

AT&T NEVADA GUIDEBOOK

PART 5 - Centrex / Plexar Services
SECTION 2 - Other Centrex Services

First Revised Sheet 1

5.2 OTHER CENTREX SERVICES

5.2.1 Integrated Service Digital Network

A. Description

1. Integrated Services Digital Network (ISDN)^{1,2/} is an architecture that will allow Centrex users to access voice, data and test/image services without the need for separate customer access lines. ISDN is a group of line and system wide features that can be provided in addition to existing Centrex features, where central office facilities and operating conditions permit. (C)
2. ISDN provides an integrated voice/data communications capability for the transmission of circuit switched voice, circuit switched data, and packet switched data on an incoming and outgoing basis over Centrex Primary and Semi-Restricted Lines utilizing Integrated Services Digital Network (ISDN) architecture. The B channels are used for voice, packet, or circuit switched data at 64 Kbps. The D channel is used to carry signaling information for the B channels plus packet switched data. The service is available from specially equipped digital switching equipment located in the Company's central offices.
3. Circuit Switched Voice provides the ability to originate and receive voice switched calls over a 64 Kbps channel.
4. Circuit Switched Data provides the ability to originate and receive switched data calls over the 64 Kbps channel. Data line speeds up to 64 Kbps are permitted.
5. Packet Data is available on the "D" channel at 16 Kbps, and optionally on the "B" channel at 64 Kbps.
6. ISDN will provide the customer with the ability to integrate current voice and data channel services over the existing Centrex local loop.

B. Regulations

1. The Company reserves the right to approve any service request.
2. Some standard and optional features may not be available in any given location, depending on the central office technology being deployed.

Note 1: Effective February 15, 2005, the Company grandfathered packet switching capability, in the Integrated Services Digital Network option of Centrex Services. No new customers will be added after that date. In addition, services will be limited to existing service and quantities at existing locations. All existing rates and regulations will continue to apply. On July 1, 2005, or when all customers have ceased subscribing to the service, whichever occurs first, packet switching capability, in the Integrated Services Digital Network will be withdrawn.

Note 2: Effective September 30, 2024, customers may not establish new term plans greater than 12 months for Centrex service, and existing term plans greater than 12 months may not be renewed or extended for a term greater than 12 months. Effective September 30, 2024, the Company will renew Centrex term payment plans only for additional 12-month terms by written amendment. If a 12-month term is not signed upon expiration of the term, the month-to-month rate listed in the Guidebook will apply.

(N)

(N)

5.2 OTHER CENTREX SERVICES

5.2.1 Integrated Service Digital Network (Cont'd)

B. Regulations (Cont'd)

3. This section applies to the Integrated Services Digital Network general offering only. ISDN is considered to be a network architecture offering. No equivalent ISDN rate element from this section may be utilized for other guidebook, tariffed or contracted exchange services with the following exception: (N)

Other Centrex or Digital Centrex Services (DCS) contractual agreements may utilize the rate elements herein described only for service elements not offered in their prevailing contract, guidebook or tariffed service offering. (N)

4. All telephones, consoles, or any terminal devices residing on the customer's premise shall be provided by the customer.
5. ISDN is furnished at the rates and charges shown in Part 5, Section 2.1.D following, which are in addition to other rates and charges for Digital Centrex Services or other contractual Centrex service. Rates and Charges for Centrex Optional Features are in addition to those for ISDN service.
6. The local loop range (distance) for a particular loop may vary depending on available technology. Consequently, ISDN will only be provided where central office facilities and operation conditions permit. Customers may be served from the normal serving central office or an Alternative Service Office Arrangement. Service beyond the local loop range (distance) may be denied if interoffice facilities are not available.
7. Rates and charges for Digital Centrex Standard and Optional Features are in addition to those for ISDN service.
8. ISDN Circuit Switched and Packet Switched data calls must originate and terminate within the same central office switch. Non-ISDN Interswitch data traffic is permitted on Circuit Switched data calls. No interswitched data traffic is permitted on packet switched data calls.
9. Alternate Serving Arrangements (ASA) may be provided when a Central Office is not equipped for ISDN. ASA allows for availability from a near by Central Office that would otherwise not be possible. Interoffice facilities (where available) will be used to accommodate this service. Calls are rated from the area code/prefix assigned from the ISDN Host Office. Mileage charges as shown in Part 5, Section 2.1.D.h. will apply

5.2 OTHER CENTREX SERVICES

5.2.1 INTEGRATED SERVICE DIGITAL NETWORK (Cont'd)

B. Regulations (Cont'd)

10. Only the Consultative Committee International Telephone and Telegraph (CCITT) defined 2B+D channel structure is offered under this Guidebook. Changes by CCITT, other standards bodies, or switched manufacturers could alter ISDN feature availability and operation. Although the standard interface consists of 2B channels, service may be offered utilizing a 1B channel. If the 1B channel is requested, the other B channel will not be available to the user.
11. The interface to the network is the American National Standards Institute (ANSI) U interface.
12. The Change Charge to add, remove, rearrange or change feature parameters within each feature package or optional feature arrangement shall be charges as defined in Part 5, Section 1 of this Guidebook.
13. The customer is responsible for providing compatible premises equipment in order to utilize the ISDN offering. ALL customer provided equipment used to interface with ISDN is required to conform with the Technical Reference Specifications as used by the Company and found the Technical References:

<u>Subject</u>	<u>Technical Reference</u>	<u>Source</u>
Basic Rate Interface	235-900-301	1-800-432-6600
	235-900-311	1-800-432-6600
	235-900-321	1-800-432-6600
	NIS S208-2	1-800-422-6373
	NIS S208-4	1-800-422-6373

Customer Premises Processor 235 900-303 1-800-432-6600

14. Foreign Exchange Centrex service as defined in Part 4, Section 3 of this Guidebook is not applicable to ISDN service. However, ISDN may be furnished from a contiguous or noncontiguous exchange other than the exchange which the customer's primary location is located.
15. Extension Line Service is not offered with ISDN.

The customer has the option of changing the B1-voice channel to a circuit switched data channel. The dedicated B-channel can either be used for voice or data but not voice and data.

The customer has the option to connect terminals that function in the stimulus or functional signaling mode.

5.2 OTHER CENTREX SERVICES**5.2.1 INTEGRATED SERVICE DIGITAL NETWORK (Cont'd)****C. Optional Features**

1. The availability and optional line features may vary according to the Company central office technologies being deployed. Compatible customer-provided terminal equipment is required for certain feature functionality. Each optional feature is identified and described in (a), (b), (c) and (d) following:

a. Basic Feature Package A**Voice Related Features:**

Incoming Call Line Identification allows the called party to receive the Directory Number (DN) of the calling party within the Centrex system.

Calling Number ID Block prevents the delivery of the calling party's number identification to the receiving party within the Centrex system.

Outgoing Call Line Identification allows the calling party to received the Directory Number (DN) of the called party within the Centrex system.

Time and Date Display displays the time and date.

Call Review displays call related information about any call appearance that has a call associated with it. The data that can be displayed includes call appearance identification, called or calling Directory Number (DN) within the Centrex system and incoming call identifier call type.

Multiple Directory Number provides an additional appearance (i.e., telephone button and lamp) of the primary Directory Number (DN) on the station equipment with compatible premises equipment.

Shared Directory Number provides an appearance of the Directory Number (DN) other than the primary assigned to the station equipped with compatible premises equipment.

ISDN Group Intercom allows the customer to use abbreviated on digit dialing for a select group of users.

Privacy provides privacy to prevent interruption or intervention of an ISDN call.

5.2 INTEGRATED SERVICE DIGITAL NETWORK**5.2.1 INTEGRATED SERVICE DIGITAL NETWORK (Cont'd)****C. Optional Features (Cont'd)****b. Basic Feature Package B**

The following features are provided in addition to (a) preceding.

Fast Select Initiate/Accept allows a sending data terminal to forward up to 129 bytes of data along with call setup and clearing packets. Fast Select Acceptance allows the switch to transmit incoming call packets with the fast select facility to a destination terminal that has this feature.

Flow Control Parameter Negotiation allows negotiation on a per call basis of the flow control parameters. This consists of automatically negotiating the maximum packet size and window size for each direction of data transmission.

Throughput Call Negotiation allows the calling data terminal to request specific throughput classes in the call request packet for both directions of data transmission.

Incoming Calls Barred prohibits a data terminal from terminating an incoming call. This feature is activated by the customer service order.

Outgoing Calls Barred prohibits a data terminal from originating outgoing virtual calls. This feature is activated by the customer service order.

Signal Logical Channel allows an ISDN subscriber to specify a logical channel for packet services.

c. Basic Feature Package C

The following features are provided in addition to (a) and (b) preceding.

Speed Calling allows the user to dial selected number using fewer digits than normally required.

5.2 OTHER CENTREX SERVICES

5.2.1 INTEGRATED SERVICE DIGITAL NETWORK (Cont'd)

C. Optional Features (Cont'd)

c. Basic Feature Package C (Cont'd)

Semi-Restricted Line - Originating and Terminating are lines that can make calls to and received calls from lines within the same terminal group including the attendant and calls over private facilities, if with the terminal group. Restricted calls are given reorder, an announcement or rerouted to another station.

Fully Restricted Line Originating and Terminating are lines that can make calls to and received calls from lines within the same terminal group and calls over private facilities, if within the same terminal group. Calls to and from the attendant are prohibited. Restricted calls are given reorder, an announcement or rerouted to another station.

Circuit Switched Data Call Hunting allows the customer to dial a single number to access a port on the host in a circuit switched implementation of multiple Basic Rate Interfaces (BRI) access to a host. This feature can hunt on individual BRI's for circuit-switched ISDN data calls.

d. Basic Feature Package D

The following feature is provided in addition to the voice features in (a) and (b) preceding:

- Allows both B channels to be assigned voice features only. Data services are not permitted on any channel.

e. Individual Optional Features

Packet Closed User Group allows ISDN subscribers to establish sub-networks with which the members of the closed user group can communicate. Communication with users who are external to the closed user groups is not permitted. This feature established by customer service order.

Packet - Permanent Virtual Circuit allows packet switching to be implemented over a dedicated logical channel without needing call set-up or clearing. This feature is established by the customer service order.

5.2 OTHER CENTREX SERVICES**5.2.1 INTEGRATED SERVICE DIGITAL NETWORK (Cont'd)****C. Optional Features (Cont'd)****e. Individual Optional Features (Cont'd)**

Packet - Additional Logical Channel provides additional logical channel for B or D channel packet devices. D channel packet terminals may be equipped with Additional Logical Channels, specifying a quantity between two (2) and fifteen (15) (the first logical channel is included in Feature packages B and C). B channel packet terminals may be equipped with Additional Logical Channels, specifying a quantity between sixteen (16) and one hundred (100) (the first fifteen are included with the B Channel Packet Service). To change the quantity of Additional Logical Channels, the Change Charge as set forth in Part 5, Section 3 of this Guidebook is applicable.

Additional Call Appearance allows additional Call Appearances of the customer's Primary, Secondary, Shared, or Multiple Directory Numbers.

Electronic Directory Interface provides the customer with the ability to access Electronic Directory features from their own Applications Processor:

Autocall allows ISDN station users to place a call to a party associated with a query display.

Calling Name Display provides the name and telephone number of the calling party within the Centrex system to the called party. This feature is available to ISDN station users within the same business group.

Directory Query Display allows the user to query the electronic directory data base for a name using the ISDN station set.

Query Service allows a user to query the Applications Processor directory using a video display terminal for call and personnel information on per customer group basis.

Additional D Channel Packet Device allows a Feature Package B or C customer to connect up to five additional packet terminals to the D channel.

5.2 OTHER CENTREX SERVICES**5.2.1 Integrated Service Digital Network (Cont'd)****C. Optional Features (Cont'd)****e. Individual Optional Features (Cont'd)**

B Channel Packet Service - permits the assignment of a dedicated B channel for the exclusive use of transporting packet data and is only available with Feature Package C. One or both B channels of a single ISDN line can be assigned to this service. Once assigned, a B channel cannot be used for any other services unless changed at the Rate and Charges as set forth in Part 5, Section 3 of this Guidebook.

Packet Hunting - allows the customer to define a group of numbers that belong to a hunt group. When an incoming call is destined for a busy terminal in the group, the call will be directed to an idle terminal in the same hunt group.

Secondary Directory Number - allows a primary Centrex station equipped with compatible premises equipment the capability of an additional Centrex station line in addition to the Primary or Shared Directory Number.

Analog Shared Directory Number - allows a non-ISDN Centrex primary station line whose primary appearance originates on non-ISDN equipment to appear to ISDN compatible premises equipment.

5.2 OTHER CENTREX SERVICES

5.2.1 INTEGRATED SERVICE DIGITAL NETWORK (Cont'd)

D. Rates and Charges

VS+++ indicates billing code for sectional billed accounts

VM+++ indicates billing code for non-sectional billed accounts

	<u>Installation Charge</u>	<u>Monthly Rate</u>	<u>USOC</u>
a. Centrex Primary Station Line ^{1,2} - Each	RR	RR	SDNA+
b. Feature Package A ¹			
B-Channel Voice Features:			
Incoming Call Line Identification			
Calling Number Identification Block			
Outgoing Call Line Identification			
Time and Data Display			
Call Review			
Intercom			
Privacy			
Multiple and Shared Directory Numbers (Maximum of 15)			
- Each	\$50.00	\$5.00	CPKG1

NOTE 1: Where facilities and operating conditions permit.

NOTE 2: Centrex monthly rates and installation charges are applied per line as shown in Part 5,
Section 2 of this Guidebook or by specific Centrex customer contract.

5.2 OTHER CENTREX SERVICES

5.2 INTEGRATED SERVICE DIGITAL NETWORK (Cont'd)

D. Rates and Charges (Cont'd)

	<u>Installation Charge</u>	<u>Monthly Rate</u>	<u>USOC</u>
c. Feature Package B ¹			
B-Channel Voice Features:			
Incoming Call Line Identification			
Outgoing Call Line Identification			
Time and Date Display			
Call Review			
ISDN Group Intercom			
Privacy			
Calling Number ID Block			
Multiple and Shared Directory Numbers (Maximum of 15)			
Data Features			
D-Channel Packet Switching Features			
Single Logical Channel			
Fast Select Initiate/Accept			
Flow Control Parameter Negotiation			
Throughput Class Negotiation			
Incoming Calls Barred			
Outgoing Calls Barred			
- Each	\$70.00	14.00	CPGK2

NOTE 1: Where facilities and operating conditions permit.

5.2 OTHER CENTREX SERVICES

5.2.1 INTEGRATED SERVICE DIGITAL NETWORK (Cont'd)

D. Rates and Charges (Cont'd)

	<u>Installation Charge</u>	<u>Monthly Rate</u>	<u>USOC</u>
d. Feature Package C ¹			
B-Channel Voice Features:			
Incoming Call Line Identification			
Outgoing Call Line Identification			
Time and Date Display			
Call Review			
ISDN Group Intercom			
Privacy			
Calling Number ID Block			
Multiple and Shared Directory Numbers (Maximum of 15)			
Data Features			
B-Channel Circuit Data Features			
Speed Calling			
Semi-Restricted Line (Originating and Terminating)			
Circuit Switched Data Call Hunting			
D-Channel Packet Switching Features:			
Single Logical Channel			
Fast Select Initiate/Accept			
Flow Control Parameter Negotiation			
Throughput Class Negotiation			
Incoming Calls Barred			
Outgoing Calls Barred			
- Each, (Rate Band A and B Customers)	108.00	39.00	CPKG3
- Each, (Rate Band 1 DCS Customers)	108.00	34.00	
- Each, (Rate Band 2 DCS Customers)	108.00	29.00	
- Each, (Rate Band 3 DCS Customers)	108.00	26.00	
- Each, (Rate Band 4 DCS Customers)	108.00	23.00	
- Each, (Rate Band 5 DCS Customers)	108.00	20.00	

NOTE 1: Where facilities and operating conditions permit.

5.2 OTHER CENTREX SERVICES

5.2.1 INTEGRATED SERVICE DIGITAL NETWORK (Cont'd)

D. Rates and Charges (Cont'd)

	<u>Installation Charge</u>	<u>Monthly Rate</u>	<u>USOC</u>
e. Feature Package D ¹			
B-Channel Voice Features:			
Incoming Call Line Identification			
Outgoing Call Line Identification			
Time and Date Display			
Call Review			
ISDN Group Intercom			
Privacy			
Calling Number ID Block			
Multiple and Shared Directory			
Numbers (Maximum of 15 per voice terminal)			
- Each, (Rate Band A and B Customers)	90.00	29.00	CPKG4
- Each, (Rate Band 1 DCS Customers)	90.00	24.00	
- Each, (Rate Band 2 DCS Customers)	90.00	19.00	
- Each, (Rate Band 3 DCS Customers)	90.00	16.00	
- Each, (Rate Band 4 DCS Customers)	90.00	13.00	
- Each, (Rate Band 5 DCS Customers)	90.00	10.00	
f. Individual Optional Features ¹			
Packet-Closed User Group ²			
- Each	60.00	1.00	PACCG
Packet-Permanent Virtual Circuit			
- Each	60.00	4.00	PACPV
Packet Additional Logical Circuit			
- D Channels - 2 through 15	--	1.00	PACLC
- B Channels - 16 through 100	--	5.00	PACMC
Additional Call Appearances			
- Each	5.00	2.00	ECAPP

NOTE 1: Available only in those offices that are suitably equipped.

NOTE 2: Available only with Feature Packages B and C.

5.2 OTHER CENTREX SERVICES

5.2.1 INTEGRATED SERVICE DIGITAL NETWORK (Cont'd)

D. Rates and Charges (Cont'd)

f. Individual Optional Features¹

	<u>Installation Charge</u>	<u>Monthly Rate</u>	<u>USOC</u>
Electronic Directory Interface ² - each ISDN Arrangement	\$750.00	\$50.00	EDSSF
Additional D-Channel Packet Device ³ - each device	15.00	3.50	APD
B-Channel Packet Service - Each channel ⁴ (Maximum of 15 logical channels)	280.00	350.00	TPS2X
Secondary Directory Number - Each	5.00	2.00	SEDN+
Packet Hunting - Each packet terminal in hunt group	5.00	1.00	PNH
Analog Shared Directory Number ⁵ - Each non-ISDN Number appearing on an ISDN terminal	5.00	2.00	ASDN+

NOTE 1: Available only in those offices that are suitably equipped.

NOTE 2: Also requires appropriate Centrex line rates and customer applications processor.

NOTE 3: Available only with Feature Packages B and C.

NOTE 4: Available only with Feature Package C.

NOTE 5: Requires a Centrex Primary Station Line as set forth in Part 5, Section 1 of this Guidebook as a primary dialable number in the customers Centrex system.

5.2 OTHER CENTREX SERVICES

5.2.1 INTEGRATED SERVICE DIGITAL NETWORK (Cont'd)

D. Rates and Charges (Cont'd)

	Non-recurring <u>Charge</u>	<u>USOC</u>
g. Change Charge to add, remove, rearrange or change feature parameters within each feature package or optional feature arrangement		
- Per Service Order	\$24.00	DOC
- Per ISDN Set (device) or ISDN Terminal Adapter	20.00	DFG
	<u>Monthly</u>	
h. Mileage - Alternate Serving Arrangement from Host ISDN CO switch to Customer CO switch		
Fixed rate	\$12.50	1L9EC
Per airline mile	2.50	1L9EC