A	N/A
Feature Buttons			
Ground Start Line	N/A		
Group Intercom		N/A	
Hunting Arrangements	N/A		
Increase Shared Directory Number (DN) Group Size			
Intercom Calling			
Last Number Redial	N/A		
Leave Message Activation	N/A		
Listen On Hold			
Make Busy - Access Code or Key	N/A		N/A
Make Set Busy	N/A		
Make Set Busy except on Group Intercom	N/A		
Message Retrieval Display	N/A	N/A	N/A
Message Waiting Activation Control			
Message Waiting Indication Lamp	N/A		

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Message Waiting Indication - Visual			
Message Waiting Indicator - Audible			
Multiple Appearance Directory Number (MADN)	N/A		
Multiple Call Arrangement (MCA)	N/A		N/A
Single Call Arrangement (SCA) Cut-off on disconnect			
Night Answer	N/A	N/A	
On Hook Dialing	N/A		
Pickup Held Conference Call from Shared Directory Number (DN) Call Appearance	N/A		
Query Busy Station	N/A		
Repeat Alert	N/A		
Ring Again Idle Set	N/A		
Ringing Options for MADN	N/A		
Secondary Directory Telephone Number	N/A		
Secondary MADN Call Forwarding	N/A	N/A	
Set Inspect	N/A		
Shared Directory Number (DN) Bridging with Conference Calls	N/A	N/A	N/A
Short Hunt			
Single Line Extension			
Speed Calling - Expanded Number Group			
Speed Calling - Long			
Speed Calling - Short			
Stop Hunt	N/A	N/A	N/A
Access Code			
Key	N/A		
Terminal Management	N/A		
Time and Date Display			
Touch-Tone			
Transfer Calls to Restricted Station			
Usage Billing by Line Number			
6 ISDN Circuit Switched Data			
Alternate Access			
Calling Display on Intercom			
Call Diverting			
Far End Disconnect Supervision			
Hunt Group for Shared Data Access			
Intercom Calling			
Speed Calling Short			
Queuing			
7 ISDN Packet Switched Data "B" or "D" Channel			
Call Diverting			
Closed User Group (CUG) - Additional Member			
Closed User Group (CUG) - Individual Design			
Default Throughput Class Assignment			

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Direct Call			
Fast Select			
Fast Select Acceptance			
Flow Control Parameter Negotiation			
Hunt Group			
Intercom Calling			
Logical Channels			
Additional Logical Channels			
Non-Standard Default Flow Control Parameters			
Permanent Virtual Circuit			
Recognized Private Operating Agency Selection			
Reverse Charging			
Reverse Charging Acceptance			
Standard "B" Packet Parameter Arrangement			
Standard "D" Packet Parameter Arrangement			
Throughput Class Negotiation			
Transit Delay Selection and Indication			
8Centrex Attendant Console Port			
Access to Paging, Code Calling, etc.			
Attendant Call Detail Entry			
Attendant Call Park			
Attendant Camp On			
Attendant Conference Capability			
Attendant Conference (30 Port)			
Attendant Console Screen Management			
Attendant Control of Call Forward Busy Line and Don't Answer			
Attendant Position Busy			
Attendant Recall from Satellite			
Attendant Recorded Announcement			
Attendant to UCD Transfer			
Attendant Transfer			
Auto-dial			
Automatic Recall			
Busy Verification of Station/Trunk			
Call Hold			
Call Hold with Recall			
Call Park Recall Timer			
Call Selection			
Call Splitting			
Call Through Tests			
Console Display Capability			
Console Test			
Control of Trunk Group Access			
Control of Virtual Facilities Groups			
Delayed Operations			
Direct Station Selections and Busy Lamp Field			
Direct Trunk Group Selection			
End to End Signaling			

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Emergency Override			
Extended Calls to Busy/No Answer			
Foreign Exchange (FX) Termination			
Flexible Console Alerting			
Incoming Call Identification			
Information / Display Calls in Queue			
Interposition Calling			
Locked Loop Operation			
Lockout			
Message Waiting Control			
Multi Position hunt (MPH)			
Multiple Console Operation			
Multiple Listed Directory Numbers			
Name Display for Attendant Console			
Night Service			
Operational Measurements			
Power Failure Transfer			
Queuing with Call Waiting Indication			
Release upon Completion of Dialing			
Secrecy			
Serial Calling			
Speed Calling Straightforward Outward Completion			
Supervisory Console			
Switched Loop Operation			
Through Dialing			
Time of Day and Date			
Timed Reminder			
Toll Diversion to Attendant			
Trunk Busy Identification			
Trunk Group Busy / Access control key			
Trunk Group Identification/Indicators			
UCD from Queue			
Verification of Authorization Codes			
Wild Card Key			
800 Termination			
9Centrex System			
Announcement Services			
Assume Dial "9"			
Authorization Codes			
Automatic Route Selection Basic			
Call Forwarding Multi Path			
Call Waiting Lamp Interface			
Centrex Station Identification (CSI)			
Conference Services			
Customized Call Diverting			
Do Not Disturb			
Electronic Directory Interface (EDI) Service			
High Speed Data Service			

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Music On Hold Interface			
Network Speed Calling			
Personal Call Screening			
Private Facility Terminations			
Line Side Access			
Trunk Side Access			
Queue Slots			
Remote Access / Direct - Inward System Access (DISA)			
Station Message Detail Recording (SMDR)			
Special Intercept Service			
Split Service			
Supplemental Three Digit Dialing			
Trunk Verification from Designated Station			
Uniform Call Distribution (UCD)			
10 DID/Digital			
DID			
WATS			
800 Service			