

**MULTI-SERVICE OPTICAL NETWORK RING SERVICE****A. Description**

Effective December 1, 2012, Multi-service Optical (MON) Ring Service is not available for new installations. Existing MON Ring customers will be permitted to modify their service by adding new circuits to their existing service, but will not be permitted to add new nodes in new locations. New circuits added to existing locations will utilize the customer's existing Term Pricing Plan (TPP) and should be coterminous with the customer's existing TPP. Customers with TPPs that expire may not extend their service contract. Effective December 1, 2016, no Move, Add or Change orders of any type will be accepted.

Multi-service Optical Network Ring (MON Ring) Service provides high volume optical transport utilizing multiplexing technology in a dedicated ring configuration. Multiple data signals are transmitted over fiber-optic cable using different wavelengths of light. Each of these wavelengths represents a transmission channel in the MON Ring system and is protocol independent of every other channel in the system.

MON Ring Service is only available within the Local Access and Transport Areas (LATAs) served by and within the service territories of the Company.

MON Ring Service allows customers to combine their multiple data signals so that they can be amplified and transported over one network. MON Ring Service provides dedicated capacity over a single pair of fiber in two directions that increases capacity without limiting customer-required data interfaces.

*Sub-Rate Systems:*

Sub-Rate System - provides a multiplexing system operating at 1.25 Gbps with 4 ports. Applicable to ESCON<sup>TM</sup>, Fast Ethernet, D1 Video, DVB-ASI Video, and OC-3/OC-3c port interfaces. Sub-rate multiplexing is offered at the serving wire center only for OC-3/OC-3c.<sup>/1/</sup>

ESCON<sup>TM</sup> Sub-Rate System - provides a multiplexing system which allows customers to put up to 8 ESCON<sup>TM</sup> Channels (no other protocol) on one port card.<sup>/1/</sup>

GigE/FC/FICON<sup>TM</sup> Sub-Rate System - provides a multiplexing system which allows customers to put 2 Gigabit Ethernet (GigE) Channels or 2 Fibre Channels (1.0625 Gbps) or 2 FICON<sup>TM</sup> Channels (1.0625 Gbps), or any combination thereof totaling two channels on the sub-rate system, on one port card. Fibre Channel (2.125 Gbps) and FICON<sup>TM</sup> (2.125 Gbps) cannot be placed on this sub-rate system.

OC-3/OC-12 Sub-Rate System – provides a multiplexing system which allows customers to put up to either 4 OC-3/OC-3c signals or OC-12/OC-12c signals or combinations thereof on one card. This sub-rate multiplexing system will have independent timing which allows multiple OC-3/OC-3c services or OC-12/OC-12c services on one port card.<sup>/1/</sup>

SONET OC-48 Sub-Rate System – provides a multiplexing system which allows customers to put up to four (4) OC-48/OC-48c signals on one card.<sup>/2/</sup>

/1/ Available where facilities and equipment permit.

/2/ Available where facilities and equipment permit beginning November 30, 2005.

**MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)****A. Description (cont'd)**

SBC MON Ring Service offers the following port interfaces:

*IBM Protocols:<sup>/1/</sup>*

ESCON™ (200 Mbps) – Enterprise Systems Connection. An IBM duplex optical connection used for computer-to-computer data exchange. ESCON™ is limited to a maximum distance of 43 km and actual data throughput is distance sensitive. ESCON™ is offered as a riding circuit where facilities and equipment permit.

ETR/CLO™ (8 Mbps – Manchester Encoded) – External Timing References/Control Link Oscillator. This protocol is used for IBM GDPS™ architecture for multiple-location host processors. ETR™ is limited to a maximum distance of 40 km.

FICON™ (1.0625 Gbps and 2.125 Gbps) – A higher-speed evolution of ESCON™, enabling 1 Gbps connectivity among mainframes, storage devices and peripherals. FICON™ is limited to a maximum distance of 100 km and actual data throughput is distance sensitive. 1.0625 Gbps service is offered as a riding circuit where facilities and equipment permit. 1.0625 Gbps service is capable of being multiplexed on the GigE/FC/FICON™ Sub-Rate System.

ISC-1™ (1.0625 Gbps) – Inter-System Coupling. This protocol is used with IBM GDPS™ architecture for multiple-location host processors. ISC™ is limited to a maximum distance of 40 km.

ISC-3™ (2.125 Gbps) – Inter-System Channel. ISC-3™ links have a peak data rate of 2.125 Gbps and can interconnect IBM™ eServer z900 systems for distances up to 10 km.

*Other Protocols:*

Fibre Channel (FC) (1.0625 Gbps and 2.125 Gbps) – an industry standard protocol used to interconnect Storage Area Networks (SANs). Fibre Channel is limited to a maximum distance of 100 km and actual data throughput is distance sensitive. 1.0625 Gbps service is offered as a riding circuit where facilities and equipment permit. 1.0625 Gbps service is capable of being multiplexed on the GigE/FC/FICON™ Sub-Rate System.

Fast Ethernet – a version of Ethernet that allows data transmission rates of 100 Mbps. Offered as a riding circuit where facilities and equipment permit.

Gigabit Ethernet (GigE) – a version of Ethernet that allows data transmission rates of 1 Gbps. Gigabit Ethernet is offered as a riding circuit where facilities and equipment permit.

10 Gigabit Ethernet (WAN-PHY) – a version of Ethernet that allows data transmission rates of 9.953 Gbps with a WAN-PHY only interface.

10 Gigabit Ethernet (LAN-PHY) – a version of Ethernet that allows data transmission rates of 10.3125 Gbps with a LAN-PHY only interface.

<sup>/1/</sup> ESCON™, ETR™, FICON™, ISC-1™, ISC-3™ and GDPS™ are registered trademarks of the International Business Machines (IBM) Corporation, Armonk, NY 10504

**MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)****A. Description (cont'd)***Other Protocols: (cont'd)*

D1 Video – uncompressed digital video signal operating at 270 Mbps. Offered as a riding circuit where facilities and equipment permit.

DVB-ASI Video – Digital Video Broadcasting – provides a 1310 nm optical interface at 270 Mbps. Offered as a riding circuit where facilities and equipment permit.

SONET OC-3/OC-3c - provides a fiber-based 155.52 Mbps synchronous optical full duplex data transmission capability. Offered as a riding circuit where facilities and equipment permit.<sup>/1/</sup>

SONET OC-12/OC-12c - provides a fiber-based 622.08 Mbps synchronous optical full duplex data transmission capability. Offered as a riding circuit where facilities and equipment permit.<sup>/1/</sup>

SONET OC-48/OC-48c - provides a fiber-based 2488.32 Mbps synchronous optical full duplex data transmission capability. Offered as a riding circuit where facilities and equipment permit beginning November 30, 2005.<sup>/1/</sup>

SONET OC-192/OC-192c - provides a fiber-based 9953.28 Mbps synchronous optical full duplex data transmission capability.<sup>/1/</sup>

/1/ These port interfaces are available at both the Customer Premises Node and the Central Office Node. All other port interfaces are available only at the Customer Premises Node.

**MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)****B. Definitions**

**Bulk Power** - Provides for customer premises node power which will be required if the customer's power source is AC.

**Central Office Node** - Provides for the termination of service at a serving wire center.

**Channel Mileage** - Provides for the transmission facilities between the serving wire centers associated with the Central Office Nodes and Customer Premises Nodes.

**Channel Protection (Optional)** - Provides protection for a single channel toward the network. It does not protect the channel against failure towards the customer interface. Protection reduces the maximum individual channel capacity of the system.

**Customer Premises Node** - Provides for the termination of service at the customer's premises and presents the various selected ports to the customer.

**Optical Amplifier** - Provides for an optical signal boost if the distance between nodes exceeds the transmission loss parameters (link loss specific). Engineering considerations may dictate the need for more than one optical amplifier on a circuit route. These additions may be service affecting. Optical amplifiers may be located at a Customer Premise node, a Central Office Node, or at a serving wire center.

**Port** - Provides the channel interface at any Node location for each unprotected or protected channel.

**Regenerator** - Provides for re-timing, re-shaping and regeneration of signals if degradation exceeds the dispersion or optical amplifier noise limits. Provided on a per shelf basis for up to 2.5 Gigabit Ethernet service. Provided on a per circuit, per each location the circuit is regenerated basis, for up to 10 Gigabit Ethernet service.

**Sub-Rate System** - Allows for multiple ports, also called riding circuits, on a single wavelength.

**MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)****C. Regulations (cont'd)**

## 2. Provision of Service

- a. MON Ring Service is only available under a Term Payment Plan with a thirty-six month or sixty-month minimum service period for which rates and charges are applicable. When a service is discontinued prior to the expiration of the minimum period, termination charges are applicable for the remaining portion of the minimum period, whether the service is used or not, and will be based on the rates in effect for the service at the time of discontinuance. (See F. following).
- b. The customer-provided equipment must deliver the data signals for the MON Ring Service transport within the industry specification for the subscribed data services.
- c. MON Ring Service provides physical layer transport only. The Company assumes no responsibility for the signals generated by the customer, for the quality of or defects in such signals, for the reception of signals by the customer, or address signaling to the extent addressing is performed by the customer. Error detection and correction of data generated by the customer is the customer's responsibility.
- d. The service is considered interrupted when the customer reports a service disruption to the Company and the Company confirms that continuity of its service has been lost.
- e. MON Ring Service may have distance limitations based on the services carried and may require routing through wire centers (central offices) based on loss limits between nodes. Services with facility length limitations may not be available on some MON rings, or may not be available between some nodes on certain MON rings.
- f. Optical Amplifiers and/or Regenerators may have to be added to a MON Ring Service subsequent to the initial installation.
- g. When additional services are added, such installation may cause a service interruption to existing unprotected channels, or a protection switch on protected channels.
- h. Where conditions, equipment, and facilities permit, MON Ring Service will be offered in two configurations. Customers can purchase MON Ring with growth capacity up to 16 wavelengths or up to 32 wavelengths. The 32 wavelength system may, at the discretion of the Company, be built as two 16 wavelength systems sharing common fiber and some common equipment. Depending upon the configuration, conversion from a 16 wavelength MON Ring Service to a 32 wavelength MON Ring Service may not be available.
- i. MON Ring Service is provided at the option of the Company where facilities permit. If appropriate facilities are not available, Special Construction charges, as set forth in paragraph D.4 in Part 15, Section 1 of this Guidebook, may apply.
- j. Floor space for subsequent shelf growth at a Central Office Node beyond the initial installation will be provided where available, but cannot be guaranteed for subsequent shelf growth beyond the initial installation.

**MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)****C. Regulations (cont'd)**

## 2. Provision of Service (cont'd)

- k. Prior to confirming an order for service, the Company will provide a proposed route diagram to the customer.
- l. Installation of service will not begin until the customer has accepted the proposed routing by the Company.
- m. Services with time-delay sensitive protocols have facility length limitations and may affect the design/availability of MON Ring Service. (e.g., CPU to CPU communications have a maximum distance limitation of 60 km). The Company will work cooperatively with the customer to determine if the desired services can operate between the customer's designated premises.
- n. Channel protection may not be available for all interface types.
- o. Conversion from MON (point-to-point) Service to MON Ring Service is not available.
- p. Conversions from any other lower speed services to MON Ring Service are not available.
- q. Where conditions, equipment, and facilities apply, the customer must first order the MON Ring Transport System followed by the MON Ring Channels. When ordering riding services, the customer must first order the MON Ring Transport System, followed by the MON Ring Sub-Rate System over which these riding services will be assigned. When riding services are ordered on a Sub-Rate System, they are represented by different rate elements than those services ordered directly on the MON Ring.
- r. Neither electrical interfaces nor optical add/drop multiplexing are available with this service.
- s. OC-12/OC-12c, Gigabit Ethernet, Fibre Channel (1.0625 Gbps) and FICON™ (1.0625 Gbps) can be ordered directly on MON Ring, or as a riding service on a Sub-Rate System. Fibre Channel (2.125 Gbps) and FICON™ (2.125 Gbps) can only be ordered directly on MON Ring, and cannot be ordered on a Sub-Rate System. OC-12, Gigabit Ethernet, Fibre Channel (1.0625 Gbps) and FICON™ (1.0625 Gbps) when ordered on a Sub-Rate System, are represented by different rate elements than those ordered directly on the MON Ring.

**MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)**

**C. Regulations (cont'd)**

3. Allowance for Interruption

- a. A credit allowance will be given for interruptions of service. An interruption of service will start when an inoperative service is reported to the Company and end when the service is operative.
- b. Any protected service interruption of greater than 2 consecutive seconds as a result of a failure on the protected portion of the circuit will result in a credit equal to one month's bill for the individual port-to-port connections involved.
- c. If the interruption occurs on an unprotected portion of the circuit, normal terms and conditions for Credit Allowances as stated in paragraph D.8 in Part 15, Section 1 of this Guidebook will apply.
- d. In any month, as a result of an interruption, the total credit per rate element of the interrupted service may not exceed 100 percent of the monthly charge for that particular rate element.

**MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)****C. Regulations (cont'd)****4. Route Diversity**

- a. MON Ring Service is configured with diversely routed fiber whenever possible. MON Ring Service will be available for protected channels 99.999% of the time and protected channels will switch within 50 milliseconds (not to exceed 2 seconds). Equipment interfaces towards the customer are not protected. Unprotected channels will be lost in the event of a fiber path failure on which the circuit is assigned.
- b. Routing of fiber may be diversified from the customer's property line to their serving wire center or alternate serving wire center as determined by the Company, and where facilities are available, to ensure that loop fibers follow separate paths to the serving wire center or alternate serving wire center. Interoffice facility (IOF) fiber paths may be diversely routed between serving wire centers or alternate serving wire centers. In addition, IOF fiber (if applicable) paths may be diversified to ensure that with any serving wire center Central Office Node, the fibers do not egress and ingress at the same point. In cases, where the serving wire center does not have multiple entrance fiber facilities, the section of the fiber from the closest manhole (to the serving wire center) will be routed within the same duct structure.
- c. At the customer's request, additional protection to the Customer Premises Nodes can be provided via dual entrance facilities. This special request may cause the customer to incur special construction cost. Without this special request, diverse fiber is provided to the closest manhole to the customer location property line. The customer or building owner is responsible for providing conduit designed to meet industry standards and local fire and safety codes from the property line to the building to within the premises. The customer determines route and method of protection inside the premises.
- d. In the case where dual entrance facilities are not established at the customer premises, facilities routed within the same duct structure from the property line to the building equipment location are not diverse.

**D. Standard Configuration**

1. MON Ring Service is available in different ring configurations utilizing Central Office Nodes and Customer Premises Nodes. The total number of circuits and total usable bandwidth to the customer depends upon the mix of services ordered and the specific traffic patterns of the customer. The Company will determine the appropriate wavelength assignment and the design of the MON Ring.

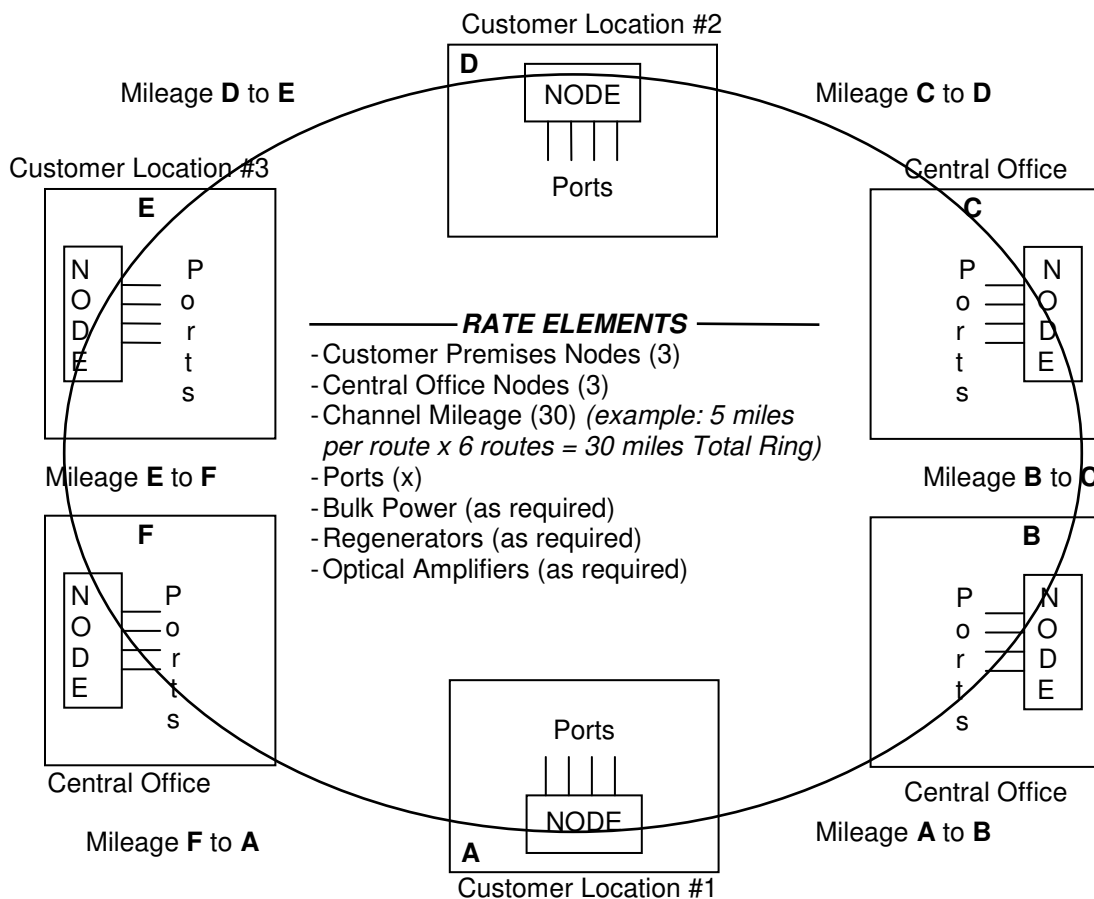
The minimum configuration would be two customer nodes either at a serving wire center or a customer premise site. If the customer nodes are not in a serving wire center, a central office management site for monitoring is required. An optical amplifier located at a serving wire center can be used as a monitoring site.

A combination of these configurations may be used in a network design depending on the customer's traffic pattern.



**MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)****D. Standard Configuration (cont'd)**

## 2. Diagram of MON Ring



**MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)****E. Technical Specifications**

The customer interfaces to MON Ring Service are as specified in:

<u>Subject</u>	<u>Technical Reference</u>
Ameritech LAN Interconnect Service - Token Ring Interface Specifications	AM TR-NIS-000100
Ameritech LAN Interconnect Service - CSMA/CD Interface Specifications	AM TR-NIS-000104
Ameritech OC-3, OC-12 and OC-48 Service Interface Specifications	AM-TR-NIS-000111
Ameritech Digital Service Transmission Parameters	AM-TR-TMO-000101
Ameritech Service's Network Channel and Network Channel Interface Codes	AM-TR-TMO-000080
Ameritech Technical Interface Specifications	AM-TR-NIS-000096
Ameritech Technical Interface Specifications (ESCON™)	AM-TR-NIS-000107
IBM Documentation (ESCON™)	IBM SA22-7202-XX
	IBM SA23-0394-XX
Fibre Channel (also includes FICON™ and ISC™)	ANSI X3.T9.3
Fast Ethernet	ANSI/IEEE 802.3
GigaBit Ethernet	IEEE 802.3x and z
D1 Video	IEEE 802.3ae
	ANSI/SMPTE 259M

The Technical References can be obtained from:

AT&T at  
[www.sbc.com/public\\_affairs/regulatory\\_documents/tariffs/1,5932,448,00.html?pid=240](http://www.sbc.com/public_affairs/regulatory_documents/tariffs/1,5932,448,00.html?pid=240)

The Telcordia Technologies Research Publication(s) can be obtained from:

Telcordia Technologies  
8 Corporate Place  
Piscataway, New Jersey 08854

**MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)****F. Rate Element Description**

There are eight basic rate elements which may apply to MON Ring Service:

- Customer Premises Node
  - Central Office Node
  - Channel Mileage
  - Optical Amplifier
  - Regenerators
  - Bulk Power
  - Ports
  - Nonrecurring Charges
1. Customer Premises Node – provides for the termination of service at the customer's premises and presents the various selected ports to the customer. Applies per customer-designated premises, per first shelf and subsequent shelves.
  2. Central Office Node - provides for the termination of service at a Company serving wire center. Applies per first shelf and subsequent shelves.
  3. Channel Mileage - provides for the transmission facilities between the serving wire centers of each node involved on the MON Ring. The mileage measurement is developed utilizing the V&H coordinate method as set forth in the National Exchange Carrier Association, Inc. (NECA) Wire Center Information Tariff, FCC 4. A one-mile minimum will be billed between nodes. A two-node ring configuration has a two-mile minimum, one mile from the Central Office Node to the Customer Premises Node, and one mile from the Customer Premises Node to the Central Office Node.
  4. Optical Amplifier - provides for an optical signal boost if the distance between nodes exceeds the transmission loss parameters (link loss specific). Additional optical amplifiers may be required per location with certain circuit configurations. Optical Amplifiers may be located at a Customer Premises Node, Central Office Node, or at a Serving Wire Center.
  5. Regenerator - provides for re-timing, re-shaping and regeneration of the signal level for up to 2.5 Gbps service (on a per shelf basis), or 10 Gbps Ethernet service (on a per circuit, per each location the circuit is regenerated basis), if degradation exceeds the dispersion and/or Optical Amplifier noise limits.
  6. Bulk Power - provides for customer premises node power which will be required if the customer's power source is AC. Applies once per each four shelves, with the first shelf and fifth subsequent shelf at each applicable Customer Premises Node.
  7. Port - provides for the channel interface at any node location for each unprotected or protected channel. Applies per port/per circuit terminating location.

**MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)****F. Rate Element Description (cont'd)**

## 8. Nonrecurring Charges

## a. General

Nonrecurring charges are one-time charges that apply for specific work activities (i.e., installation of new service, moves and rearrangements of installed services). There are three different nonrecurring charges: Administrative Charge, Design and Central Office Connection Charge and Customer Connection Charge. They are applied as follows:

The *Administrative Charge* applies any time a customer initiates an order for service. This charge applies once per service order.

The *Design and Central Office Connection Charge* applies to each service installed. This charge is applied once per each riding circuit.

The *Customer Connection Charge* applies to establish the MON Ring Network, and is charged per node. Subsequent installation charges apply to each subsequent shelf installed after the MON Ring network is established.

## b. Service Rearrangements

Service rearrangements are changes to existing (installed) services, which do not result in either a change in the minimum period requirements as set forth in C. 2.a. preceding or a change in the physical location of the point of termination at a customer premises.

Service rearrangements will be charged as follows:

1. If changing the customer of record, the Administrative Charge will apply. For the change of customer of record to be treated as a service rearrangement, the new customer must assume liability for both current and prior charges of the service.
2. For all other changes not requiring physical work at the central office, or customer premises, including a change in the customer assigned circuit identification or billing account number (when initiated by the customer); the Administrative Charge will apply.
3. For all other service rearrangements requiring physical work to be performed, the Administrative Charge will apply. Additionally, one Design and Central Office Connection Charge and/or one Customer Connection Charge will apply.

**MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)****F. Rate Element Description (cont'd)**

## 8. Nonrecurring Charges (cont'd)

## c. Cancellation of Application for Service

When an applicant cancels an order for service, other than those provided by Special Construction;

1. Prior to the issuance of an order, no charges apply.
2. After the issuance of an order, nonrecurring charges apply as follows:
  - Canceled before the Record Issue Date (RID), the Administrative Charge applies.
  - Canceled on or after the RID, but before the Plant Test Date (PTD), the Administrative Charge and the Design and Central Office Connection Charge apply.
  - Canceled on or after the PTD, the Administrative Charge, Design and Central Office Connection Charge and Customer Connection Charge apply.

When an applicant cancels an order for service involving Special Construction;

1. Prior to the issuance of an order, no charges apply.
2. After the issuance of an order, but prior to the start of construction, all nonrecurring charges associated with the design of the special construction and the Administrative Charge will apply.
3. After construction has begun:
  - If there is another requirement for the specially constructed facilities, the Administrative Charge, Design and Central Office Connection Charge, and the Customer Connection Charge will apply.
  - If there is no other use for the specially constructed facilities, a charge equal to all the costs incurred in the special construction (including overheads), less net salvage, applies in addition to the Administrative Charge, Design and Central Office Connection Charge, and the Customer Connection Charge.

**Note:** Installation or special construction of facilities for a customer starts when the Company incurs any expense in connection therewith which would not otherwise have been incurred and the customer has advised the Company to proceed with the installation or special construction.

**MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)****G. Rates and Charges**

<u>MON Ring Transport System</u>	<u>USOC</u>	<u>Monthly Rates</u>		<u>Monthly Extension</u>
		<u>3 Year</u>	<u>5 Year</u>	
1. Customer Premises Node				
- (includes first shelf).....	F2ND1	\$ 7,800.00	\$ 6,240.00	\$10,920.00
- per subsequent shelf .....	F2NDS	5,850.00	4,680.00	8,190.00
2. Central Office Node				
- (includes first shelf).....	F2NC1	7,800.00	6,240.00	10,920.00
- per subsequent shelf .....	F2NCS	5,850.00	4,680.00	8,190.00
3. Channel Mileage				
- per V-H mile or fraction thereof .....	1L5XX	325.00	260.00	455.00
4. Optical Amplifier (as required)				
- C band (per location).....	67QXX	5,400.00	3,600.00	7,600.00
- L band (per location) <sup>/1/</sup> .....	67QSX	5,400.00	3,600.00	7,600.00
5. Regenerator (as required)				
- up to 2.5 Gbps, per shelf).....	V8RXX	7,500.00	5,000.00	10,500.00
- up to 10 Gbps (per circuit, per location) .....	V8R2C	15,000.00	10,000.00	21,000.00
6. Bulk Power (as required)				
- per first shelf (shelves 1-4) .....	CBVDX	2,000.00	1,600.00	2,600.00
- per 5th subsequent shelf (shelves 5-8) .....	CBVDS	1,600.00	1,300.00	2,100.00

/1/ Available where facilities and equipment permit.

**MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)****G. Rates and Charges (cont'd)**

<u>MON Ring Channels</u>	<u>USOC</u>	<u>Monthly Rates</u>		<u>Monthly Extension</u>
		<u>3 Year</u>	<u>5 Year</u>	
7. Ports				
- per port/per circuit terminating location				
ETR/CLO™				
- unprotected channel .....	POYKW	\$975.00	\$750.00	\$1,400.00
FICON™ (1.0625 Gbps)				
- unprotected channel .....	POYMW	975.00	750.00	1,400.00
- protected channel .....	POYMP	1,950.00	1,500.00	2,800.00
FICON™ (2.125 Gbps)				
- unprotected channel .....	POYWW	1,700.00	1,300.00	2,400.00
- protected channel .....	POYWP	3,400.00	2,600.00	4,800.00
ISC-1™				
- unprotected channel .....	POYJW	3,250.00	1,250.00	4,600.00
- protected channel .....	POYJP	3,600.00	2,500.00	5,000.00
ISC-3™				
- unprotected channel .....	POY9W	3,750.00	2,500.00	5,000.00
- protected channel .....	POY9P	7,500.00	5,000.00	10,000.00
Fibre Channel (1.0625 Gbps)				
- unprotected channel .....	POYNW	1,200.00	900.00	1,700.00
- protected channel .....	POYNP	2,400.00	1,800.00	3,400.00
Fibre Channel (2.125 Gbps)				
- unprotected channel .....	POYYW	1,700.00	1,300.00	2,400.00
- protected channel .....	POYYP	3,400.00	2,600.00	4,800.00
Gigabit Ethernet				
- unprotected channel .....	POYLW	1,200.00	900.00	1,700.00
- protected channel .....	POYLP	2,400.00	1,800.00	3,400.00

**MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)****G. Rates and Charges (cont'd)**

<u>MON Ring Channels</u>	<u>USOC</u>	<u>Monthly Rates</u>		<u>Monthly Extension</u>
		<u>3 Year</u>	<u>5 Year</u>	
7. Ports (cont'd)				
- per port/per circuit terminating location				
10 Gigabit Ethernet (WAN PHY)				
- unprotected channel .....	POYTW	\$15,000.00	\$12,500.00	\$21,000.00
- protected channel .....	POYTP	20,000.00	16,700.00	28,000.00
10 Gigabit Ethernet (LAN-PHY)				
- unprotected channel .....	POYUW	15,375.00	12,815.00	21,525.00
- protected channel .....	POYUP	20,500.00	17,120.00	28,700.00
SONET OC-12/OC-12c				
- unprotected channel .....	POYFW	1,300.00	1,000.00	1,900.00
- protected channel .....	POYFP	2,600.00	2,000.00	3,700.00
SONET OC-48/OC-48c <sup>/1/</sup>				
- unprotected channel .....	POYGW	4,400.00	3,700.00	6,000.00
- protected channel .....	POYGP	6,600.00	5,560.00	9,000.00
SONET OC-192/OC-192c				
- unprotected channel .....	POYOW	15,000.00	12,500.00	21,000.00
- protected channel .....	POYOP	20,000.00	16,700.00	28,000.00

/1/ Available where facilities and equipment permit.



**MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)****G. Rates and Charges (cont'd)**

<u>MON Ring Channels</u>	<u>USOC</u>	<u>Monthly Rates</u>		<u>Monthly Extension</u>
		<u>3 Year</u>	<u>5 Year</u>	
7. Ports (cont'd)				
- per port/per circuit terminating location				
GigE/FC/FICON™ Sub-Rate System				
- unprotected channel.....	POY1W	\$ 875.00	\$ 700.00	\$1,140.00
- protected channel.....	POY1P	1,750.00	1,400.00	2,280.00
GigE Riding Circuit <sup>/1/</sup>				
- unprotected channel.....	POY4W	500.00	400.00	650.00
- protected channel.....	POY4P	1,000.00	800.00	1,300.00
Fibre Channel Riding Circuit (1.0625 Gbps) <sup>/1/</sup>				
- unprotected channel.....	POY6W	500.00	400.00	650.00
- protected channel.....	POY6P	1,000.00	800.00	1,300.00
FICON™ Riding Circuit (1.0625 Gbps) <sup>/1/</sup>				
- unprotected channel.....	POY7W	400.00	320.00	480.00
- protected channel.....	POY7P	800.00	640.00	960.00

/1/ Available only when ordered with GigE/FC/FICON™ Sub-Rate System.

**MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)****G. Rates and Charges (cont'd)**

<u>MON Ring Channels</u>	<u>USOC</u>	<u>Monthly Rates</u>		<u>Monthly Extension</u>
		<u>3 Year</u>	<u>5 Year</u>	
7. Ports (cont'd)				
- per port/per circuit terminating location				
ESCON <sup>TM/1/</sup>				
- unprotected channel.....	PWY1W	\$1,300.00	\$1,000.00	\$1,900.00
- protected channel.....	PWY1P	2,600.00	2,000.00	3,700.00
Fast Ethernet <sup>/1/</sup>				
- unprotected channel.....	PWY2W	1,300.00	1,000.00	1,900.00
- protected channel.....	PWY2P	2,600.00	2,000.00	3,700.00
D1 Video <sup>/1/</sup>				
- unprotected channel.....	PWY3W	1,300.00	1,000.00	1,900.00
- protected channel.....	PWY3P	2,600.00	2,000.00	3,700.00
DVB-ASI Video <sup>/1/</sup>				
- unprotected channel.....	POY8W	2,100.00	1,650.00	3,075.00
- protected channel.....	POY8P	4,200.00	3,300.00	5,775.00
SONET OC-3/OC-3c <sup>/1/</sup>				
- unprotected channel.....	PWY4W	1,300.00	1,000.00	1,900.00
- protected channel.....	PWY4P	2,600.00	2,000.00	3,700.00
SONET OC-48 Sub-Rate System <sup>/1/</sup>				
- unprotected channel.....	POYRW	3,500.00	2,750.00	4,250.00
- protected channel.....	POYRP	7,000.00	5,500.00	8,500.00
SONET OC-48/OC-48c Riding Circuit <sup>/1/,/2/</sup>				
- unprotected channel.....	POYZW	1,900.00	1,200.00	2,800.00
- protected channel.....	POYZP	3,800.00	2,400.00	5,600.00

/1/ Available where facilities and equipment permit beginning November 30, 2005.

/2/ Available only when ordered with OC-48 Sub-Rate System beginning November 30, 2005.

**MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)****G. Rates and Charges (cont'd)**

<u>MON Ring Channels</u>	<u>USOC</u>	<u>Monthly Rates</u>		<u>Monthly Extension</u>
		<u>3 Year</u>	<u>5 Year</u>	
7. Ports (cont'd)				
- per port/per circuit terminating location				
Sub-Rate System <sup>/1/</sup>				
- unprotected channel.....	POYSW	\$1,300.00	\$1,000.00	\$1,900.00
- protected channel.....	POYSP	2,600.00	2,000.00	3,700.00
ESCON <sup>TM</sup> Riding Circuit <sup>/1/,/2/,/3/</sup>				
- unprotected channel.....	POYHW	100.00	100.00	150.00
- protected channel.....	POYHP	100.00	100.00	150.00
Fast Ethernet Riding Circuit <sup>/1/,/2/</sup>				
- unprotected channel.....	POYCW	325.00	250.00	400.00
- protected channel.....	POYCP	500.00	400.00	650.00
D1 Video Riding Circuit <sup>/1/,/2/</sup>				
- unprotected channel.....	POYVW	100.00	100.00	150.00
- protected channel.....	POYVP	100.00	100.00	150.00
DVB-ASI Video Riding Circuit <sup>/1/,/2/</sup>				
- unprotected channel.....	PWY5W	100.00	100.00	100.00
- protected channel.....	PWY5P	100.00	100.00	100.00
SONET OC-3/OC-3c Riding Circuit <sup>/1/,/2/,/4/</sup>				
- unprotected channel.....	POYEW	100.00	100.00	150.00
- protected channel.....	POYEP	100.00	100.00	150.00

/1/ Available where facilities and equipment permit.

/2/ Available only when ordered with Sub-Rate System.

/3/ Also available with ESCON<sup>TM</sup> Sub-Rate System.

/4/ Also available with SONET OC-3/OC-12 Sub-Rate System.

**MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)****G. Rates and Charges (cont'd)**

<u>MON Ring Channels</u>	<u>USOC</u>	<u>Monthly Rates</u>		<u>Monthly Extension</u>
		<u>3 Year</u>	<u>5 Year</u>	
7. Ports (cont'd)				
- per port/per circuit terminating location				
ESCON <sup>TM</sup> Sub-Rate System <sup>/1/</sup>				
- unprotected channel .....	POY2W	\$1,500.00	\$1,125.00	\$1,950.00
- protected channel .....	POY2P	3,000.00	2,250.00	3,900.00
OC-3/OC-12 Sub-Rate System <sup>/1/</sup>				
- unprotected channel .....	POY3W	1,000.00	750.00	1,300.00
- protected channel .....	POY3P	2,000.00	1,500.00	2,600.00
OC-12/OC-12c Riding Circuit <sup>/1/,/2/</sup>				
- unprotected channel .....	POY5W	500.00	375.00	700.00
- protected channel .....	POY5P	1,000.00	750.00	1,400.00

/1/ Available where facilities and equipment permit.

/2/ Available only when ordered with OC-3/OC-12 Sub-Rate System.

**MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)****G. Rates and Charges (cont'd)**

<u>Nonrecurring Charges</u>	<u>USOC</u>	<u>Nonrecurring Charge</u>
8. Nonrecurring Charges		
a. Administrative Charge		
- per service order.....	ORCMX	\$125.00
b. Design and Central Office Connection Charge		
- per circuit .....	NRBCL	600.00
c. Customer Connection Charge		
1. Service Establishment		
- per node .....	NRBBL	7,500.00
2. Subsequent Installation		
- per subsequent shelf .....	NHCNL	1,000.00

**MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)****G. Rates and Charges (cont'd)**

## 9. Term Pricing Plan

- a. MON Ring Service Term Pricing Plan (TPP) provides the customer with discounted rates. The TPP provides for three or five year rates. During the length of the selected TPP, monthly prices for service ordered under the plan would automatically change (increase or decrease) as Company-initiated price changes become effective. However, under no circumstances will any price change cause the monthly price for the service to exceed the price that was in effect at the beginning of the selected TPP term. The Company will notify customers participating in a TPP when monthly rates are decreased.
- b. The customer may choose to terminate an existing TPP before the end of the three or five year period and negotiate a new TPP. The new TPP will be based upon the rates that are currently in effect and available to all customers, and must be of equal or greater duration than the existing TPP.
- c. If during the duration of the TPP, the customer wishes to rearrange or move a Customer Premises Node, a termination charge will apply.
- d. If the customer elects not to renew the TPP, or does not notify the Company of the customer's intent to renew the TPP, the customer's service will automatically be billed under the monthly extension rates in effect at the time the TPP expires.
- e. If a customer cancels a Service Order or terminates service before the completion of the term for any reason whatsoever other than as a result of a re-negotiation, the customer agrees to pay the Company termination liability charges, which are defined below. These charges shall become due and owing as of the effective date of the cancellation or termination and be payable within the period set forth in 'Rules and Regulations Applying to All Customers' Contracts' in Part 2, Section 2. Payment of the termination charge does not release the customer from other previous amounts owed to the Company.
- f. After the expiration of 25 months of a 3 year TPP term or 42 months of a 5 year TPP term, any MON Ring components added to the existing service configuration provided under that TPP will be billed under the monthly extension rates.
- g. Customer termination liability for cancellation of a MON Ring Service shall be equal to:
  - Any unpaid Special Construction or nonrecurring charges (excluding any waived charges); plus
  - Fifty (50) percent of all recurring charges for the remaining months of the customer's term.

For purposes of applying termination charges, all rate elements making up a MON Ring service are subject to termination charges.

**MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)****G. Rates and Charges (cont'd)****10. Customer Specific Pricing (CSP)**

CSP is available to customers who subscribe to a 3 year or greater service contract. Each contract may contain rates and charges, and terms and conditions specific to that customer's needs. However, the discounted rates and charges shall be set above the Long Run Incremental Cost (LRIC) floor and the price ceiling for the service.

The rates and charges established will apply for the duration of the contract period. All MON Ring Services covered by the contract must be in-service within 3 months of the order date. An existing MON Ring Service customer may elect to transfer their existing MON Ring Service service(s) to a CSP contract established upon ordering a new MON Ring Service for a term equal to or greater than 3 years. Such a transfer will not incur termination liability; however, the CSP contract must be for a term of equal or greater duration to the number of months remaining on the original Term Pricing Plan (TPP).

Once the customer has notified the Company of their intent to renew their CSP contract, the Company will negotiate a new CSP contract with the customer. If the customer elects not to renew the CSP contract, or does not notify the Company of the customer's intent to renew the CSP contract, the service will automatically be billed under the monthly extension rates in effect at the time the CSP contract expires.

During the term of the CSP contract, additional service elements may be added to the contract, and the contract will specify the terms and conditions or such additions.

**VOICE GRADE SERVICE - SERIES 300 AND 400****A. Special Bridging Service<sup>/1/</sup>****1. Split Band Bridging Arrangement****a. Description of Service**

This service provides for a four wire frequency split common port and two wire multiple port bridging arrangement intended for application in multi-point voice frequency, data or tone signaling networks.

**b. Application**

Regulations applicable to Split Band Bridging Arrangements, except as otherwise specified below, are in addition to the regulations contained in other sections of this Guidebook.

**c. Regulations**

1. Split Band Bridging Arrangements are provided on voice grade service with a transmission rate normally suitable for 75 baud, but can be utilized with equipment operating at rates up to a maximum of 400 baud.
2. A maximum of three serving offices each equipped with a Split Band Bridge is permitted on a multi-point network.
3. A maximum of 144 remote stations is permitted on a multi-point network.
4. Remote stations connected to a Split Band Bridge shall be in the same serving office area or contiguous serving office area of the same exchange in which the Split Band Bridge is located.
5. Access from the Master Station to the Split Band Bridge is obtained through a Master Station Channel as provided in A.1.d.2, following. Interoffice and/or interexchange channels and channel terminals are required when appropriate between Split Bank Bridges and Between the Master Station serving office and the Split Bank Bridge as provided in A.1.d.2, following.
6. A voice grade bridging charge (BQ7) applies per Split Band Bridge and Master Station, when more than one Split Band Bridge is provided.

<sup>/1/</sup> Obsolete – applicable to existing installations at existing locations for existing customers until March 1, 2004 when Special Bridging Service will be completely withdrawn. The Company will waive all nonrecurring charges associated with any new Series 400 Service for customers who order and install a conversion from the current Special Bridging Service to Series 400 Service.



**VOICE GRADE SERVICE - SERIES 300 AND 400 (cont'd)**A. Special Bridging Service<sup>/1/</sup> (cont'd)

## 1. Split Band Bridging Arrangement (cont'd)

## c. Regulations (cont'd)

## 7. Transmission parameters and specifications for Split Band Bridging are:

- (a) This service will be designed for an end-to-end net loss of 16 dB at 1004 Hz
- (b) The 1004 Hz long-term variation from the design loss will be less than  $\pm 5$  dB
- (c) The frequency response between 500 and 2800 Hz will be: -4 to +14 dB (relative to the 1004 Hz loss)
- (d) These requirements are specified for the total channel service offering and do not include losses or gains present in customer-provided equipment
- (e) Transmission parameters and specifications as specified in Part 15, Section 2, paragraph C. for Voice Grade Service – Series 300 and 400 Channels are not applicable

## 8. Additional points of termination are not provided with Special Bridging service.

## d. Rates

	<u>USOC</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
1. Special bridge and common equipment for: <sup>/2/</sup>			
Maximum of 48 remote stations .....	BMC48	\$45.00	---
Maximum of 95 remote stations .....	BMC95	67.50	---

/1/ Obsolete – applicable to existing installations at existing locations for existing customers until March 1, 2004 when Special Bridging Service will be completely withdrawn. The Company will waive all nonrecurring charges associated with any new Series 400 Service for customers who order and install a conversion from the current Special Bridging Service to Series 400 Service.

/2/ Customer must specify transmit and receive frequency of Master Station.

**VOICE GRADE SERVICE - SERIES 300 AND 400 (cont'd)**A. Special Bridging Service<sup>/1/</sup> (cont'd)

## 1. Split Band Bridging Arrangement (cont'd)

## d. Rates (cont'd)

	<u>USOC</u>	<u>Monthly Rate</u>		<u>Nonrecurring Charge</u>
		<u>Intraexchange</u>	<u>Interexchange</u>	
2. Access Lines				
Master Station				
Local Channel.....	1LM4Y	\$29.25	---	\$235.00
		---	\$33.65	265.00
Interoffice Mileage, (per V-H mile).....	1LMFS	11.50	16.60	---
Interoffice Channel Terminal .....	PMNNL	6.65	---	---
	PMNSS	---	4.60	---
Interexchange Channel Terminal .....	P1NY1	N/A	12.95	---
Remote Station				
Local Channel.....	1LM1Y	12.60	---	200.00
Interoffice Mileage, (per V-H mile).....	1LM1S	5.00	---	---
Interoffice Channel Terminal .....	OXN1L	8.65	---	---

/1/ Obsolete – applicable to existing installations at existing locations for existing customers until March 1, 2004 when Special Bridging Service will be completely withdrawn. The Company will waive all nonrecurring charges associated with any new Series 400 Service for customers who order and install a conversion from the current Special Bridging Service to Series 400 Service.

**VOICE GRADE SERVICE - SERIES 300 AND 400 (cont'd)****A. Special Bridging Service<sup>/1/</sup> (cont'd)****2. Passive Bridging Arrangement****a. Description of Service**

This service provides for a network of up to ten passive two-wire 10 port bridges. Each bridge is capable of connecting a combination of remote stations, interoffice channels or interbridge connections totaling nine to one master station, interconnect station, interoffice channel or interbridge connection. This service is intended for application in multi-point voice frequency, data or tone signaling networks.

**b. Application**

Regulations applicable to Passive Bridging Arrangements, except as otherwise specified below, are in addition to the regulations contained in other sections of this Guidebook.

**c. Regulations**

1. Passive Bridging Arrangements are provided on voice grade service with a transmission rate normally suitable for 75 baud, but can be utilized with equipment operating at rates up to a maximum of 400 baud.
2. A maximum of 10 serving offices each equipped with a Passive Bridge is permitted on a multi-point network.
3. A maximum of 90 remote stations is permitted on a multi-point network.
4. Remote stations connected to a Passive Bridge are limited to the same serving office area in which the Passive Bridge is located.
5. One Master or Interconnecting Station or an interoffice voice grade channel is required for each Passive Bridge except as provided for in 6. following.
  - (a) When an interoffice channel is used to connect Passive Bridges, voice grade interoffice and/or interexchange channels and channel terminals will apply.
  - (b) When an interoffice channel is used to connect Passive Bridges, mileage will be determined in the order that the Passive Bridges are connected.
6. When more than one passive bridge is provided on a multi-point service in the same serving office, an interbridge connection charge applies to each subsequent bridge provided. This arrangement cannot be provided if two-way transmission is required.

<sup>/1/</sup> Obsolete – applicable to existing installations at existing locations for existing customers until March 1, 2004 when Special Bridging Service will be completely withdrawn. The Company will waive all nonrecurring charges associated with any new Series 400 Service for customers who order and install a conversion from the current Special Bridging Service to Series 400 Service.

**VOICE GRADE SERVICE - SERIES 300 AND 400 (cont'd)**

A. Special Bridging Service<sup>/1/</sup> (cont'd)

2. Passive Bridging Arrangement (cont'd)

c. Regulations (cont'd)

7. All equipment located at a remote station required for connecting a Remote Station access line to an Interconnecting Station access line is to be provided by the customer.
8. Voice grade interoffice and/or interexchange channels and channel terminals are required, when appropriate, between the serving office of the Master Station and the Passive Bridge; and between the serving office of the Interconnecting station and the Passive Bridge, when appropriate.
9. Service can be provided under two circuit configurations as follows:
  - (a) Data collective system provides one-way transmission from Remote Stations to the Master Station and is designed to provide an end to end loss of 16 dB relative to 1000 Hz.
  - (b) Data polling system provides two-way transmission between the Master or Interconnecting Station and Remote Stations and is designed to provide an end to end loss of 38 dB relative to 1000 Hz.
10. Transmission Parameters and Specifications as specified in Part 15, Section 2, paragraph C. for Voice Grade Service – Series 300 and 400 Channels are not guaranteed for this service.
11. Additional points of termination are not provided with Special Bridging Service.

<sup>/1/</sup> Obsolete – applicable to existing installations at existing locations for existing customers until March 1, 2004 when Special Bridging Service will be completely withdrawn. The Company will waive all nonrecurring charges associated with any new Series 400 Service for customers who order and install a conversion from the current Special Bridging Service to Series 400 Service.

**VOICE GRADE SERVICE - SERIES 300 AND 400 (cont'd)**A. Special Bridging Service<sup>/1/</sup> (cont'd)

## 2. Passive Bridging Arrangement (cont'd)

## d. Rates

	<u>USOC</u>	<u>Monthly Rate</u>		<u>Nonrecurring Charge</u>
		<u>Intraexchange</u>	<u>Interexchange</u>	
1. Access Lines				
Master Station				
Local Channel.....	1LM3Y	\$ 5.20	\$16.50	\$200.00
Interconnecting Station				
Local Channel.....	1LM2Y	5.20	16.50	200.00
Interoffice Mileage, (per V-H mile).....	1LMFS	11.50	16.60	---
Interoffice Channel				
Terminal .....	PMNML	3.15	---	---
	PMNSS	---	4.60	---
Interexchange Mileage (per V-H mile)				
0-150 miles, each mile .	1LH24	N/A	2.10	---
Over 150 miles, each ...	1LH24	N/A	1.40	---
Interexchange Channel				
Terminal .....	P1NZ1	N/A	12.95	---

/1/ Obsolete – applicable to existing installations at existing locations for existing customers until March 1, 2004 when Special Bridging Service will be completely withdrawn. The Company will waive all nonrecurring charges associated with any new Series 400 Service for customers who order and install a conversion from the current Special Bridging Service to Series 400 Service.

**GIGAMAN® SERVICE**

/1/

Effective September 30, 2017, GigaMAN Service will no longer be available for purchase by new or existing customers. The Company will no longer accept orders for adds, moves, changes or new term plans for GigaMAN Service, and existing term plans may not be renewed, converted or extended. Following the expiration of a customer's existing GigaMAN term agreement, service will be provided on a month-to-month basis at the applicable monthly extension rates until the service is discontinued.

(N)

(N)

**A. Description**

/1/

GigaMAN (Gigabit Metro Area Network) Service is an intraLATA dedicated high capacity service limited to the transport of data signals between customer stations. GigaMAN provides for the transmission of data at a discrete bit rate of 1 Gigabit per second (Gbps) in Ethernet format (Ethernet IEEE 802.3). GigaMAN is available in a point to point (node-to-node) configuration.

GigaMAN Service can be used to seamlessly extend customer local area networks to off-site locations such as data centers, storage locations or satellite office locations within the same metro area. Applications that could be used with GigaMAN Service include LAN-to-LAN connectivity, CAD/CAM file transfer, telemedicine and business continuity transport.

**B. Regulations**

In addition to the regulations contained in this Guidebook, the following regulations apply to GigaMAN.

1. This service is only available to customers in those LATAs served by and within the service territories of the Company.
2. The services provided for GigaMAN are primarily designed to meet the private line communications requirements of business customers, i.e., non-interexchange carriers.
3. A service is interrupted when it becomes unusable to the customer because of a failure of a facility component used to furnish service under this Guidebook or in the event that the protective controls applied by the Company result in the complete loss of service by the customer. An interruption period starts when an inoperative service is reported to the Company and the Company confirms that continuity has been lost, and ends when the service is operative.

In case of an interruption to service, allowance for the period of interruption, if not due to the negligence of the customer or the customer's end user, shall be as follows: no credit shall be allowed for an interruption of less than 10 seconds. The customer shall be credited for an interruption of 10 seconds or more as follows: the credit shall be at the rate of 10/8640 of the monthly charges for the service for each period of 5 minutes or major fraction thereof that the interruption continues. The credit allowance(s) for service interruptions shall not exceed 100% of the applicable monthly rates.

The Company's failure to provide or maintain services under this Guidebook shall be excused by force majeure events such as, but not limited to, an earthquake, hurricane, flood, fire, storms, tornadoes, explosion, lightning, power surges or failure, fiber cuts, strikes or labor disputes, acts of war, civil disturbances, acts of civil or military authorities or public enemy, governmental orders, civil commotion, criminal actions taken against the Company, acts of God and other circumstances beyond the Company's reasonable control.

/1/

GigaMAN is a registered trademark of AT&T Knowledge Ventures

/1/ Material formerly appeared in Part 15, Section 4, Sheet 1.

**GIGAMAN® SERVICE (cont'd)**

/1/

**B. Regulations (cont'd)**

## 4. Protection Options

A Service Level Agreement (SLA) is offered with fully-protected GigaMAN Service, which provides the customer with a performance commitment that includes a service credit if the service does not perform as described. An SLA of 99.999% Service Availability performance is offered on a GigaMAN circuit with Protection (defined as Equipment Plus Fiber Path Protection for every segment of the circuit). Service Availability will be determined using unavailable seconds as defined in ANSI T1.503-2002 (see *Technical References* following).

- SLAs are applicable to customers who purchase Equipment Plus Fiber Path Protection with Alternate Wire Center Path Protection or Equipment Plus Fiber Path Protection with Local Channel Path Protection on both ends of a circuit (both local channels), as well as Inter-Wire Center Path Protection, when applicable.
- If this SLA is not met, or if there is any single event of unavailability of service of 10 seconds or more, the customer will be entitled to a credit equal to 100% of the monthly rate for the circuit. Only one such credit in a billing period will apply.
- In order to qualify for this credit, the event causing the unavailability must be determined by the Company to be in its network and the failure occurred in that part of the service with Protection.
- SLA adjustments are not available in the event of a cable cut in any unprotected portion of the GigaMAN Service fiber path or due to customer-requested modifications to the service that may require down time. Routine maintenance is not counted against unavailability.
- The customer is responsible for notifying the Company when the service parameter within the calendar month falls below the committed level.
- The customer must request a service credit within 25 calendar days after the unavailability event occurred.

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/1/ Material formerly appeared in Part 15, Section 4, Sheet 2.

**GIGAMAN® SERVICE (cont'd)**

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**C. Provision of Service**

1. The customer-provided equipment must deliver the data signals for GigaMAN transport within the industry specification for the subscribed data service. Interface specifications are as specified in the Technical Specifications Packages listed in Paragraph E.
2. GigaMAN provides physical layer transport only. The Company assumes no responsibility for the through transmission of signals by CPE, for the quality of or defects in such transmission, for the reception of signals by CPE, or address signaling to the extent addressing is performed by CPE. Error detection and correction of data generated by CPE is the customer's responsibility.
3. GigaMAN is designed to provide connectivity at the discrete bit rate of 1 Gbps. The service is considered interrupted when the customer reports to the Company and the Company confirms that continuity has been lost.
4. The provision of GigaMAN Service is subject to the availability and operational limitations of the equipment and associated facilities. In the event that suitable facilities are not available, or modifications to existing facilities are required, Special Construction charges may be applicable as set forth in Part 15, Section 1.
5. Repeaters (circuit regenerators) will be located in Company wire centers as required. A monthly charge will be associated with each repeater network element, except for the first repeater in a circuit path (as the first repeater is also used for service alarming and monitoring purposes).
6. Additional repeaters (circuit regenerators) may be required on the diverse or alternately routed path when Protection options are ordered by the customer. The need for repeaters on the protected path will be determined by the Company. Additional charges will apply.
7. If Protection Options are added to an existing GigaMAN circuit that was installed after January 19, 2004, a temporary service interruption will result as the new protected circuit must be re-designed and re-installed. Termination Charges will not apply for the circuit redesign (see *Term Pricing Plan* following for requirements). This installation must occur during an agreed-upon maintenance window between a designated customer representative and the Company. The customer will be responsible for providing adequate floor space, as determined by the Company, to accommodate additional equipment bays and related power protection equipment (such as batteries). Protection Options are contingent on availability of equipment and fiber facilities from premise to premise. Other Special Construction charges, as necessary, may apply.
8. Interoffice Channel Mileage charges are applicable on both paths of the GigaMAN Service when any of the Protection Options are ordered.

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/1/ Material formerly appeared in Part 15, Section 4, Sheet 3.



**GIGAMAN® SERVICE (cont'd)**

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**D. Channel Types**

1 Gbps GigaMAN channel: an intraLATA dedicated high capacity channel, limited to the transport of data signals between customer stations. GigaMAN provides for the transmission of data at a discrete bit rate of 1 Gigabit per second (Gbps) in Ethernet format (Ethernet IEEE 802.3).

**E. Technical Specifications Packages**

Technical specifications for GigaMAN Service are described in the following technical references:

Ethernet Standards for the SBC Local Exchange Companies	SBC-TP-76412-000
Network Performance Parameters for Dedicated Digital Services – Definitions and Measurements	ANSI T1.503-2002

The technical publication can be obtained from:

APEX Support Team  
(734) 523-7348

The ANSI publication can be obtained from:

Alliance for Telecommunications Industry Solutions  
1200 G. Street, NW Suite 500  
Washington, DC 20005

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/1/ Material formerly appeared in Part 15, Section 4, Sheet 4.

**GIGAMAN® SERVICE (cont'd)**

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**F. Service Components**

There are five basic rate elements, which may apply to GigaMAN service:

- Local Distribution Channel
- Interoffice Channel Mileage
- Repeater
- Diversity Options
- Protection Options

Local Distribution Channel (LDC)

The local distribution channel is the channel between a customer's premises and the Company serving wire center office that normally provides service to that customer's premises.

Interoffice Channel Mileage (ICM)

Interoffice channel mileage is defined as the component of the service between two Company serving wire center offices. The serving wire center offices may be located in the same exchange area, as in a multi-office metropolitan exchange, or may be located in different exchange areas.

Interoffice channel mileage charges include a fixed charge, and a per mile charge, which is based on the vertical and horizontal (V-H) distance between serving wire center offices measured in whole miles. Fractional miles are rounded to the next whole mile.

V-H coordinates for serving wire centers can be found in the National Exchange Carrier Association, Inc. (NECA) Wire Center Information Tariff.

Repeater (RPTR)

A repeater (circuit regenerator) may be used to extend the transmission of GigaMAN service when necessary. In addition, the first repeater in any multi-repeater circuit will be used for service alarming and monitoring purposes.

Diversity Options

Diversity Options are available where facilities exist. If appropriate facilities do not exist, Special Construction charges may apply. End-to-end diversity can be achieved by coupling Alternative Wire Center Diversity with Inter-Wire Center Diversity. Diversity Options are only available to customers with service installed after January 19, 2004. Route diversity options are described in detail below under *Service Configurations*.

Protection Options

Protection Options are available where facilities exist. If appropriate facilities do not exist, Special Construction charges may apply. Protection Options are only available to customers with service installed after January 19, 2004. In addition to charges for the various Protection Options, normal charges for the Local Distribution Channel and Interoffice Channel Mileage will apply. Protection Options provide additional levels of reliability to GigaMAN Service. There are multiple options for Protection at each end of a two point circuit. The options at each end do not need to be the same, but both ends must include some form of Protection, for any to be offered. A GigaMAN circuit cannot include Protection at only one end (excluding Power Protection which can be at just one end, or both ends, of the circuit).

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/1/ Material formerly appeared in Part 15, Section 4, Sheet 5.

**GIGAMAN® SERVICE (cont'd)**

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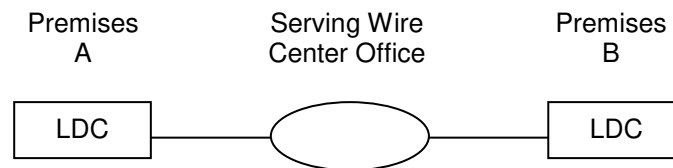
**G. Service Configurations**

All basic service configurations provide full duplex transmission. There is one basic type of GigaMAN Service configuration: Node-to-Node Service. GigaMAN services from a customer data hub location to multiple points, or multiple GigaMAN services between two customer data hub locations are merely aggregated node-to-node services.

Node-to-Node

A node-to-node configuration connects two customer designated premises either inter or intra wire center.

The following diagram depicts a node-to-node (intra-wire center) configuration connecting two customer-designated premises served from the same wire center office.

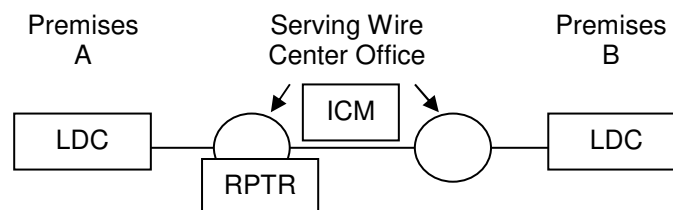


LDC - Local Distribution Channel

In this case, the applicable rate element is:

- Local Distribution Channels (two applicable)

The following diagram depicts a node-to-node (inter-wire center) configuration connecting two customer-designated premises with Serving Wire Center offices located "x" miles apart.



LDC - Local Distribution Channel  
ICM - Interoffice Channel Mileage  
RPTR - Repeater (where required)

In this case, applicable rate elements are:

- Local Distribution Channels (two applicable)
- Interoffice Channel Mileage Fixed (one applicable)
- Interoffice Channel Mileage Per Mile ("x" applicable)
- Repeater (where required)

/1/

/1/ Material formerly appeared in Part 15, Section 4, Sheet 6.

**GIGAMAN® SERVICE (cont'd)**

/1/

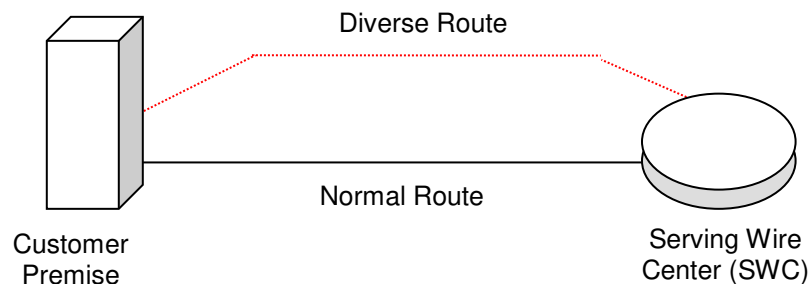
**G. Service Configurations (cont'd)**Diversity Options

Route diversity options are available where facilities exist. If appropriate facilities do not exist, Special Construction charges may apply.

GigaMAN offers three diversity options:

*Local Channel Diversity (LCD)*

Local Channel Diversity provides for a transmission path between a designated customer premise and the standard serving wire center (SWC) that is diverse from the normal/standard transmission path. Local Channel Diversity requires two eligible services purchased by (or for the benefit of) the same customer. The Company will determine which services are eligible based on technical or operational limitations. With this arrangement, one or more local distribution channels will be provisioned over the standard route and one or more local distribution channels will be provisioned over the diverse route. Local channel diversity does not provide for full diversity; it only allows for diversity from the splice point closest to the customer's property line to the SWC. If a customer desires full diversity, arrangements must be made for constructing dual entrance facilities into the customer's premise, at the customer's expense.



/1/

/1/ Material formerly appeared in Part 15, Section 4, Sheet 7.

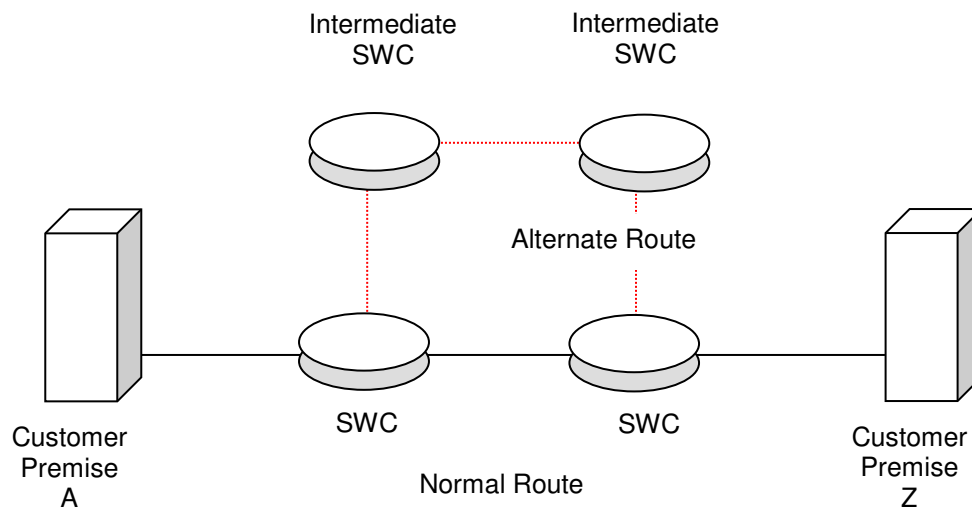
**GIGAMAN® SERVICE (cont'd)**

/1/

**G. Service Configurations (cont'd)**Diversity Options (cont'd)*Inter-Wire Center Diversity (IWCD)*

Inter-Wire Center Diversity arrangements presume that each end of a GigaMAN local distribution channel is served out of a different serving wire center (SWC). This arrangement provides a transmission path for GigaMAN local distribution channels between the customer's designated SWC and the serving wire center at the distant end of the circuit, over a transmission path that is separate from the standard transmission path between the two wire centers. Interoffice mileage will be calculated between the intermediate serving wire centers along the circuit path of the diversely routed GigaMAN Service. Inter-Wire Center Diversity requires two eligible services purchased by (or for the benefit of) the same customer. The Company will determine which services are eligible based on technical or operational limitations.

In this scenario, the customer may or may not already have a GigaMAN local distribution channel operating over the normal (or standard) inter-office route. Inter-wire center diversity does not provide for full diversity; it only offers interoffice diversity. If a customer desires full diversity, Alternate Wire Center Diversity must be implemented along with Inter-Wire Center Diversity. Additionally, arrangements must be made for constructing dual entrance facilities at the customer's premise, at the customer's expense.



/1/

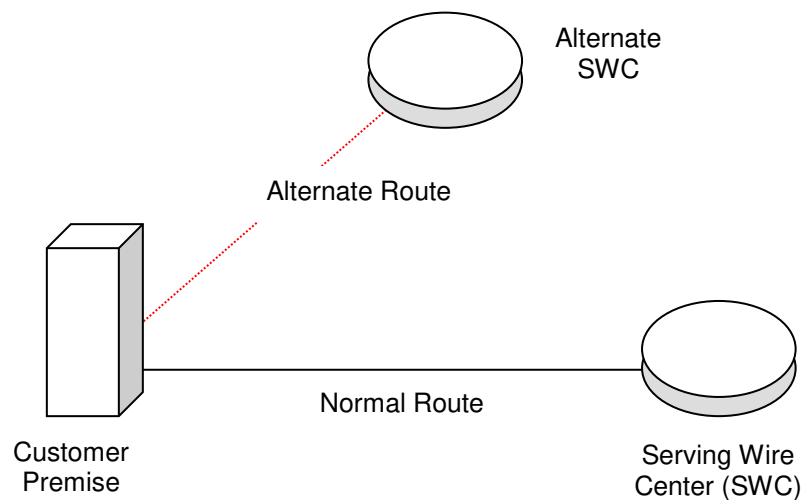
/1/ Material formerly appeared in Part 15, Section 4, Sheet 8.

**GIGAMAN® SERVICE (cont'd)**

/1/

**G. Service Configurations (cont'd)**Diversity Options (cont'd)*Alternate Wire Center Diversity (AWCD)*

Alternate Wire Center Diversity is for the local loop only. It provides a local channel transmission path for GigaMAN service between the customer's designated premises and a wire center that is not the normal (or standard) serving wire center. The Company will choose the alternate wire center closest to the customer's designated premise that is capable of providing GigaMAN Service over the alternate route. Alternate Wire Center Diversity does not require the purchase of two GigaMAN Services by (or for the benefit of) the same customer, nor does it require the customer to have an existing GigaMAN circuit operating over the normal (or standard) route to the normal (or standard) serving wire center. With this arrangement, one or more local distribution channels will be provisioned over the alternate route. If a customer desires full diversity, arrangements must be made for constructing dual entrance facilities into the customer's premise, at the customer's expense.



/1/

/1/ Material formerly appeared in Part 15, Section 4, Sheet 9.

**GIGAMAN® SERVICE (cont'd)**

/1/

**G. Service Configurations (cont'd)**Protection Options*Equipment Only Protection (EOP)*

Equipment Only Protection offers a network design where one GigaMAN signal will be routed down two different fiber pairs that co-exist in the same cable and conduit structure, and terminate at the customer's premise in the same device (but into separate and distinct modules). Protection switching will occur between the two modules if necessary. Should one fiber pair or network element become defective, service will be maintained through 50 millisecond protection switching within the network terminating equipment (NTE) at the customer's demarcation point. If both fiber pairs are cut, an Out Of Service condition will result. This form of protection can only be ordered per loop (per end) for each circuit the customer wishes to protect.

*Equipment Plus Fiber Path Protection*

Equipment Plus Fiber Path Protection offers varying degrees of path protection for each terminating end of the circuit. For circuits that are served by different wire centers, Equipment Plus Fiber Path Protection may be combined with Inter-Wire Center Path Protection, to ensure a fully-protected circuit.

Equipment Plus Fiber Path Protection, with ...

*Alternate Wire Center Path Protection (AWCPP)*

One GigaMAN (1 Gbps) signal will be routed over one fiber pair of the protected circuit from the customer's premise to the normal serving wire center, and a duplicate GigaMAN (1 Gbps) signal will be routed over a diversely routed fiber pair to the Alternate Wire Center selected by the Company. If any location between the fiber paths is closer than 10 feet, the location or locations will be disclosed to the customer. The customer will determine whether to accept the engineered path, or agree to pay Special Construction Charges to have a completely diverse route constructed in those instances where there is not a minimum separation of 10 feet between paths. The customer can also select Equipment Only Protection for an inter-office segment where facilities are not available. This option can be selected for one or both terminating ends. If an equipment failure or fiber cable cut occurs in a segment of the circuit that has this form of protection, the circuit will be switched to the alternate path in 50 milliseconds or less. If a customer desires full path diversity, arrangements must be made for constructing dual entrance facilities into the customer's premise, at the customer's expense.

/1/

/1/ Material formerly appeared in Part 15, Section 4, Sheet 10.

**GIGAMAN® SERVICE (cont'd)**

/2/

**G. Service Configurations (cont'd)**Protection Options (cont'd)*Equipment Plus Fiber Path Protection (cont'd)*

## Equipment Plus Fiber Path Protection, with ... (cont'd)

Local Channel Path Protection (LCPP)

The two fiber pairs of the protected service will be routed diversely to the normal serving wire center. If any location between the fiber paths is closer than 10 feet, the location or locations will be disclosed to the customer. The customer will determine whether to accept the engineered path, or agree to pay Special Construction Charges to have a completely diverse route constructed. This option can be selected for one or both terminating ends. If an equipment failure or fiber cable cut occurs in a segment of the circuit that has this form of protection, the circuit will be switched to the alternate path in 50 milliseconds or less. If a customer desires full path diversity, arrangements must be made for constructing dual entrance facilities into the customer's premise, at the customer's expense.

Inter-Wire Center Path Protection (IWCPP) <sup>/1/</sup>

Each fiber pair is routed through different Central Offices between the two serving wire centers, or between the standard serving wire center and an alternate serving wire center. Inter-Wire Center Protection begins at the first manhole out of the Central Office. If only the two serving wire centers are involved, the two fiber pairs will be routed down two fiber paths that are separated by at least 10 feet. If any location between the fiber paths is closer than 10 feet, the location or locations will be disclosed to the customer. The customer will determine whether to accept the engineered path, or agree to pay Special Construction Charges to have a completely diverse route constructed. The customer will receive Equipment Only Protection for an inter-office segment where facilities are not available. If an equipment failure or fiber cable cut occurs on one of the inter-office routes, the circuit will be switched to the alternate path in 50 milliseconds or less. Interoffice mileage will be calculated between the intermediate serving wire centers along the circuit paths of both protected fiber pairs.

Power Protection (PP)

Power Protection provides customers with battery back-up for up to eight (8) hours to maintain GigaMAN equipment in case of a power failure. Power Protection is provided on a per rack or cabinet basis, and customers in a multi-tenant building will require separate equipment and bays dedicated to each customer. Power Protection is not available for installations using a wall mounted cabinet. Requests for Power Protection are subject to equipment availability and compatibility. Upon receipt of a customer request for Power Protection, the Company will determine the availability, design and engineering requirements for Power Protection, and the appropriate number of service element charges to apply. Negotiated down time will apply to add Power Protection to existing GigaMAN Service.

/2/

/1/ Inter-Wire Center Path Protection must be ordered in conjunction with an Equipment Protection option at each end of the circuit.

/2/

/2/

/2/ Material formerly appeared in Part 15, Section 4, Sheet 11.



**GIGAMAN® SERVICE (cont'd)**

/3/

**H. Rates and Charges**

Nonrecurring Charges are one-time charges that apply for specific work activity related to the provisioning of GigaMAN Service.

<u>Description /USOC/</u>	<u>Nonrecurring Charge</u>
<b>Installation Charge<sup>/1/</sup></b>	
- per Local Distribution Channel	\$ 1,500.00
<b>Protection Options</b>	
Per terminating end	
- Equipment Only /CPAEX/	625.00
- Equipment Plus Fiber Path Protection, with ...	
Alternate Wire Center Path Protection /CPAFX/, or	1,400.00
Local Channel Path Protection /CPAGX/	1,225.00
Per rack or cabinet	
- Power Protection /VBBGX/	475.00
Per circuit	
- Inter-Wire Center Path Protection <sup>/2/</sup> /CPAHX/	625.00

/3/

/1/ The Installation Charge will be waived for those customers selecting the 36 or 60 month Term Pricing Plan (TPP) period for new service.

/3/

/2/ Inter-Wire Center Path Protection must be ordered in conjunction with an Equipment Protection option at each end of the circuit.

/3/

/3/ Material formerly appeared in Part 15, Section 4, Sheet 12.

**GIGAMAN® SERVICE (cont'd)****H. Rates and Charges (cont'd)**

Recurring Charges are flat recurring rates that apply each month or fraction thereof that the service is provided. Recurring rates may be applied only over a 12, 24, 36, or 60 month period under the terms and conditions of the Term Pricing Plan (TPP), described below. Upon completion of a TPP, a customer's service will automatically convert to the monthly rates unless the customer requests a new TPP. No customer shall purchase GigaMAN on a month-to-month basis prior to the completion of a TPP.

	<u>USOC</u>	<u>Monthly Extension Charge</u>	<u>12 Month</u>	<u>Term Pricing Plan Monthly Contract Charge</u>		
				<u>24 Month</u>	<u>36 Month</u>	<u>60 Month</u>
LDC	3LN5S	\$6,925.50(I)	\$3,300.00	\$3,100.00	\$2,850.00	\$2,500.00
ICM	1DA8X					
Fixed		455.63(I)	250.00	225.00	200.00	100.00
Per Mile		227.81(I)	125.00	115.00	100.00	75.00
RPTR	VU4	4,556.25(I)	2,400.00	1,700.00	1,150.00	850.00
Diversity						
LCD	CPALX	1,366.88(I)	750.00	750.00	750.00	750.00
IWCD	CPATX	911.25(I)	500.00	500.00	500.00	500.00
AWCD	CPAAX	2,187.00(I)	1,200.00	1,200.00	1,200.00	1,200.00
Protection						
EOP	CPAEX	2,733.75(I)	1,375.00	1,225.00	1,050.00	900.00
EP with						
AWCPP	CPAFX	4,483.35(I)	2,050.00	1,840.00	1,600.00	1,400.00
LCPP	CPAGX	3,991.28(I)	1,825.00	1,650.00	1,425.00	1,225.00
IWCPP <sup>/1/</sup>	CPAHX	865.69(I)	375.00	200.00	150.00	100.00
PP	VBBGX	1,275.75(I)	625.00	525.00	480.00	435.00

/1/ Inter-Wire Center Path Protection must be ordered in conjunction with an Equipment Protection option at each end of the circuit.

**GIGAMAN® SERVICE (cont'd)**

/1/

**I. Term Pricing Plan**

1. The Term Pricing Plan provides the customer with rate stabilization and discounted rates. The Term Pricing Plan provides for 12, 24, 36, or 60 months rate stabilization. Decreases in Term monthly recurring rates will be passed on to customers who participate in a Term Pricing Plan. The Company will notify customers participating in a Term Pricing Plan when Term monthly recurring rates are decreased.

Should the Company increase its rates during the Term Pricing Plan period, the customer would continue to pay the rates in effect at the time the customer elected to establish service under the Term Pricing Plan.

2. The customer may choose to terminate an existing Term Pricing Plan before the end of the 12, 24, 36, or 60 months period and negotiate a new 12, 24, 36, or 60 months Term Pricing Plan. The new Term Pricing Plan must be based upon the rates that are currently in effect and available to all customers.
3. The customer must provide the Company with a written notice of intent to renew a Term Pricing Plan no later than 90 days prior to its expiration. If the customer's intent to renew the Term Pricing Plan, the service will automatically be billed under the monthly extension rates in effect at the time that Term Pricing Plan expires. Subsequently, customers under the monthly extension rates may convert their existing service to either a 12, 24, 36, or 60 months Term Pricing Plan. Nonrecurring charges will be waived at the time of conversion.
4. Any special construction charges incurred for services billed under a Term Pricing Plan will be applicable as provided for in Section 1 of this Guidebook.
5. If the customer terminates the Term Pricing Plan agreement prior to the expiration of the 12, 24, 36, or 60-month service term, the customer shall pay a termination charge. Payment of the termination charge does not release the customer from other previous amounts owed to the Company. The termination charge shall be:
  - All unpaid nonrecurring charges (excluding any waived charges); plus
  - Fifty percent (50%) of all recurring charges for the remaining months of the customer's term

/1/

/1/ Material formerly appeared in Part 15, Section 4, Sheet 14.

**GIGAMAN® SERVICE (cont'd)**

/1/

**I. Term Pricing Plan (cont'd)**

6. Effective November 24, 2003, the Company migrated to a new equipment platform in support of GigaMAN Service. As of November 24, 2003, customers who request a conversion from the legacy GigaMAN platform to the new equipment platform will be allowed to do so under the following conditions:

- The customer must issue a disconnect order for their legacy GigaMAN Service and place a service order for GigaMAN Service using the new equipment platform. Termination Charges for the legacy service will be waived. Standard nonrecurring charges to install GigaMAN Service using the new equipment platform will apply.
- The term of the new contract must be equal to or greater than the remaining time left on the legacy GigaMAN contract.

Migration is contingent on availability of fiber from premise to premise. Other Special Construction charges, as necessary, may apply.

7. For circuits installed prior to January 19, 2004, a customer may move one Local Distribution Channel of a GigaMAN Service during their TPP term to another location in the same LATA and keep the TPP in force (without assessment of Termination Charges), provided no lapse in service occurs. Nonrecurring charges, as appropriate, will apply.
8. For circuits installed after January 19, 2004, customers will be permitted to move one end of a GigaMAN Service to another location, without incurring Termination Charges, given the following conditions are met:
- The customer must issue a disconnect order for the existing location and place a new service order for GigaMAN Service at the new location. Termination Charges for the existing location will be waived. Standard nonrecurring charges to install GigaMAN Service as a new circuit will apply.
  - Negotiated down time will apply, as the new circuit will need to be designed and installed.
  - The term of the new contract must be equal to or greater than the remaining time left on the existing GigaMAN contract.
  - The existing GigaMAN Service must have been in service for a minimum period of 12 months for a 2-year contract, 15 months for a 3-year contract or 18 months for a 5-year contract. Existing GigaMAN Service with 1-year contracts will not be eligible for this Moves option.

Moves are contingent on availability of fiber from premise to premise. Other Special Construction charges, as necessary, may apply.

/1/

/1/ Material formerly appeared in Part 15, Section 4, Sheet 15.

**GIGAMAN® SERVICE (cont'd)**

/1/

**I. Term Pricing Plan (cont'd)**

9. Customers will be permitted to add Protection Options to existing GigaMAN Service that was installed after January 19, 2004, without incurring Termination Charges, given the following conditions are met:
- The customer must issue a disconnect order for the existing circuit and place a service order for the newly protected circuit. Termination Charges for the existing circuit will be waived. Standard nonrecurring charges to install the newly protected GigaMAN Service will apply. The conditions described here do not apply to Power Protection added to an existing GigaMAN circuit.
  - Negotiated down time will apply, as the new circuit will need to be designed and installed.
  - The term of the new contract must be equal to or greater than the remaining time left on the existing GigaMAN contract. The conditions described here do not apply to Power Protection added to an existing GigaMAN circuit.
  - The existing GigaMAN Service must have been in service for a minimum period of 12 months for a 2-year contract, 15 months for a 3-year contract or 18 months for a 5-year contract. Existing GigaMAN Service with 1-year contracts will not be eligible for this option. The conditions described here do not apply to Power Protection added to an existing GigaMAN circuit.
- Addition of Protection Options are contingent on availability of equipment and fiber facilities from premise to premise. Other Special Construction charges, as necessary, may apply.
10. Customers re-negotiating an existing term payment plan contract expiring after January 19, 2004 will be required to migrate to the new equipment platform.

/1/

/1/ Material formerly appeared in Part 15, Section 4, Sheet 16.

**GIGAMAN® SERVICE (cont'd)**

/2/

**I. Term Pricing Plan (cont'd)**

11. Customers will be permitted to upgrade to a higher-speed service provided by the Company, without incurring Termination Charges, given the following conditions are met:

- an upgrade is considered an increase in speed or capacity when comparing GigaMAN Service to the new service.
- the customer must issue a disconnect order for the existing GigaMAN Service and place a service order for the new, higher-speed service, such that there is no more than 90 days overlap in service.
- the same customer locations must be utilized for the new, higher-speed service.
- the expiration date for the new, higher-speed service is beyond the end of the original TPP term associated with the existing GigaMAN Service.
- the existing GigaMAN Service must have been in service for a minimum period of 12 months for a 24-month contract, 15 months for a 36-month contract or 18 months for a 60-month contract. Existing GigaMAN Service with 12-month contracts will not be eligible for this Upgrade option.<sup>/1/</sup>

12. Migration to AT&T Dedicated Ethernet

Customers subscribing to GigaMAN Service may migrate to AT&T Dedicated Ethernet provided by the Company without incurring Termination Charges, subject to the following conditions:

- The new AT&T Dedicated Ethernet and the existing GigaMAN Service must be billed to the same customer of record at the same customer locations.
- The customer's existing service must have been in place for at least 12 months.
- The minimum term for the new service must be at least 12 months and must be equal to or greater than the number of months remaining in the customer's existing Term Payment Plan (TPP) term.
- The speed (capacity/bandwidth) of the new service must be equal to or greater than that of the existing service.
- The customer must issue a disconnect order for the replaced GigaMAN Service to be effective within 90 days after the AT&T Dedicated Ethernet installation date. The disconnect and new orders must be coordinated through the Company.
- If overlapping service is required, the period will be limited to not more than 90 days and billing will apply to both services during the time both services are available.

/2/

/1/ Minimum in-service periods required for Upgrades only apply for service installed after July 20, 2007. /2/

/2/ Material formerly appeared in Part 15, Section 4, Sheet 17.

**GIGAMAN® SERVICE (cont'd)**

/1/

**J. Customer Specific Pricing**

Discounted volume pricing is available to customers who subscribe to GigaMAN Service. The established rates and charges for these services will apply for the duration of the contract. Each customer's contract may contain conditions, rates and charges specific to that customer's needs; however, the discounted rates and charges shall be set above the Long Run Incremental Cost (LRIC) floor.

In order to qualify for the discounted volume price, all GigaMAN Services must terminate at the same customer's premises and be covered by a single contract. When the customer meets these eligibility requirements, the customer may elect to transfer existing GigaMAN services to a new Customer Specific Pricing contract.

Customers who have existing TPPs and who qualify for the discounted volume price may at any time convert to a Customer Specific Pricing contract without incurring any termination charges. The Customer Specific Pricing contract must be for a term of equal or greater duration to the number of months remaining on the original TPP.

During the term of the Customer Specific Pricing contract, additional service elements may be added to the contract, and the contract will specify the terms and conditions of such additions.

/1/

/1/ Material formerly appeared in Part 15, Section 4, Sheet 18.

**GENERAL**

/2/

## 1. Availability of Analog Private Line Services

(N)

Effective June 30, 2021, Analog Private Line Services will no longer be available for purchase by new or existing customers. In addition, requests to move, add, change, or renew existing service arrangements will not be accepted. Following the expiration of a customer's existing term agreement, service will be provided on a month-to-month basis at the applicable Monthly rates until the service is discontinued. The Company currently plans to discontinue these services on or after June 30, 2024.

The following services are covered by this *Availability* paragraph: Series 100 Channels, Series 200 Channels, Series 300 and 400 Channels, Local Area Data Service, Signaling Arrangements and Served Direct Service.

(N)

## 2. In addition to the regulations set forth in the regulations section of this Guidebook applicable to Private Line services, additional regulations are set forth throughout this section.

/2/ (C)

## 3. Channels are classified by series, and further classified within each series by types. The various series and types are described in terms of circuit characteristics and use.

(C)

## 4. The customer is responsible for the selection of the service, i.e., type of circuit, signaling options, jacks and terminating interfaces required to meet his needs. The customer-provided terminal equipment and station apparatus must be compatible with the service provided by the Company. The Company has overall responsibility for the Private Line service up to the network interface/demarcation point. Terms and conditions for the location of demarcation points are found in 'Rules and Regulations Applying to All Customers' Contracts' in Part 2, Section 2.

(C)

## 5. Exchange rates, rules and regulations apply for the exchange portion of the total service when Private Line services are used in connection with exchange services or are connected to exchange services or equipment.

(C)

6. When the number of Private Line services is such that cable facilities are required, such cable facilities may be provided especially for the customer's use and not as a part of the Company's general distributing plant, at charges based upon cost in lieu of guidebook charges, where to do so results in lower charges to the customer.<sup>/1/</sup>

(C)

When it is feasible to connect buildings by the use of channels obtained from a cable for which carrying charges are paid to the Company, the regular guidebook charges do not apply. The channel termination charge is as shown below. The channel termination provides for termination at the demarcation point and does not provide for inside wiring beyond this demarcation point.

	<u>USOC</u>	<u>Duplex Monthly Rate</u>	<u>Nonrecurring Charge</u>
Channel Termination	29G	\$2.15	\$37.00

/2/

/1/ This offering is obsolete and applicable only to existing installations at existing locations for existing customers. (Cannot add to, cannot outside move, cannot supersede.)

/2/

/2/ Material formerly appeared in Part 15, Section 2.



**SPECIAL SIGNALING SERVICE - SERIES 100**

/2/

**A. Channel Uses**

These channels are suitable for use with two-point or multi-point service subject to the number of point limitations indicated for each type and are provided for use with customer-provided power and signaling equipment and other special signaling services.

It is expressly declared that metallic interoffice facilities for this type of service are in continually decreasing supply and the Company is not obligated to continue to make such additional facilities available.

Those local channels used to provide a transmission path to connect customer-premises station equipment (CPE) at a premises are defined in terms of electrical interfaces. Interconnection protection criteria and regulations as described in Part 15, Section 1 shall apply.

The types of local channels offered for termination at a premises for termination in customer-premises terminal equipment and systems are as follows:

Type 101

Transmission Characteristics in C. following

Type 102

Transmission Characteristics in C. following

**B. Types of Channels**

Type 101 service is furnished on an intraexchange two- or three-point basis only.

Type 102 service is furnished on an intraexchange multi-point (minimum of four points, maximum of 26 points) basis. Type 102 service is provided on an interexchange two-point or multi-point (maximum of 26 points) basis.<sup>/1/</sup>

Service is restricted to no more than three serving offices, including the serving office of the central station.<sup>/1/</sup>

/2/

/1/ Not applicable to existing multi-point services with more than 26 points of termination or terminations in more than three serving offices installed prior to November 13, 1980. No additional or replacement of points of termination in excess of these limitations will be permitted.

/2/

|

/2/

/2/ Material formerly appeared in Part 15, Section 2.

**SPECIAL SIGNALING SERVICE - SERIES 100 (cont'd)****C. Transmission Characteristics**

Transmission characteristics of Types 101 and 102 are as follows:

1. Type 101 service has a two-wire interface with two-wire facilities suitable for use with direct current transmission (metallic continuity). Customers may order two two-wire services to achieve four-wire service.

Transmission specifications and limitations are described in the Bell System Technical Reference on the transmission specification for private line metallic circuits which include the following:

Current applied by CPE - AC and DC components per conductor, not to exceed .150 amperes rms.

Magnitude of the peak of the voltage between any conductor and ground - not to exceed 70.7 volts except continuous DC voltage not to exceed 135 volts.

2. Type 102 service has a two-wire interface with two-wire facilities suitable for low speed, undirectional series - operated signaling, and may be implemented by either metallic channels or by other means at the Company's option. If provided by "other means," the transmission specifications are described in a Bell System Technical Reference for low speed signaling channels.

**D. Rates - Intraexchange Series 100**

	<u>USOC</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
1. Local Channel, each, Per first termination on a premises <sup>/1/</sup>			
Type 101 .....	1LMCY, 1L3QY	\$6,053.00 (I)	\$130.00 <sup>/2/</sup>
Type 102 .....	1LMCY, 1L3QY	6,053.00 (I)	\$160.00 <sup>/2/</sup>

/1/ The application of rates for service within the same building applies for services between premises not more than one mile apart which are connected by an enclosed passageway as of November 13, 1980. This application of rates is restricted to existing service installations at existing locations for existing customers. Existing service installations refers to existing enclosed passageways connecting buildings on different premises as of November 13, 1980.

/2/ Additional charges may apply as outlined in paragraph G. 'Method of Applying Rates' in Part 15, Section 1.

**SPECIAL SIGNALING SERVICE - SERIES 100 (cont'd)**

/3/

**D. Rates - Intraexchange Series 100 (cont'd)**

	<u>USOC</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
2. Interoffice Channel, each V-H mile or fraction thereof, per channel			
Type 101 .....	1LMCS,1L3QS	\$6.30	---
Type 102 .....	1LMCS,1L3QS	5.50	---
3. Interoffice Channel Terminal per terminal, (two required per interoffice channel)			
Type 101 .....	OXNSL,OXNTL	---	---
Type 102 .....	OXNSL,OXNTL	3.40	---
4. Each additional point of termination of a local channel, different building, same premises per 1/10 mile <sup>/1/</sup>			
Type 101			
First 1/10 mile .....	1LMCK,1L3QK	3.40	\$55.00
Additional 1/10 mile .....		.70	---
Type 102			
First 1/10 mile .....	1LMCK,1L3QK	3.40	55.00
Additional 1/10 mile .....		.70	---
5. Each additional point of termination of a local channel in same building <sup>/1/</sup>			
Type 101 .....	1LMCA,1L3QA	1.10	55.00
Type 102 .....	1LMCA,1L3QA	1.10	55.00
6. Two-Point Service, different building same premises, each, per 1/10 mile <sup>/1/</sup>			
Type 101			
First 1/10 mile .....	1LMCE,1L3QE	4.40	69.00 <sup>/2/</sup>
Additional 1/10 mile .....		.70	---
7. Two-Point Service, same building <sup>/1/</sup>			
Type 101 .....	1LMCB,1L3QB	2.10	69.00 <sup>/2/</sup>
8. Each additional point of termination in same building for two-point service in 6 or 7, preceding <sup>/1/</sup>			
Type 101 .....	1LMCC,1L3QC	1.10	55.00

/3/

/1/ Obsolete - applicable to existing installations at existing locations, subject to maximum capacity of available facilities.

/3/

/2/ Nonrecurring charge applies to each point of termination.

/3/

/3/ Material formerly appeared in Part 15, Section 2.

**SPECIAL SIGNALING SERVICE - SERIES 100 (cont'd)****E. Rates - Interexchange Series 102**

	<u>USOC</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
1. Local Channel, each, per first termination on a premises Type 102 .....	1LMCY,1L3QY	\$6,053.00 (I)	\$210.00
2. Interoffice Channel, each V-H mile, or fraction thereof, per channel Type 102 .....	1LMCS,1L3QS	5.50	---
3. Interoffice Channel Terminal, per terminal (two required per interoffice channel) Type 102 .....	OXNSS,OXNTS	6.30	---
	<u>USOC</u>	Monthly Rate 1 to 150 miles <u>each mile</u>	Each additional <u>mile over 150</u>
4. Interexchange Channel, per V-H mile or fraction thereof, per channel Type 102 .....	1LMC4,1L3Q4	\$5.25	\$5.25
	<u>USOC</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
5. Interexchange Channel terminal, each (two required per interexchange channel) Type 102 .....	OXN2S,OXN3S	\$11.65	---
6. Each Additional point of termination of a local channel, different building, same premises, per 1/10 mile <sup>/1/</sup> Type 102 First 1/10 mile .....	1LMCK,1L3QK	3.40	\$75.00
Additional 1/10 mile .....		.70	---
7. Each additional point of termination of a local channel in the same building <sup>/1/</sup> Type 102 .....	1LMCA,1L3QA	1.10	75.00

/1/ Obsolete - applicable to existing installations at existing locations, subject to maximum capacity of available facilities.

**SUB-VOICE GRADE SERVICE - SERIES 200**

/2/

**A. Channel Uses**

Sub-Voice Grade service provides, and is designed for, transmission of low speed data at rates up to 75 and up to 150 baud within certain technical specifications. These channels are furnished for half duplex and duplex operation. The service is not suitable for the transmission of alternating current tones.

**B. Types of Channels and Transmission Characteristics**

The types of local channels and the transmission characteristics offered for termination at a premises for termination in customer-provided terminal equipment and systems are as follows:

Type 250

An interface engineered for binary signals at rates up to 75 baud,  $20 \pm 1$  or  $62.5 \pm 2.5$  milliamperes neutral signals<sup>/1/</sup>. The terminal equipment shall deliver no more than 8% telegraph distortion and shall be capable of processing received data signals with up to 35% telegraph distortion.

Type 251

EIA standard RS232C type interface engineered for binary signals at rates up to 150 baud and the terminal equipment shall deliver no more than 5% telegraph distortion and shall be capable of processing received data signals with up to 40% telegraph distortion.

Note that the specifications of channel signals refer to the requirement of the total service offering and not the individual local channel.

Type 250 and Type 251 channels are furnished for teletypewriter, data, supervisory control and miscellaneous signaling use.

/2/

/1/ The Company has the option of providing 20 or 62.5 milliamperes and will notify the customer of the current level to be supplied. The Company will supply the line voltage and provide for the current adjustment. The maximum open circuit voltage across the send data leads at the interface will not exceed 270 volts.

/2/

/2/ Material formerly appeared in Part 15, Section 2.

/2/

**SUB-VOICE GRADE SERVICE - SERIES 200 (cont'd)****C. Rates – Intraexchange**

		Half Duplex		Duplex		Nonrecurring
		<u>USOC</u>	<u>Monthly Rate</u>	<u>USOC</u>	<u>Monthly Rate</u>	<u>Charge</u>
1.	Local Channel, each Per first termination on premises <sup>1/</sup>					
	Type 250 .....	1L3AY 1LMFY 1LYDY	\$9,142.00 (I)	1LMDY 1LYKY	\$17,550.00 (I)	\$210.00
	Type 251 .....	1L3AY 1LMFY 1LYDY	9,142.00 (I)	1LMDY 1LYKY	17,550.00 (I)	210.00
2.	Interoffice Channel Each V-H mile or fraction thereof, per channel					
	Type 250 .....	1L3AS 1L6BS 1LMFS 1LYDS	1,570.00 (I)	1L3CS 1L6DS 1LMDS 1LYKS	4.25	---
	Type 251 .....	1L3AS 1L6BS 1LMFS 1LYDS	1,570.00 (I)	1L3CS 1L6DS 1LMDS 1LYKS	4.25	---
3.	Interoffice Channel Terminal Per terminal (two required for each interoffice channel)					
	Type 250 .....	O1N5L	6.50	O1N6L	6.50	---
	Type 251 .....	O1N5L	5.50	O1N6L	5.50	---

/1/ The application of rates for service within the same building applies for service between premises not more than one mile apart which are connected by an enclosed passageway as of November 13, 1980. This application of rates is restricted to existing service installations at existing locations for existing customers. Existing service installations refer to existing enclosed passageways connecting buildings on different premises as of November 13, 1980.

**SUB-VOICE GRADE SERVICE - SERIES 200 (cont'd)**

/4/

**C. Rates – Intraexchange (cont'd)**

		Half Duplex		Duplex		Nonrecurring Charge
		<u>USOC</u>	<u>Monthly Rate</u>	<u>USOC</u>	<u>Monthly Rate</u>	
4.	Each additional point of termination of a local channel, different building on the same premises, per 1/10 miles <sup>/1/,/2/</sup>					
	Type 250					
	First 1/10 mile .....	1LMFK	\$ 9.25	1LMDK	\$12.75	\$ 80.00
	Additional 1/10 mile .....		.70		.70	---
5.	Each additional point of termination of a local channel in same building <sup>/1/,/2/</sup>					
	Type 250 .....	M8X W1W	7.00			80.00
6.	Two-Point Service, different buildings, same premises, per 1/10 mile <sup>/2/</sup>					
	Type 250					
	First 1/10 mile .....	1L6BE 1LMFE	16.25	1LYKE 1LMDE 1L6DE	16.25	110.00 <sup>/3/</sup>
	Additional 1/10 mile .....		.70		.70	
	Type 251					
	First 1/10 mile .....	1L6BE	22.75	1LYKE 1L6DE 1LMDE	22.75	110.00 <sup>/3/</sup>
	Additional 1/10 mile .....		.70		.70	

/4/

/1/ Maximum of three terminations on the same premises for Type 250 and no additional termination of Type 251.

/4/

/2/ Obsolete - applicable to existing installations at existing locations, subject to maximum capacity of available facilities.

/3/ Nonrecurring charge applies to each point of termination.

/4/

/4/ Material formerly appeared in Part 15, Section 2.

**SUB-VOICE GRADE SERVICE - SERIES 200 (cont'd)****C. Rates – Intraexchange (cont'd)**

	Half Duplex USOC	Monthly Rate	Duplex USOC	Monthly Rate	Nonrecurring Charge
7. Two-Point Service, same building <sup>/1/</sup>					
Type 250 .....	1LYDB 1L3AB 1L6BB 1LMFB	\$14.00	1LYKB 1L6DB 1LMDB	\$14.00	\$110.00 <sup>/2/</sup>
Type 251 .....	1LYDB 1L3AB 1L6BB 1LMFB	20.50	1LYKB 1L6DB 1LMDB	20.50	110.00 <sup>/2/</sup>
8. Each additional point of termination in same building for two-point service in 6 or 7, preceding <sup>/1/,/3/</sup>					
Type 250 .....	J5Y	7.00	WAP DUX	7.00	80.00

**D. Rates – Interexchange**

1. Local Channel, each, per first termination on a premises					
Type 250.....	1L3AY 1LYDY 1LMFY	9,142.00 (I)	1L3CY 1LYKY 1LMDY	17,550.00 (I)	280.00
Type 251.....	1L3AY 1LYDY 1LMFY	9,142.00 (I)	1L3CY 1LYKY 1LMDY	17,550.00 (I)	280.00

/1/ Obsolete - applicable to existing installations at existing locations, subject to maximum capacity of available facilities.

/2/ Nonrecurring charge applies to each point of termination.

/3/ Maximum of three terminations on the same premises for Type 250 and no additional termination of Type 251.



**SUB-VOICE GRADE SERVICE - SERIES 200 (cont'd)**

/1/

**D. Rates – Interexchange (cont'd)**

	Half Duplex		Duplex		Nonrecurring Charge
	<u>USOC</u>	<u>Monthly Rate</u>	<u>USOC</u>	<u>Monthly Rate</u>	
2. Interoffice Channel, each, V-H mile, or fraction thereof, per channel					
Type 250 .....	1LYDS 1L3AS 1LMFS	\$3.00	1LYKS 1L3CS 1LMDS	\$4.00	---
Type 251 .....	1LYDS 1L3AS 1LMFS	3.00	1LYKS 1L3CS 1LMDS	4.00	---
3. Interoffice Channel Terminal, per terminal (two required for each interoffice channel)					
Type 250 .....	O1N5S	12.35	O1N6S	12.35	---
Type 251 .....	O1N5S	6.85	O1N6S	6.85	---
	<u>USOC</u>	<u>Half Duplex Monthly Rate</u> 0 to 150 miles Each mile	<u>Each add'l mile over 150 miles</u>	<u>Duplex Monthly Rate</u> 0 to 150 miles Each mile	<u>Each add'l mile over 150 miles</u>
4. Interexchange Channel, each V-H mile, or fraction thereof, per channel					
Type 250 .....	1LYK4 1L3C4 1LMD4 1L6D4	\$4.20	\$2.30	\$4.20	\$2.30
Type 251 .....	1LYK4 1L3C4 1LMD4 1L6D4	3.60	2.60	3.60	2.60

/1/

/1/ Material formerly appeared in Part 15, Section 2.

**SUB-VOICE GRADE SERVICE - SERIES 200 (cont'd)**

/3/

**D. Rates – Interexchange (cont'd)**

	Half Duplex		Duplex		Nonrecurring
	<u>USOC</u>	<u>Monthly Rate</u>	<u>USOC</u>	<u>Monthly Rate</u>	<u>Charge</u>
5. Interexchange Channel Terminal, per terminal (two required per interexchange channel)					
Type 250 .....	O1N2S	\$42.65	O1N3S	\$43.45	---
Type 251 .....	O1N2S	40.40	O1N3S	41.15	---
6. Each additional point of termination of a local channel, different building, same premises, each, per 1/10 mile <sup>/1/,2/</sup>					
Type 250					
First 1/10 Mile .....	1LMFK	9.25			\$115.00
Additional 1/10 Mile..		.70			---
7. Each additional point of termination of a local channel in same building <sup>/1/,2/</sup>					
Type 250 .....	M8X W1W	7.00			115.00

/3/

/1/ Maximum of three terminations on the same premises for Type 250 and no additional terminations for Type 251.

/3/

/2/ Obsolete - applicable to existing installations at existing locations, subject to maximum capacity of available facilities.

/3/

/3/ Material formerly appeared in Part 15, Section 2.

**VOICE GRADE SERVICE - SERIES 300 AND 400**

/2/

**A. Channel Uses**

Series 300 and 400 voice grade channels are furnished for half duplex (voice or data use) and duplex (data use) operations for oral communications, and data communications which operate within certain technical specifications. The channels maybe used as the customer elects within the technical specifications and guidelines specified. The channels are offered for termination at a premises for connection to customer-provided terminal equipment and systems as follows:

Type 314

Furnished for tie line use between a premises PBX (or similar) switching system and a Centrex (with switching equipment located on the Company premises) Type 314B; or between two Centrex's (with switching equipment located on the Company premises) Type 314C. The Type 314B channel provides for either a two-wire or four-wire interfaces at the customer's premises with effective four-wire facilities engineered to VNL Design specifications for tie line use.

Type 315

Furnished for voice transmission, in the same serving office as the primary service<sup>/1/</sup>, off-premises extension (non-PBX) and off-premises Centrex (with switching equipment located on the Company premises) station and/or extension station use. Provides a two-wire interface with two-wire facilities engineered for a maximum facility loss of 6db. Loop signaling arrangement is also provided with this service.

Type 322

Furnished for half duplex data transmission for an Automatic Identified Outward Dialing (AIOD) data channel. For use between a premises PBX (or similar) switching system and a serving office. Provides a two-wire interface with effective two-wire facilities engineered for a maximum facility loss of 13 dB.

Type 323

Furnished for use with Centrex (with switching equipment located on the Company premises) Data link consoles. For service between the premises control cabinet and the serving office.

/2/

/1/ For rates and charges applicable to foreign serving office service see paragraph H. following.

/2/

/2/ Material formerly appeared in Part 15, Section 2.

**VOICE GRADE SERVICE - SERIES 300 AND 400 (cont'd)**

/2/

**A. Channel Uses (cont'd)**Type 420

A four-wire interface with four-wire facilities engineered for 1000 Hz net loss of 16 dB. Normally suitable for use as a full duplex data channel.<sup>/1/</sup>

Type 422

A two-wire interface with effective two-wire facilities engineered for a 1000 Hz net loss of 16 dB. Normally suitable for use as a half duplex data channel.<sup>/1/</sup>

Type 423

A two-wire interface with effective two-wire facilities engineered for a 1000 Hz net loss of up to 10 dB for two-point service and up to 20 dB for multi-point service. Normally suitable for use as a voice channel.<sup>/1/</sup>

Type 424

A two-wire or four-wire interface with effective four-wire facilities engineered to VNL design specifications for tie line use. Normally suitable for use as a tie line between two premises PBXs (or similar) switching systems. Refer to 'Served Direct Service' found later in this Section for applicable signaling charges.

Type 425

A four-wire interface with four-wire facilities engineered for a 1000 Hz net loss of 16 dB. Normally suitable for use as a voice channel.

Type 428

A two-wire interface with two-wire facilities engineered for a 1000 Hz net loss of VNL+4 dB. Normally suitable for use as a main or extension station of a premises PBX (or similar) switching system. Additional signaling arrangements may be required, refer to 'Alternate Use of Private Line Service Channels' found later in this Section for charges.

Type 435

A two-wire interface with four-wire facilities engineered for a 1000 Hz net loss of 16 dB. Normally suitable for use as a multi-point voice channel where two-way communication is required.

Customers must insure that neither direct transmitted signal nor reflected signal energy is allowed to violate interconnection protection criteria and regulations as set forth in Part 15, Section 1 of this Guidebook.

Specifications of net loss (or gain) refers to the requirement of the total channel offering, not the individual local channel. Gains or losses present in customer-provided equipment have not been included.

/2/

/1/ Type 420 through Type 423 local channels are not suitable for, nor can they be used for, switching and/or tandem operations to the switched network or other private line services.

/2/

/2/

/2/ Material formerly appeared in Part 15, Section 2.

**VOICE GRADE SERVICE - SERIES 300 AND 400 (cont'd)**

/2/

**B. Options**

1. Signaling options required to arrange Series 400 channels for suitable signaling are available at charges found in 'Alternate Use of Private Line Service Channels' later in this Section.<sup>/1/</sup>
2. Bridging charges per channel bridged apply when three or more voice grade channels are connected at the same location. Bridging charges do not apply to Foreign Serving Office and Series 300 channels.

**C. Parameters and Specifications**

Parameters and Specifications for two-point service used with customer-provided equipment (described in A.) are as follows: Speech application specifications and limits apply to all local channels except Type 420 and 422. Data application specifications and limits apply only to Types 420 and 422.

Basic ParametersSpecification or Limit

Net Loss

The specifications of net loss or gain refer to the requirements of the total channel service offering, not the individual local or interoffice channel. Losses or gains present in customer-provided equipment have not been included.

DC Resistance

Local Channels used with customer-provided equipment - Limit as specified in Standard Bell System Design Practices and/or Technical References does not imply or guarantee end-to-end DC continuity

Frequency Error

 $\pm 5$  Hz

Frequency Response

300-3000 Hz, -3 dB to +12 dB  
500-2500 Hz, -2 dB to +8 dB  
("+" means more loss and "-" means less loss)

Envelope Delay Distortion

For Speech Application, not controlled  
For Data Applications:  
- less than 1000 micro-seconds, 1000-2400 Hz  
- less than 1750 micro-seconds, 800-2600 Hz

/2/

/1/ The application of signaling options currently provided to arrange Series 400 on premises, same building and additional point of termination services is obsolete--applicable to existing installations at existing locations - subject to maximum capacity of available facilities.

/2/

/2/ Material formerly appeared in Part 15, Section 2.

/2/

**VOICE GRADE SERVICE - SERIES 300 AND 400 (cont'd)**

/1/

**C. Parameters and Specifications (cont'd)**

<u>Basic Parameters</u>	<u>Specification or Limit</u>
-13 dBm0 1000 Hz	For Speech Application, 20 db
Test Signal to C-Notched Noise Ratio	For Data Application, 24 dB
Impulse Noise	For Speech Application, 90 counts in 15 minutes at a threshold of 1 dB below a -13 dBm0 rms 1000 Hz Test Signal  For Data Application, 15 counts in 15 minutes at a threshold of 6 dB below a -13 dBm0 rms 1000 Hz Test Signal
Phase Jitter	For Speech Application, 18 degrees peak to peak For Data Application, 10 degrees peak to peak
Non-Linear Distortion Signal to 2nd Order Distortion	For Speech Application, 20 dB For Data Application, 25 dB
Signal to 3rd Order Distortion	For Speech Application, 25 dB For Data Application, 30 dB

/1/

/1/ Material formerly appeared in Part 15, Section 2.

**VOICE GRADE SERVICE - SERIES 300 AND 400 (cont'd)**

/2/

**D. Multi-Point**

The Company will provide bridging equipment in serving offices and primary serving offices to provide multi-point service. Bridging charges apply per channel (interoffice channel, local channel and interexchange channel) in offices where three or more channels are bridged. Bridging charges do not apply to Foreign Serving Office or Series 300 channels. See E.9 for intraexchange charges and F.8 for interexchange charges.

Standard bridging equipment for two-way communication between all points will be provided unless the customer specifies another fixed bridging arrangement.

Two-wire channel services are restricted to no more than five points or 4000 total route miles. Four-wire channel services are restricted to no more than 20 points or 4000 total route miles.<sup>/1/</sup>

These restrictions do not apply to one-way simultaneous transmission from a master station to all other stations such as broadcast-type Multi-Point service. The transmission parameters in paragraph C., preceding, are not applicable to Multi-Point service consisting of more than twenty points where local channels with two-way simultaneous communication is involved.

/2/

/1/ 422 type channels are limited to no more than 20 points or 4000 total route miles.

/2/

/2/ Material formerly appeared in Part 15, Section 2.

**VOICE GRADE SERVICE - SERIES 300 AND 400 (cont'd)****E. Rates - Intraexchange**

	<u>USOC</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
1. Local Channel, each, per first termination on premises <sup>/1/</sup>			
Type 314B <sup>/2/</sup> .....	1LTBY	\$39.25	\$340.00 <sup>/3/</sup>
Type 314C .....	1LTCY	---	250.00
Type 315 <sup>/2/</sup> .....	1LLRY,1LLHY	7,396.00 (I)	240.00 <sup>/3/</sup>
Type 322 .....	1L6QY	32.00	390.00
Type 420 <sup>/2/</sup> .....	1L6CY,1LMDY	17,550.00 (I)	230.00
Type 422 <sup>/2/</sup> .....	1L6AY,1LMFY	16,217.00 (I)	230.00
Type 423 <sup>/2/</sup> .....	1LLUY,1LPAY		
	1L1OY,1L3AY		
	1LMGY	6,031.00 (I)	175.00 <sup>/3/</sup>
Type 424 <sup>/2/</sup> .....	1LTAY	30.25	205.00 <sup>/3/</sup>
Type 425 <sup>/2/</sup> .....	1LMJY	22.50	180.00
Type 428 <sup>/2/</sup> .....	1LLJY,1LMKY	7,375.00 (I)	175.00 <sup>/3/</sup>
Type 435 <sup>/2/</sup> .....	1LPWY,1LMMY	31.25	195.00

/1/ The application of rates for service within the same building applies for services between premises not more than one mile apart which are connected by an enclosed passageway as of November 13, 1980. This application of rates is restricted to existing service installations at existing locations for existing customers. Existing service installations refer to existing enclosed passageway connecting buildings on different premises as of November 13, 1980.

/2/ When service terminates in a SmartTrunk Interface or in a channel port of an Access Advantage Plus Service, a Local Channel charge will not apply for that location. All other appropriate circuit charges specified in this Guidebook will apply to the remainder of the circuit.

/3/ Additional charges may apply as outlined in paragraph G. 'Method of Applying Rates' in Part 15, Section 1.



**VOICE GRADE SERVICE - SERIES 300 AND 400 (cont'd)****E. Rates – Intraexchange (cont'd)**

	<u>USOC</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
2. Interoffice Channel, each V-H mile, or fraction thereof per channel.....	1LJKS,1LLBS 1LPJS,1LTBS 1L1OS,1L3AS 1L6BS,1L6DS 1LMFS,1LLUS 1LXQS	\$1,090.00 (I)	---
3. Interoffice Channel Terminal per terminal (two required per interoffice channel)			
Type 314B.....	PMN4B	5.00	---
Type 314C.....	PMN4C	7.80	---
Type 322 .....	PMN22	12.75	---
Type 420 .....	PMNCL,PMN3A	4,079.00 (I)	---
Type 422 .....	PMNEL,PMN3B	8.75	---
Type 423 .....	PMNFL,PMN11		
	PMNUL	4.50	---
Type 424 .....	PMNGL,PMN4A	6.10	---
Type 425 .....	PMNHL	6.30	---
Type 428 .....	PMNLL,PMN12	7.25	---
Type 435 .....	PMN5L,PMN2O	5.70	---

## VOICE GRADE SERVICE - SERIES 300 AND 400 (cont'd)

/2/

## E. Rates – Intraexchange (cont'd)

		Monthly Rate		Nonrecurring Charge
		First 1/10 Mile	Each Add'l 1/10 Mile	
	USOC			
4. Each additional point of termination of local channel in different building, same premises <sup>/1/</sup>				
Type 422 .....	1LMFK	\$4.30	\$ .70	\$80.00
Type 423 .....	1LMGK,1LPJK			
	1LLUK	3.50	.70	65.00
Type 425 .....	1LMJK	8.50	1.40	65.00
Type 435 .....	1LMKK	6.75	1.40	95.00
5. Each additional point of termination of a local channel in same building <sup>/1/</sup>				
Type 422 .....	M8XF3,M8X	2.00	---	80.00
Type 423 .....	M8XG3,2SE			
	M8X	1.25	---	65.00
Type 425 .....	MUXJ3	4.00	---	65.00
Type 435 .....	M8XK3	2.25	---	95.00

/2/

/1/ Obsolete - applicable to existing installations at existing locations - subject to maximum capacity of available facilities.

/2/  
/2/

/2/ Material formerly appeared in Part 15, Section 2.

## VOICE GRADE SERVICE - SERIES 300 AND 400 (cont'd)

/3/

## E. Rates – Intraexchange (cont'd)

		Monthly Rate		Nonrecurring Charge	
		First	Each Add'l		
<u>USOC</u>		<u>1/10 Mile</u>	<u>1/10 Mile</u>		
6. Two-Point Service and Business Extension lines, different buildings, same premises, per 1/10 mile <sup>1/</sup>					
a.	Type 420 .....	1LMDE,1L6DE	\$23.75	\$1.40	\$132.00 <sup>2/</sup>
	Type 422 .....	1LMFE,1L6BE	6.25	.70	132.00 <sup>2/</sup>
	Type 423 .....	1LMGE,1LLUE			
		1LPJE,1L1OE			
		1L3AE	4.40	.70	70.00 <sup>2/</sup>
	Type 425 .....	1LMJE	12.50	1.40	70.00 <sup>2/</sup>
b.	Residence Extension Line .....	1LLJE	---	---	78.00 <sup>2/</sup>
		1LLBE	---	.70	---
c.	Business Extension Line .....	1LLBE	4.40	.70	78.00 <sup>2/</sup>
7. Two-Point Service, same building <sup>1/</sup>					
	Type 420.....	1LMDB,1L6DB	19.00	---	132.00 <sup>2/</sup>
	Type 422.....	1LMFB,1L6BB	3.90	---	132.00 <sup>2/</sup>
	Type 423.....	1LMMB			
		1L3AB,29H	2.50	---	70.00 <sup>2/</sup>
	Type 424.....	1LTBB	22.50	---	96.00 <sup>2/</sup>
	Type 425.....	1LMJB	7.75	---	70.00 <sup>2/</sup>

/3/

/1/ Obsolete - applicable to existing installations at existing locations - subject to maximum capacity of available facilities.

/3/

/2/ Nonrecurring charge applies to each point of termination.

/3/

/3/ Material formerly appeared in Part 15, Section 2.

**VOICE GRADE SERVICE - SERIES 300 AND 400 (cont'd)**

/2/

**E. Rates – Intraexchange (cont'd)**

	<u>USOC</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
8. Each additional point of termination in the same building for 6 and 7 preceding <sup>/1/</sup>			
Type 420 .....	DUX	\$9.50	\$80.00
Type 423 .....	J5YG3,EZ6,4SE	1.25	65.00
9. Bridging Charges (Multi-Point Service), per channel bridged.....	BQ7	5.95	---

/2/

/1/ Obsolete - applicable to existing installations at existing locations - subject to maximum capacity of available facilities.

/2/  
/2/

/2/ Material formerly appeared in Part 15, Section 2.

**VOICE GRADE SERVICE - SERIES 300 AND 400 (cont'd)****F. Rates - Interexchange**

	<u>USOC</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
1. Local Channel, each, per first termination on a premises			
Type 314B <sup>/1/</sup> .....	1LTBY	\$39.25	\$535.00 <sup>/2/</sup>
Type 314C <sup>/1/</sup> .....	1LTCY	---	450.00 <sup>/2/</sup>
Type 315 <sup>/1/</sup> .....	1LLAY	6,053.00 (I)	240.00 <sup>/2/</sup>
Type 322 .....	1L6QY	32.00	470.00
Type 420 <sup>/1/</sup> .....	1LMDY,1L6CY		
	1LLCY	17,550.00 (I)	265.00
Type 422 <sup>/1/</sup> .....	1LMFY,1L6AY		
	1LLDY	16,217.00 (I)	265.00
Type 423 <sup>/1/</sup> .....	1LPAY,1L1OY		
	1L3AY,1LLBY		
	1LMGY	6,031.00 (I)	260.00 <sup>/2/</sup>
Type 424 <sup>/1/</sup> .....	1LMHY,1LTAY	30.25	310.00
Type 425 <sup>/1/</sup> .....	1LMJY	22.50	260.00
Type 428 <sup>/1/</sup> .....	1LPRY,1LMKY	7,375.00 (I)	260.00 <sup>/2/</sup>
Type 435 <sup>/1/</sup> .....	1LMMY,1LPWY		
	1L1MY,1L3WY	31.25	250.00
2. Interoffice Channel, each V-H mile, or fraction thereof, per channel.....	1LJKS,1LPJS		
	1LTBS,1L1OS		
	1L3AS,1L6BS		
	1L6DS,1LMFS	1,570.00 (I)	---
3. Interoffice Channel Terminal, per terminal (two required per interoffice channel).....	PMNSS	4.60	---

<sup>/1/</sup> When service terminates in a SmartTrunk Interface or in a channel port of an Access Advantage Plus Service, a Local Channel charge will not apply for that location. All other appropriate circuit charges specified in this Guidebook will apply to the remainder of the circuit.

<sup>/2/</sup> Additional charges may apply as outlined in paragraph G. 'Method of Applying Rates' in Part 15, Section 1.

**VOICE GRADE SERVICE - SERIES 300 AND 400 (cont'd)****F. Rates – Interexchange (cont'd)**

		Monthly Rate	
		0 to 150 miles each mile	Each add'l mile over 150
	<u>USOC</u>		
4. Interexchange Channel, V-mile, or fraction thereof, per channel.....	1LHU4	\$3.10	\$2.15
		<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
5. Interexchange Channel Terminal, per terminal (two required per interexchange channel)			
Type 314B .....	P1NH1	\$12.95	---
Type 314C .....	P1NJ1	15.00	---
Type 322 .....	P1NM1	19.40	---
Type 420 .....	P1NQ1,P1NC1	8,394.00 (l)	---
Type 422 .....	P1NR1,P1NE1	15.90	---
Type 423 .....	P1NS1,P1NA1	12.95	---
Type 424 .....	P1NT1,P1NG1	12.95	---
Type 425 .....	P1NU1	12.95	---
Type 428 .....	P1NV1,P1NB1	12.95	---
Type 435 .....	P1NW1,P1NL1	12.95	---

## VOICE GRADE SERVICE - SERIES 300 AND 400 (cont'd)

/2/

## F. Rates – Interexchange (cont'd)

	<u>USOC</u>	Monthly Rate		Nonrecurring Charge
		First 1/10 Mile	Each add'l 1/10 Mile	
6. Each additional point of termination of local channel in different building, same premises <sup>/1/</sup>				
Type 422 .....	1LMFK	\$4.30	\$ .70	\$80.00
Type 423 .....	1LMGK,1LPJK	3.50	.70	65.00
Type 425 .....	1LMJK	8.50	1.40	65.00
Type 435 .....	1LMKK	6.75	1.40	95.00
	<u>USOC</u>	<u>Monthly Rate</u>		<u>Nonrecurring Charge</u>
7. Each additional point of termination of a local channel in same building <sup>/1/</sup>				
Type 422 .....	M8XF3,M8X	\$2.00		\$80.00
Type 423 .....	M8XG3,M8X			
	2SE	1.25		65.00
Type 425 .....	MUXJ3	4.00		65.00
Type 435 .....	M8XK3	2.25		95.00
8. Bridging Charge, (multi-point service), per bridged channel .....	BQ7	5.95		---

/2/

/1/ Obsolete - applicable to existing installations at existing locations - subject to maximum capacity of available facilities.

/2/  
/2/

/2/ Material formerly appeared in Part 15, Section 2.

**VOICE GRADE SERVICE - SERIES 300 AND 400 (cont'd)**

/1/

**G. Conditioning Options Available for Types 314B, 314C, 343, 420 and 422**

The types and description of the available conditioning options, at rates found in this section, are as follows:

1. Type C - Conditioning provides assured transmission quality for frequency response and envelope delay distortion as specified below.
  - a. Type C1 - For a two point or multi-point channel:
    - The envelope delay distortion shall not exceed:  
between 1000 and 2400 Hz, a maximum difference of 1000 microseconds
    - The loss deviation with frequency (from 1000 Hz, reference) shall not exceed:  
between 1000 and 2400 Hz, -1 dB to +3 dB  
between 300 and 2700 Hz, -2 dB to +6 dB
  - b. Type C2 - For a two-point or multi-point channel:
    - The envelope delay distortion shall not exceed:  
between 1000 and 2600 Hz, a maximum difference of 500 microseconds  
between 600 and 2600 Hz, a maximum difference of 1500 microseconds  
between 500 and 2800 Hz, a maximum difference of 3000 microsecond
    - Frequency response shall not exceed:  
between 500 and 2800 Hz, 1 to +3 dB  
between 300 and 3000 Hz, 2 dB to +6 dB  
(+ means more loss)

On a three-point or four-point channel, conditioning in accordance with above specifications is applicable only between one station (that designated by the customer as the control point) and each of the other two or three stations.

/1/

/1/ Material formerly appeared in Part 15, Section 2.



**VOICE GRADE SERVICE - SERIES 300 AND 400 (cont'd)**

/2/

**G. Conditioning Options Available for Types 314B, 314C, 343, 420 and 422 (cont'd)**

1. Type C - Conditioning provides assured transmission quality for frequency response and envelope delay distortion as specified below. (cont'd)

- c. Type C4 - For a two-point, three-point or four-point channel

- The envelope delay distortion shall not exceed:
  - between 1000 and 2600 Hz, a maximum difference of 300 mcs
  - between 800 and 2800 Hz, a maximum difference of 500 mcs
  - between 600 and 3000 Hz, a maximum difference of 1500 mcs
  - between 500 and 3000 Hz, a maximum difference of 3000 mcs
- The loss deviation with frequency (from 1000 Hz, reference) shall not exceed:
  - between 500 and 3000 Hz, 2 dB to +3 dB
  - between 300 and 3200 Hz, 2 dB to +6 dB
  - (+ means more loss)

On a three-point or four-point channel, conditioning in accordance with above specifications is applicable only between one station (that designated by the customer as the control point) and each of the other two or three stations.

- d. Type C5 - For a two-point channel

- The envelope delay distortion shall not exceed:
  - between 1000 and 2600 Hz, a maximum difference of 100 mcs
  - between 600 and 2600 Hz, a maximum difference of 300 mcs
  - between 500 and 2800 Hz, a maximum difference of 600 mcs
- The loss deviation with frequency (from a 1000 Hz reference) shall not exceed:
  - between 500 and 2800 Hz, 0.5 dB to +1.5 dB
  - between 300 and 3000 Hz, 1.0 dB to 3.0 dB
  - (+ means more loss)

2. Type D1 High Performance Data Conditioning for a two-point channel not arranged for switching<sup>/1/</sup>

- a. Signal to C-Notched Noise Ratio 28 db
  - b. Non-Linear distortion:
 

Signal to second order distortion	35 db
Signal to third order distortion	40 db

When the channel equipped with this conditioning is utilized for voice communications, the Company does not undertake to represent nor guarantee that the channel will be suitable for such transmission.

/2/

/1/ Available only where facilities and conditions permit.

/2/ Material formerly appeared in Part 15, Section 2.

**VOICE GRADE SERVICE - SERIES 300 AND 400 (cont'd)**

/2/

**G. Conditioning Options Available for Types 314B, 314C, 343, 420 and 422 (cont'd)**

## 3. Channel Conditioning – Rates

	<u>USOC</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
a. Type C1			
Two-point not arranged for switching, per station.....	P2W	\$ 6.90	\$75.00
Two-point arranged for switching to another two-point channel, per station .....	P2X	12.40	75.00
Multi-point channel, per station .....	P3G	6.90	75.00
b. Type C2			
Two-point not arranged for switching, per station.....	P3HC2	27.60	75.00
Two-point arranged for switching, per station.....	P3J	41.40	75.00
Multi-point channel, per station .....	PH9	20.70	75.00
c. Type C4			
Two-point channel, per channel.....	P4G	96.60	150.00
Three or four point channel, per station.....	6DU	62.10	75.00
d. Type C5			
On a two-point channel not arranged for switching, per station .....	UHD	69.00	75.00
e. Type D1 <sup>/1/</sup>			
Two-point channel not arranged for switching, per channel.....	QHA	16.55	150.00

/2/

/1/ Available only where facilities and conditions permit.

/2/ Material formerly appeared in Part 15, Section 2.

/2/

**VOICE GRADE SERVICE - SERIES 300 AND 400 (cont'd)****H. Foreign Serving Office and Centrex Station Service (with switching equipment located on Company premises)**

1. This service is furnished to a maximum of two serving offices (in addition to the serving office in which the exchange service is furnished) within the exchange or metropolitan exchange in which the exchange or Centrex service is furnished.
2. Service is furnished on the condition that additional costs to the Company may be necessary to provide a type of signaling suitable for operation with the serving office from which service is furnished, or to provide, at the customer's request, a type of signaling other than the type the Company would elect to furnish. In such cases, additional charges shall apply.
3. Customers, for the exchange or Centrex portion of the service, are subject to Local Exchange Service or Centrex C.O. Service charges, rules and regulations; and for the private line portion of the service, are subject to the private line charges, rules and regulations in this Guidebook.
4. Off-premises extensions are provided only where facilities and conditions permit. Type 315 (1LLRY) and (1LLHY) local channel rates and charges apply for off-premises extensions.
5. Rates

	<u>USOC</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
Point to Termination in one foreign serving office <sup>/1,2/</sup> .....	T21FS,E1B	---	\$125.00
Point of Termination in two foreign serving offices <sup>/2,3/</sup> .....	T1SFS	\$11.00	\$250.00
Interoffice Channel Terminal, each (two required per interoffice channel) .....	PMNFS,E96	\$4,382.00	--- (I)

/1/ In addition, private line charges apply between the serving office of the customer premises and the serving office from which the local exchange or Centrex service is provided. Local channel charges do not apply to the main station of local exchange service but do apply to Centrex main stations and extensions.

/2/ Local channel charges do not apply when the exchange service terminates in a channel port of an Access Advantage Plus Service.

/3/ Local channel charges do not apply to the main station and one extension of local exchange service but do apply to Centrex main stations and extensions.

**VOICE GRADE SERVICE - SERIES 300 AND 400 (cont'd)**

/2/

**I. Foreign Exchange and Foreign Exchange Centrex Station Service (with switching equipment located on Company premises)**

1. This service is furnished to a maximum of two exchanges (in addition to the exchange in which the exchange service is furnished). The exchange service connection is provided from one exchange only.
2. Service is furnished on the condition that additional costs to the Company may be necessary to provide a type of signaling suitable for operation with the exchange from which service is furnished, or to provide, at the customer's request, a type of signaling other than the type the Company would elect to furnish. In such cases, additional charges shall apply.
3. Customers, for the exchange portion of the service, are subject to exchange charges, rules and regulations; and for the private line portion of the service, are subject to the private line charges, rules and regulations of this Guidebook.
4. Off-premises extensions are provided only where facilities and conditions permit. Type 315 (1LLAY) Local Channel charges apply for off-premises extensions.
5. Reversible Operation and Intercept Arrangement
  - a. A charge of \$48.30 per month (FXV) applies when a channel is arranged for reversible operation and includes Serving Office switching equipment and switching keys. The control channel at each service point is required at charges as specified in 'Sub-Voice Grade Service – Series 200', preceding. When only one terminal is in a Bell exchange, the charge is \$24.20.
  - b. An intercept arrangement is available to permit calls made to a foreign exchange number to be received at the customer's location in the foreign exchange during the period the service is in the reversed condition (37H) \$2.30.<sup>/1/</sup>

/2/

/1/ Local channel charges are also applicable.

/2/ Material formerly appeared in Part 15, Section 2.

/2/

**VOICE GRADE SERVICE - SERIES 300 AND 400 (cont'd)****I. Foreign Exchange and Foreign Exchange Centrex Station Service (with switching equipment located on Company premises) (cont'd)**

## 6. Rates

	<u>USOC</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
Point of Termination in one foreign exchange between exchanges 0 to 20 miles apart .....	T21	\$ 23.00	\$380.00
between exchanges over 20 miles apart .....	T22	85.50	380.00
Point of Termination in two foreign exchanges <sup>/1,2/</sup> .....	T1S	115.80	760.00
Interoffice Channel Terminal each, (two required per interoffice channel) .....	PMNFX E1D	2,960.00 (I)	---
Interexchange Channel terminal, (2 required per interexchange channel) .....	P1NF4 E1C	3,553.00 (I)	---
Interoffice Channel, each V-H mile or fraction thereof, per channel .....	1LHBS 1LXRS	7.00	---
Interexchange Channel, V-H, or fraction thereof, per channel .....	1LHU4 1LXQ4		
0 to 150 miles, each mile .....		5.90	---
Each additional mile over 150 .....		4.30	---

/1/ Local channel charges do not apply to the main station and one extension, but do apply to Centrex main stations and extensions.

/2/ Local channel charges do not apply when the exchange service terminates in a channel port of an Access Advantage Plus Service.

**LOCAL AREA DATA SERVICE**

/2/

**A. Regulations**

In addition to the Regulations specified previously in this Guidebook, the following regulation applies to these services:

Provision of this service does not contemplate connection to the public switched message network.

**B. Description of Service**

Local Area Data Service will provide subject to availability of facilities, channels suitable for baseband transmission of data signals between two points on the same premises or different premises within the same serving office area. Service is limited to points that are not more than six cable route miles apart, as determined by the Company, using normal cable routing between the points to be served. Service is offered only for balanced transmission of data signals conforming to the signal power limitations and other parameters specified in the applicable Bell System Technical Reference.

1. Local Area Data Service channels require use of nonloaded cable facilities. In the event that only loaded facilities are available, the Company will at the customer's request, deload facilities as specified under the Special Construction provisions as provided in Part 15, Section 1, paragraph D.4.
2. A channel is available as follows:
  - Type 980 Two-wire interface with effective two-wire facilities for use with customer-premises equipment with the transmission characteristics specified in B.3 following and the applicable Bell System Technical Reference.
  - Type 981 Four-wire interface with effective four-wire facilities for use with customer-premises equipment with the transmission characteristics specified in B.3 following and the applicable Bell System Technical Reference.
3. Applicable jacks used to connect this service can be found in Section 13 of the Access Service Tariff.
4. Transmission specifications for Types 980 and 981 are dependent upon the route length of the facilities utilized to provide the service as follows:

<u>Maximum End-to-End Facility Length in Route Miles</u>	<u>Maximum Insertion Loss at 1000 Hz, in dB<sup>/1/</sup></u>
1	9.0
2	13.5
3	17.0
4	20.0
5	23.0
6	25.5

/2/

/1/ Insertion loss is referenced to 135 ohm resistive terminations at each end.

/2/

/2/ Material formerly appeared in Part 15, Section 2.

**LOCAL AREA DATA SERVICE (cont'd)**

/3

**C. Rates**

	<u>USOC</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
1. Two-point service, same building, same premises <sup>/1/</sup>			
- Type 981 .....	1LMGB,1L6GB	\$13.00	\$127.00 <sup>/2/</sup>
	<u>USOC</u>	<u>First 1/10 Mile</u>	<u>Each add'l 1/10 Mile</u>
2. Two-point service, same building, same premises <sup>/1/</sup>			<u>Nonrecurring Charge</u>
- Type 980 .....	1LMGC	\$ 9.00	\$127.00 <sup>/2/</sup>
- Type 981 .....	1LMGC,1L6GC	17.75	127.00 <sup>/2/</sup>
	<u>USOC</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
3. Local channel, each per termination on a premises; different building, different premises, for two-point service			
- Type 980 .....	1LMGJ	\$14.25	\$170.00 <sup>/2/</sup>
- Type 981 .....	1LMGJ,1L6GJ	28.50	170.00 <sup>/2/</sup>

/3/

/1/ Obsolete - applicable to existing installations at existing locations - subject to maximum capacity of available facilities.

/3/

/2/ Nonrecurring charge applies to each point of termination.

/3/

/3/ Material formerly appeared in Part 15, Section 2.

**VOICE COMMUNICATING EQUIPMENT**

/4/

**A. Signaling Arrangements**

1. Signaling Options per point of termination for the capability to accommodate signaling on private line service utilizing Type 420, 422, 423, 425 and 435 local channels.<sup>/1/</sup>

	<u>USOC</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
a. Interexchange			
- Manual <sup>/2/</sup> .....	J1B	\$14.50	\$70.00
- Automatic <sup>/3/</sup> .....	J1A	12.25	70.00
b. Intraexchange			
With Interoffice Channel			
- Manual <sup>/2/</sup> .....	J1B	11.60	70.00
- Automatic <sup>/3/</sup> .....	J1A	6.25	70.00
Without Interoffice Channel			
- Manual <sup>/2/</sup> .....	J1BWO	4.90	70.00
- Automatic <sup>/3/</sup> .....	J1AWO	6.00	70.00

2. Rules and Regulations

- a. The type A, B and C Loop Signaling Arrangements for station ports of a premises PBX (or similar) switching system and the E&M Signaling Arrangement for tie-lines are furnished for grandfathered and registered PBXs in accordance with Part 68 of the FCC Rules and Regulations.
- b. For connections to registered PBX (or similar) equipment, the customer must specify the equipment capability of their registered equipment.
- c. Customers with grandfathered customer-premises PBX (or similar) equipment may, at their option:
  1. Continue to provide their own off-premises station signaling capability and utilize only the type 428 channel.
  2. Request that off-premises station signaling capability be provided by the Company. Where this option is selected, the customer must specify his equipment signaling capability.

/4/

/1/ Signaling options for Type 420 and 422 local channels are obsolete-applicable to existing installations at existing locations for existing customers.

/4/

/2/ Manual signaling for multi-point channels - available for Type 425 and 435 only.

/3/ Automatic signaling for multi-point channels is obsolete-applicable to existing installations at existing location for existing customers.

/4/

/4/ Material formerly appeared in Part 15, Section 2.



**VOICE COMMUNICATING EQUIPMENT (cont'd)**

/3/

**A. Signaling Arrangements (cont'd)**

## 2. Rules and Regulations (cont'd)

- d. Based on information provided by the customer, the Company will furnish the appropriate signaling arrangement. Where the requested signaling arrangement is furnished and determined to be of a lesser signaling range than required, and the customer requests the Company to furnish another signaling arrangement, such request will be treated as a new request for service and appropriate nonrecurring charges will apply.

3. Signaling Options per point of termination, limited to two-point service only, for the capability to accommodate signaling on private line service utilizing Type 400 Local Channels indicated below.

	<u>USOC</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
a. Interexchange E & M Type Signaling			
- Type 423 <sup>/1/</sup> .....	SLM23	\$13.75	---
- Type 424 .....	SLM24	9.25	\$70.00 <sup>/2/</sup>
- Type 425 <sup>/1/</sup> .....	SLM25	19.50	---
Loop Signaling Options per Local Channel on Type 428 when associated with station ports of a premises switching system			
Type A, where premises switching system is capable of operation over loops with resistance in the range of 0-199 ohms .....	SALAS	6.10	\$70.00 <sup>/2/</sup>
Type B, where premises switching system is capable of operation over loops with resistance in the range of 200-899 ohms .....	SAUBS	3.95	\$70.00 <sup>/2/</sup>
Type C, where premises switching system is capable of operation over loops with resistance in the range of 900 ohms or more .....	SAYCS	2.00	\$70.00 <sup>/2/</sup>

/3/

/1/ Obsolete - applicable to existing installations at existing locations for existing customers.

/2/ Nonrecurring Charge applies only if signaling option is installed subsequent to initial installation of the local channel.

/3/ Material formerly appeared in Part 15, Section 2.

/3/

|

/3/

**VOICE COMMUNICATING EQUIPMENT (cont'd)**

/3/

**A. Signaling Arrangements (cont'd)**

## 3. (cont'd)

## b. Intraexchange

	<u>USOC</u>	Monthly Rate Without <u>Interoffice</u>	<u>USOC</u>	Monthly Rate With <u>Interoffice</u>	Nonrecurring <u>Charge</u>
E & M Type Signaling					
Type 423 <sup>/1/</sup> .....		---	SLM23	\$12.75	---
Type 424.....	SLMW4	\$4.30	SLM24	5.80	\$70.00 <sup>/2/</sup>
Loop Signaling, where customer-premises equipment is capable of operation over loops with resistance of 900 ohms or more <sup>/1/</sup>					
Type 423.....	SLLW3	2.40	SLL23	3.30	---

/3/

/1/ Obsolete - applicable to existing installations at existing location for existing customers.

/2/ Nonrecurring Charge applies only if signaling option is installed subsequent to initial installation of the local channel.

/3/ Material formerly appeared in Part 15, Section 2.

/3/

/3/

**VOICE COMMUNICATING EQUIPMENT (cont'd)**

/2/

**A. Signaling Arrangements (cont'd)**

## 3. (cont'd)

## b. Intraexchange (cont'd)

	<u>USOC</u>	Monthly Rate Without <u>Interoffice</u>	<u>USOC</u>	Monthly Rate With <u>Interoffice</u>	<u>Nonrecurring Charge</u>
Loop Signaling Options per Local Channel or Served Direct Service Channel on Type 428 when associated with station ports of a premises switching system					
Type A, where premises switching system is capable of operation over loops with resistance in the range of 0-199 ohms.....	SALAL	\$5.20	SALAW	\$5.35	\$70.00 <sup>/1/</sup>
Type B, where premises switching system is capable of operation over loops with resistance in the range of 200-899 ohms.....	SAUBL	5.05	SAUBW	4.00	70.00 <sup>/1/</sup>
Type C, where premises switching system is capable of operation over loops with resistance in the range of 900 ohms or more.....	SAYCL	2.00	SAYCW	4.00	70.00 <sup>/1/</sup>
The DC resistance specification does not imply a guaranteed end to end DC continuity. The customer can expect to be provided a loop meeting the same limits as the normal central office loop, i.e., not exceeding 1300 ohms, exclusive of 200 ohm maximum terminal equipment resistance.					

/2/

/1/ Nonrecurring charge applies only if signaling option is installed subsequent to initial installation of the local channel.

/2/  
/2/

/2/ Material formerly appeared in Part 15, Section 2.

**ALTERNATE USE OF PRIVATE LINE SERVICE CHANNELS**

/1/

**A. Regulations**

Voice Grade Channels furnished the Company in connection with Series 300 Service may be used on an alternate basis with either Voice Grade Service or Sub-Voice Grade Service.

Half duplex Sub-Voice Grade Services may be used on an alternate basis with other Sub-Voice Grade Service.

During alternate use the regulations are the same as those set forth in Part 15, Section 1, except as otherwise specified herein.

The customer may switch at will from one type of operation to another, but only one type of operation can be used at a time.

Alternate use is available on two-point service. Service involving more than two points will be permitted where facilities permit.

**B. Rates**

Rates and charges are the highest of the regular private line charges applicable to the channels arranged for alternate use as specified in this Section of the Guidebook plus the following additional charges as applicable.

	<u>USOC</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
1. Voice Grade Services			
a. With channels for remote metering supervisory control and miscellaneous signaling purposes			
Channel Termination, per station including switching key .....	3AM	\$1.80	\$9.00
Including connection of customer-provided Punch-card equipment, per station (Includes one switching key).....	TYM, TYU	29.80	---

/1/

/1/ Material formerly appeared in Part 15, Section 2.

**ALTERNATE USE OF PRIVATE LINE SERVICE CHANNELS**

/2/

**B. Rates (cont'd)**

	<u>USOC</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
1. Voice Grade Services (cont'd)			
b. For data transmission up to 150 Baud per data transmission station connected for alternate. Includes key to transfer between the telephone termination .....	37R,GHH	\$29.80	---
c. With Switched Access Service, the Switched Access will operate only on a two-Point Basis <sup>/1/,/2/</sup>			
An additional Voice Grade Local Channel as specified in 'Voice Grade Service – Series 300 and 400' is required			
Alternate Switching to go from Switched Access operation to Voice Grade operation and from voice Grade to Switched Access operation applies at each of the two service points arranged or alternate use. ....	36B	7.50	\$11.00
2. Sub-Voice Grade Services			
a. A rate of \$1.80 (TYX)(TYO)(TYW) and a nonrecurring charge of \$9.00 apply for each station equipped for alternate use (includes a switching key).			
b. A rate of \$29.80 per month (TYU)(TYM)(TYK) applies where the alternate use include the connection of customer-provided punched card equipment, per station (includes a switched key).			
c. Special equipment and arrangement charges will apply for the additional facilities required for alternate use to more than two points.			

/2/

/1/ Channels are furnished subject to the condition that additional cost to the Company may be necessary to provide a type of signaling suitable for operation with the exchange from which service is furnished, or, at the customer's request, a type of signaling other than the type the Company would elect to furnish. In such cases, additional charges based upon the cost incurred shall apply.

/2/

/2/ Material formerly appeared in Part 15, Section 2.

/2/

**SERVED DIRECT SERVICE**

/3/

**A. Regulations**

1. This offering is for specified two-point intraexchange channel types between different buildings on different premises which do not route through a serving office.
2. Served Direct Channel Charges apply:
  - a. When it is the economic decision of the Company to provide served direct facilities<sup>/1/</sup>
  - b. When there is a minimum billing of 15 channels per each two-point configuration
  - c. When the maximum airline distance between the two premises is one mile or less
  - d. When the customer considers it economically feasible to change to Served Direct Service
3. A customer may request this service offering when it is not the economic decision of the Company; however, in such case, Special Construction Charges as specified in Part 15, Section 1, paragraph D.4 shall apply in addition to the rates and charges found in this section.

Where a customer requests a quotation for Special Construction Charges associated with Served Direct Service and then elects not to subscribe to the service, a Quotation Charge for developing the charges shall apply. This charge will include all developmental hours associated with the design and preparation of an individual request.

4. Termination Liability Contracts where applicable in a customer-initiated request for Served Direct Service would be equal to the costs incurred for rearrangements of existing facilities and/or construction of new facilities as appropriate, less net salvage. Installed cost includes any expense associated with this particular case.
5. The service is limited to intraexchange channels, but can involve Served Direct Service between two separate Serving Office Areas.

**B. Rates**

Between Different Buildings on Different Premises	USOC	Monthly Rate First	USOC	Monthly Rate Additional	Nonrecurring Charge <sup>/2/</sup>	
		1/10 Mile		1/10 Mile		
Type 428 .....	1LMKQ	\$6.00	11LVJQ	\$1.00	\$70.00	/3/

/1/ A Basic Termination Liability Contract may be applicable in this case if the Company determines the facilities are not reusable. The contract period will normally be 36 months, and the amount will be reduced by 1/36th for each month in service.

/3/

/2/ Nonrecurring charge applies to each point of termination.

/3/

/3/ Material formerly appeared in Part 15, Section 2.

**MEGALINK I – STANDARD DIGITAL SERVICE**

/1/

Effective June 30, 2021, MegaLink I – Standard Digital Service will no longer be available for purchase by new or existing customers. In addition, requests to move, add, change, or renew existing service arrangements will not be accepted. Following the expiration of a customer's existing term agreement, service will be provided on a month-to-month basis at the applicable Monthly rates until the service is discontinued. The Company currently plans to discontinue this service on or after June 30, 2024.

(N)

**A. Description**

(N)

MegaLink I is a service which supports synchronous, full duplex transmission at bit rates of 2.4, 4.8, 9.6, 19.2 and 56 Kbps.

MegaLink I channels provide the transmission paths for digital data signals between two or more customer premises within a LATA.

/1/

**B. Regulations**

The following regulations are in addition to those in Part 15, Section 1:

## 1. Availability of Service

MegaLink I can only be provided where suitable facilities exist. MegaLink I serving offices are determined by the Company.

## 2. Provision of Service

- a. Timing of MegaLink I is provided by the network.
- b. When suitable facilities are not available, or modifications to existing facilities are required, special construction charges apply.
- c. The customer shall be responsible for ordering MegaLink I and specifying the transmission speed required for operation with the customer's equipment.
- d. An access channel to a digital serving office is required for each station connected to the MegaLink I service. Access channels may be comprised of a local distribution channel only or a local distribution channel and an interoffice channel.
- e. MegaLink I service may be provided between more than two stations through a multi-station arrangement. Multi-station arrangements will only be provided at a digital serving office. The number of stations that may be connected on a given service may be limited by operating and transmission factors. Multi-station arrangements are offered only at data speeds of 2.4, 4.8, 9.6 and 56 Kbps.
- f. MegaLink I Service may be equipped for secondary channel capability. Secondary channel capability is an additional service feature that utilizes extra capacity of the digital facilities. This feature provides the customer with a lower speed (secondary) channel, over the same physical facility as the primary channel, through which the customer has the capability of performing network management operations, such as the on-line diagnostics, data monitoring, traffic measurements and network configuration management. Secondary channel capability is available for all speeds, and can only be provided at a digital serving office.

/1/

/1/ Material formerly appeared in Part 15, Section 3, Sheet 1.

**MEGALINK I – STANDARD DIGITAL SERVICE (cont'd)**

/1/

**C. Rate Application**

1. Access Channels to a Digital Serving Office
  - a. Local Distribution Channel - A local distribution channel charge applies for each channel between a customer's premises and the customer's serving office.
  - b. Interoffice Channel - An interoffice channel charge applies for each local distribution channel to the customer's premises except when the customer's serving office is also the digital serving office. A fixed charge and rate per mile applies per each interoffice channel.
2. Channel Between Digital Serving Offices - An interoffice channel charge applies for each channel between digital serving offices.
3. Nonrecurring Charge - A nonrecurring charge applies per point of termination installed or moved.
4. Additional Service Features
  - a. Multi-station Arrangement - A multi-station arrangement charge applies for each channel connected when three or more channels are connected at a digital serving office.
  - b. Secondary Channel Capability - A secondary channel capability charge applies to each local distribution channel connected to a circuit.

/1/

/1/ Material formerly appeared in Part 15, Section 3, Sheet 2.



**MEGALINK I – STANDARD DIGITAL SERVICE (cont'd)****C. Rate Application (cont'd)**

## 5. Rates

**Local Distribution Channel<sup>/1/</sup>**

- Per termination of local distribution channel at a customer's premises

<u>For Transmission Speed of:</u>	<u>USOC</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
2.4 Kbps	SYN24	\$13,707.00 (I)	\$265.00
4.8 Kbps	SYN48	13,707.00	265.00
9.6 Kbps	SYN96	13,707.00	265.00
19.2 Kbps	SYN19	19,691.00	300.00
56 Kbps	SYN56	19,691.00 (I)	300.00

**Interoffice Channel**

- Per V-H mile between the digital serving office and serving office or between digital serving offices

<u>For Transmission Speed of:</u>	<u>USOC</u>	<u>Fixed Charge</u>	<u>Monthly Rate Per Mile</u>
2.4 Kbps	1LNQQ	\$6,917.00 (I)	\$175.00 (I)
4.8 Kbps	1LNRQ	6,917.00	175.00
9.6 Kbps	1LNSQ	6,917.00	175.00
19.2 Kbps	1LNJQ	6,917.00	315.00
56 Kbps	1LNTQ	6,917.00 (I)	315.00 (I)

<b>Additional Service Features</b>	<u>USOC</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
<b>Multi-Station Arrangement<sup>/2/</sup></b>			
- Per access channel connected at a digital service office	6BN	\$18.00	---
<b>Secondary channel capability</b>			
- Per local distribution channel connected to a circuit	SCA	12.00	\$95.00

/1/ When service terminates in a channel port of an Access Advantage Plus Service, a Local Distribution Channel charge will not apply for that location. All other appropriate circuit charges specified in this Guidebook will apply to the remainder of the circuit.

/2/ Multi-Station Arrangement is not available for 19.2 Kbps service.

**MEGALINK I – STANDARD DIGITAL SERVICE (cont'd)**

/2/

**D. Term Pricing Plan<sup>/1/</sup>**

1. The Term Pricing Plan provides the customer with rate stabilization and discounted rates. The Term Pricing Plan provides for one, three or five year rate stabilization. Decreases in monthly recurring rates will be passed on to customers who participate in a Term Pricing Plan. The Company will notify customers participating in a Term Pricing Plan when monthly rates are decreased.  
  
Should the Company increase its rates during the Term Pricing Plan period, the customer would continue to pay the rates in effect at the time the customer elected to establish service under the Term Pricing Plan.
2. The customer may choose to terminate an existing Term Pricing Plan before the end of the one, three or five year period and negotiate a new one, three or five year Term Pricing Plan provided the new Term Pricing Plan meets the following requirements:
  - a. The new Term Pricing Plan must be based upon the rates that are currently in effect and available to all customers.
  - b. If moving down in bandwidth (e.g., 56 Kbps to 9.6 Kbps) the new Term Pricing Plan contract period **must exceed** the remaining time period on the customer's existing contract. Termination charges do not apply.
  - c. If moving up in bandwidth (e.g., 4.8 Kbps to 56 Kbps) the new Term Pricing Plan contract period **must meet or exceed** the remaining time period on the customer's existing contract. Termination charges do not apply.
3. The customer must provide the Company with a written notice of intent to renew a Term Pricing Plan no later than 90 days prior to its expiration. A Term Pricing Plan may not be renewed beyond the one, three or five year commitment at the same rate. If the customer elects not to renew the Term Pricing Plan, or does not notify the Company of its intent to renew the Term Pricing Plan, the customer's service will automatically be billed under the monthly rates in effect at the time the Term Pricing Plan expires.
4. Any special construction charges incurred for services billed under a Term Pricing Plan will be applicable as provided for in Part 15, Section 1.

/1/ MegaLink I Term Pricing Plans are obsolete except for existing customers on existing term pricing plans, that were subscribed to prior to December 1, 2006. Upon expiration of these existing term plans, customers will revert to the monthly rate for MegaLink I Service.

/2/ Material formerly appeared in Part 15, Section 3, Sheet 4.

/2/

**MEGALINK I – STANDARD DIGITAL SERVICE (cont'd)**

/2/

**D. Term Pricing Plan (cont'd)<sup>/1/</sup>**

5. Customers requesting the termination of a Term Pricing Plan prior to the expiration date, excluding the Term Pricing Plans terminated as a result of a renegotiation, will be charged a termination charge. If the customer terminates the Term Pricing Plan agreement prior to the expiration of the one, three, or five year Term Pricing Plan, the customer shall pay a termination charge. Payment of the termination charge does not release the customer from other previous amounts owed to the Company.

The termination charge for all service terms will be calculated as follows:

For service terms that become effective on or after November 24, 2004:

- All unpaid Special Construction or Nonrecurring Charges (excluding any waived charges); plus
- Fifty (50%) of all recurring charges for the remaining months of the customer's term

For service terms in effect prior to November 24, 2004:

The termination charge is based on the number of months the Term Pricing Plan was in service multiplied by the difference of the standard Company month-to-month rates and the rates associated with the particular service and rate period selected by the customer.

6. Customers currently subscribing to MegaLink I Service on a month-to-month basis may convert their existing service to either a one, three or five year Term Pricing Plan. Nonrecurring charges will be waived at the time of conversion.

/1/ MegaLink I Term Pricing Plans are obsolete except for existing customers on existing term pricing plans, that were subscribed to prior to December 1, 2006. Upon expiration of these existing term plans, customers will revert to the monthly rate for MegaLink I Service.

/2/ Material formerly appeared in Part 15, Section 3, Sheet 5.

/2/

**MEGALINK I – STANDARD DIGITAL SERVICE (cont'd)**

/5/

**D. Term Pricing Plan (cont'd)<sup>1,2/</sup>****7. Local Distribution Channel<sup>3/</sup>**

- Per termination of a local distribution channel at a customer's premises

<u>For Transmission Speed of:</u>	<u>Monthly Rates</u>		
	<u>1 Year</u>	<u>3 Years</u>	<u>5 Years</u>
2.4 Kbps	\$50.00	\$50.00	\$50.00
4.8 Kbps	56.00	54.00	50.00
9.6 Kbps	60.00	55.00	50.00
19.2 Kbps	90.00	60.00	50.00
56 Kbps	95.00	70.00	60.00

- Per V-H mile between the digital serving office and serving office or between digital serving offices.

<u>For Transmission Speed of:</u>	<u>Monthly Rates</u>					
	<u>1 Year</u>		<u>3 Years</u>		<u>5 Years</u>	
	<u>Fixed</u>	<u>Per Mile</u>	<u>Fixed</u>	<u>Per Mile</u>	<u>Fixed</u>	<u>Per Mile</u>
2.4 Kbps	\$30.00	\$1.00	\$20.90	\$.55	\$20.00	\$.50
4.8 Kbps	30.00	1.00	20.90	.55	20.00	.50
9.6 Kbps	30.00	1.00	20.90	.55	20.00	.50
19.2 Kbps	31.00	1.00	20.90	.55	20.00	.50
56 Kbps	31.00	1.00	20.90	.55	20.00	.50

<u>Monthly Rates</u>		
<u>1 Year</u>	<u>3 Years</u>	<u>5 Years</u>

**8. Multi-station Arrangement<sup>3,4/</sup>**

- Per access channel connected at a digital serving office

\$16.00	\$14.00	\$12.00
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**9. Secondary Channel Capability<sup>4/</sup>**

- Per local distribution channel connected to a circuit

12.00	10.00	8.00
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/1/ MegaLink I Term Pricing Plans are obsolete except for existing customers on existing term pricing plans, that were subscribed to prior to December 1, 2006. Upon expiration of these existing term plans, customers will revert to the monthly rate for MegaLink I Service.

/2/ A Termination Charge is applicable when the Term Pricing Plan is terminated prior to the expiration date. The Termination Charge calculation is described in D.5, preceding.

/3/ Nonrecurring charges and USOC codes are the same as those listed in C.5, preceding.

/4/ Multi-station Arrangement is not available for 19.2 Kbps service.

/5/ Material formerly appeared in Part 15, Section 3, Sheet 6.

/5/

**MEGALINK II – PREMIUM DIGITAL SERVICE**

/1/

Effective June 30, 2021, MegaLink II – Premium Digital Service will no longer be available for purchase by new or existing customers, and service agreements may no longer be renewed. In addition, requests to move, add or change existing service arrangements will not be accepted. Following the expiration of a customer's existing term agreement, service will be provided on a month-to-month basis at the applicable Monthly rates until the service is discontinued. The Company currently plans to discontinue these services on or after June 30, 2024.

(N)

(N)

**A. Basic Channel Description**

/1/

MegaLink II is similar to MegaLink I except that MegaLink II Service has higher technical standards and is always provided via a Company hub. See Oklahoma Access and Related Interconnection Services Guidebook, Section 7 for a description of Digital Data Service or MegaLink II Service.

**B. Availability of Service**

MegaLink II can only be provided where suitable facilities exist. When suitable facilities are not available, or modifications to existing facilities are required, special construction charges apply.

*Digital Hubs*

The Digital hubs provide interconnection to channels and additional service features.

<u>Digital Hub</u>	<u>V</u>	<u>H</u>
Oklahoma City	7947	4373
Tulsa	7707	4173

**C. Regulations**

Access to a digital hub from a customer premises requires the application of Local Distribution Section and Interoffice Section rate elements provided for this purpose.

Rate elements for additional service features should be applied when these features are used in conjunction with MegaLink II channels at the digital hub.

## 1. Access Channels to a Digital Hub

## a. Local Distribution Section

This rate element represents a two-point transmission path between a customer's premises and that premises' serving office. Local distribution sections suitable for synchronous data rates of 2.4, 4.8, 9.6, 19.2 and 56 Kbps are provided.

## b. Interoffice Section

This rate element represents a two-point transmission path between a digital hub and a serving office where MegaLink II is available. Interoffice sections suitable for synchronous data rates of 2.4, 4.8, 9.6, 19.2 and 56 Kbps are provided.

/1/

/1/ Material formerly appeared in Part 15, Section 3, Sheet 7.

**MEGALINK II – PREMIUM DIGITAL SERVICE (cont'd)**

/2/

**C. Regulations (cont'd)****2. Additional Service Features****a. Multi-Station Arrangement<sup>/1/</sup>**

This arrangement provides the capability to connect multiple MegaLink II channels at a digital hub. A multi-station arrangement is provided for each channel when three or more channels are connected at a digital hub. All channels connected by a multi-station arrangement must operate at the same transmission speed.

This arrangement allows customers to simultaneously transmit or receive communications between a master station and many other stations or individually between master station and another station. All such communications are under the control of the customer's master station.

**b. Secondary Channel Capability**

Secondary Channel Capability provides for an additional low-speed digital transmission channel within the existing 2.4, 4.8, 9.6, 19.2 and 56.0 Kbps primary channels. It is available as a point-to-point or a multi-point service utilizing a non-repeater local distribution channel. The Secondary Channel can be used as a communications channel for the controlling and monitoring of the customer's network.

The technical specifications packages are as specified in Section 7 of the Access and Related Interconnection Services Guidebook.

**D. Rates****1. Access Channels to a Digital Hub****a. Local Distribution Channel**

A local distribution channel charge for the requested transmission speed shall apply for each termination at the premises of a customer or authorized user.

**b. Interoffice Channel**

Interoffice channel mileage charges for the requested transmission speed shall apply for each termination of a corresponding local distribution channel on the premises of a customer or authorized user. Charges are based on the vertical and horizontal (V-H) distance between the digital hub and the serving office for the customer or authorized user. The appropriate rate schedule for the mileage band corresponding to the V-H distance between the digital hub and the serving office should be used. A fixed charge for the requested transmission speed will be applied per each interoffice channel.

**c. Nonrecurring Charges**

A charge applies per each termination of a local distribution channel installed or moved at the premises of a customer or authorized user.

/1/ Multi-station arrangement is not available for 19.2 Kbps service.

/2/ Material formerly appeared in Part 15, Section 3, Sheet 8.

/2/

**MEGALINK II – PREMIUM DIGITAL SERVICE (cont'd)**

/2/

**D. Rates (cont'd)**

## 1. Access Channels to a Digital Hub (cont'd)

## d. Local Distribution Channel

Per termination of local distribution channel at a customer's premises.

<u>For Transmission Speed of:</u>	<u>USOC</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
2.4 Kbps	1L7AJ	\$ 30.00	\$ 75.00
4.8 Kbps	1L7BJ	30.00	75.00
9.6 Kbps	1L7CJ	40.00	75.00
19.2 Kbps	1L7JJ	140.00	100.00
56 Kbps	1L7DJ	160.00	100.00

## 2. Additional Service Features

Multi-Station Arrangement<sup>/1/</sup>

A multi-station arrangement charge is applied per each channel connected when three or more channels are connected at a digital hub. The multi-station arrangement is used to interconnect three or more access channels to a digital hub.

	<u>USOC</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
For all speeds	DDZ	\$24.00	---
Secondary Channel Capability	SCA	12.00	\$95.00

/1/ Multi-station Arrangement is not available for 19.2 Kbps service.

/2/ Material formerly appeared in Part 15, Section 3, Sheet 9.

/2/

**MEGALINK II – PREMIUM DIGITAL SERVICE (cont'd)**

/1/

**D. Rates (cont'd)**

## 3. Interoffice Channel

Per V-H mile between the digital hub and serving office for the mileage portion plus the fixed charge.

<u>Mileage Band</u>	<u>For Transmission Speed of:</u>	<u>USOC</u>	<u>Fixed Charge</u>	<u>Rate Per Mile</u>
Band - 1 For mileage of 0 or over but less than 2 miles	2.4 Kbps	1L7A1	\$ 60.00	---
	4.8 Kbps	1L7B1	70.00	---
	9.6 Kbps	1L7C1	150.00	---
	19.2 Kbps	1L7J1	165.00	---
	56 Kbps	1L7D1	180.00	---
Band 2 - For mileage of 2 or over but less than 11 miles	2.4 Kbps	1L7A2	70.00	\$6.00
	4.8 Kbps	1L7B2	80.00	5.50
	9.6 Kbps	1L7C2	160.00	2.50
	19.2 Kbps	1L7J2	180.00	3.50
	56 Kbps	1L7D2	200.00	4.00
Band 3 - For mileage of 11 miles or over	2.4 Kbps	1L7A3	80.00	1.50
	4.8 Kbps	1L7B3	120.00	1.50
	9.6 Kbps	1L7C3	175.00	1.50
	19.2 Kbps	1L7J3	200.00	3.00
	56 Kbps	1L7D3	220.00	4.00

/1/

/1/ Material formerly appeared in Part 15, Section 3, Sheet 10.