LARGE FILING SEPERATOR SHEET

CASE NUMBER: 08-358-TP-ATA

FILE DATE: 4/1/08

SECTION: 10 OF 14

NUMBER OF PAGES: 200

DESCRIPTION OF DOCUMENT:

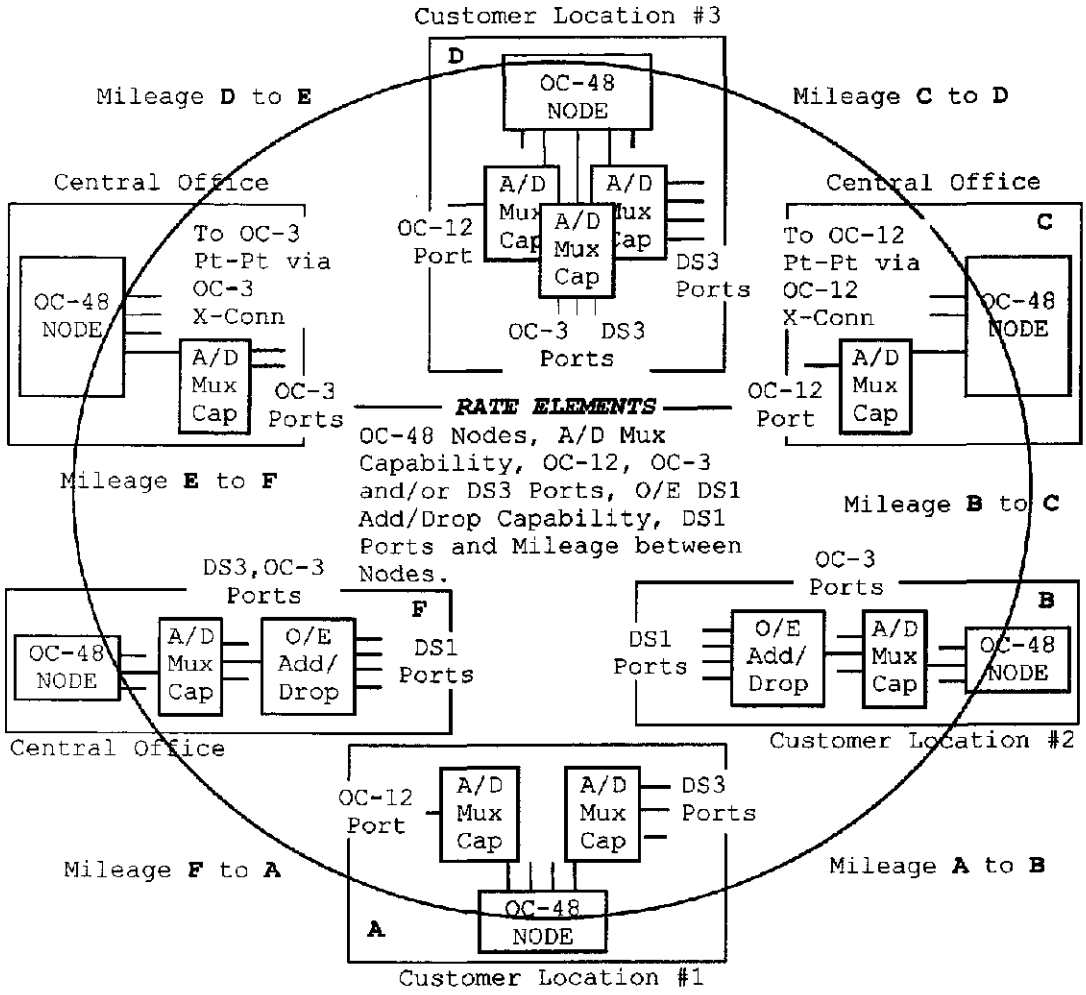
APPLICATION

6. OC-n DEDICATED RING SERVICE (cont'd) (T)

A. DESCRIPTION (cont'd)

Dedicated Ring Configuration (cont'd)

- ***Diagram of OC-48 Dedicated Ring Service*** (T)

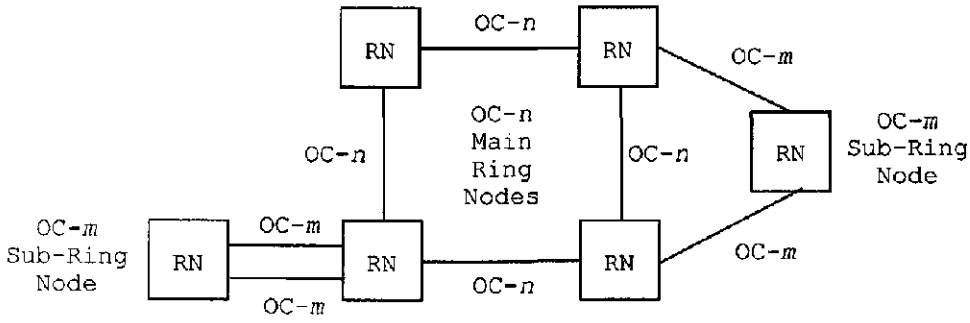


6. OC-*n* DEDICATED RING SERVICE (cont'd)

A. DESCRIPTION (cont'd)

Dedicated Ring Configuration (cont'd)

- ***Diagram of Sub-Ring Nodes, OC-M < OC-N***



Sub-Ring Nodes, OC-*m* < OC-*n*

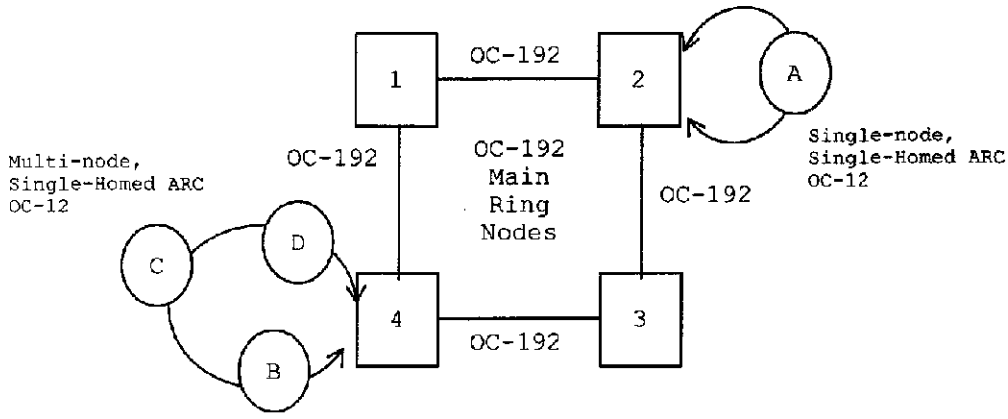
RN = Ring Node (N)

6. OC-*n* DEDICATED RING SERVICE (cont'd) (N)

A. Description (cont'd)

Dedicated Ring Configuration (cont'd)

- *Diagram of ARC Sub-Ring Nodes, OC-m < OC-n*



ARC Sub-Ring Nodes, OC-*m* < OC-*n*

OC-192 Dedicated Ring shown as an example (N)

6. OC-*n* DEDICATED RING SERVICE (cont'd) (N)

C. Terms and Conditions (cont'd)

17. ARC sub-rings can be provisioned in two basic configurations:
    - single-node, single-homed ARC
    - multi-node, single-homed ARC

18. Circuit traffic can be added/dropped from an ARC sub-ring node to another ARC sub-ring node within the same ARC (known as intra-ARC) or between ARCs (known as inter-ARC). Intra-ARC circuits can only be provisioned as unprotected, due to technical limitations. Circuit traffic can also originate on an ARC sub-ring node and route across and drop from a main ring node, but only when UPSR protection schemes are used. (N)

6. OC-n DEDICATED RING SERVICE (cont'd)

B. DEFINITIONS

Dedicated Ring Node
A dedicated ring designation of either a customer location or Company wire center that has Add/Drop capabilities.

Dedicated Ring Port
A dedicated ring element that denotes the termination or origination of a channelized service between dedicated ring nodes.

Ring Extension
A customer premises SONET installation connected to OC-12 Dedicated Ring Service via dedicated ring nodes and ports at two different wire center locations, one of which must be the serving wire center of the extended location. This applies only when the 1+1 Protection with Central Office Survivability optional feature is offered with OC-3 Service or OC-12 Service local distribution channels.

SONET (Synchronous Optical Network)
SONET is a set of international standards for fiber optic based transmission systems. SONET defines standard optical carrier transmission rates and utilizes a modular multiplexing approach based on the application of Synchronous Transport Signals (STS).

Re-Map Service
Re-Map Service is provided in conjunction with an OC-n Dedicated Ring Service and allows for a pre-defined set of services to be re-routed by the Company from one customer premises node to another customer premises node (defined as a "Re-Map node") in the event of a customer premises disaster. Re-Map Service will be tested at initial installation and once each year thereafter. Additional testing can be requested and will be charged on a per test basis. Activation upon customer request in the event of an emergency will be charged on a per-occurrence basis.

/1/

/1/ Material now appears on Original Sheet 72.1 in this Section.

In accordance with an Order issued by the Public Utilities Commission of Ohio, dated January 6, 2003, Case No. 02-3069-TP-ALT.

By Connie Browning, President, Cleveland, Ohio

6. OC-*n* DEDICATED RING SERVICE (cont'd)

B. Definitions (cont'd)

Ethernet over SONET (EoS) /1/ (N)
EoS allows the efficient transport of Ethernet frames using SONET. Ethernet ports will be available in bandwidths up to the Ethernet interface of 100 Mbps or 1 Gbps on an OC-*n* Dedicated Ring Service. As SONET bandwidths will be preset, the customer will be unable to transmit data beyond these preset SONET bandwidths.

Additional features are provided with the Ethernet over SONET (EoS) capability: (N)

Virtual Concatenation (VCAT) provides the ability and flexibility to size the customer's bandwidth (sub-rate VT1.5, super-rate STS-1 and 3c service payloads) based on their traffic requirements. For transport of payloads that do not fit efficiently into the standard set of VT1.5, STS-1 and STS-Nc payload envelopes, virtual concatenation can be used. (N)

Flex Ring
Denotes a feature which will provide multiple rings at various bandwidth levels (i.e. OC-12 and OC-48) in a single shelf. To increase bandwidth, a second high-speed card can be provisioned or a card with higher optics can be provisioned on the same shelf. When customers opt to purchase Dedicated Ring Services, the customer owns 100% of the available bandwidth within the ring. Although multiple rings can be provisioned off the shelf, all rings will be owned by the same customer.

/1/ EoS port interfaces offered as 10/100BaseT are only available at the customer premises location. (N)

6. OC-*n* DEDICATED RING SERVICE (cont'd)

C. TERMS AND CONDITIONS

The following terms and conditions apply to OC-*n* Dedicated Ring Service:

1. Dedicated ring service is provided at the option of the Company where appropriate SONET facilities are available. If appropriate facilities are not available, **Special Construction** charges may apply.

2. Dedicated ring service has a minimum service period of 36 months.

3. The customer will be billed time and material for any additional charges incurred by the Company in locating Company equipment at the customer premises for Dedicated Ring Node installations.

4. When a customer orders a Re-Map node, a minimum number of Re-Map ports must be equipped:

OC-3	28 DS1 Re-Map ports, or 1 DS3 or EC-1 Re-Map port	(N)
OC-12	28 DS1 Re-Map ports, or 3 DS3 or EC-1 Re-Map ports, or 1 OC-3 or OC-3c Re-Map port	(N)
OC-48	28 DS1 Re-Map ports, or 3 DS3 or EC-1 Re-Map ports, or 1 OC-3 or OC-3c Re-Map port, or 1 OC-12 or OC-12c Re-Map port	(N)
OC-192	28 DS1 Re-Map ports, or 3 DS3 or EC-1 Re-Map ports, or 1 OC-3 or OC-3c Re-Map port, or 1 OC-12 or OC-12c Re-Map port, or 4 OC-48 or OC-48c Re-Map ports	(N) | (N)

6. OC-*n* DEDICATED RING SERVICE (cont'd)

C. Terms and Conditions (cont'd)

5. Re-Map node ports must be ordered in incremental blocks as described below:

(N)

	Port Type				
	DS1	DS3	OC-3 OC-3c	OC-12 OC-12c	OC-48 OC-48c
OC-3 Ring	28, 56 or 84 (multiples of 28)	1, 2 or 3	N/A	N/A	N/A
OC-12 Ring	28, 56 or 84 (multiples of 28)	3, 6, 9 or 12	1, 2, 3 or 4	N/A	N/A
OC-48 Ring	28, 56 or 84 (multiples of 28)	3, 6, 9 ... or 48	1, 2, 3 ... or 16	1, 2, 3 or 4	N/A
OC-192 Ring	28, 56 or 84 (multiples of 28)/1/	3, 6, 9 ... or 192	1, 2, 3 ... or 64	1, 2, 3 ... or 16	1, 2, 3 or 4

6. An OC-48 or OC-192 ring utilizing Re-Map requires an OC-12, OC-3, EC-1 or DS3 Re-Map port. DS1 Re-Map Add/Drop Capability is needed if DS1 drops are required at the Re-Map node. (An OC-3 or OC-3c Re-Map port and DS1 Re-Map O/E Add/Drop Capability supports up to 84 DS1s).

7. When provisioning a Re-Map node, either 28 DS1 Re-Map ports or 1 DS3 or EC-1 Re-Map port will be the minimum required.

8. The emergency Re-Map activation configuration will be maintained for up to 30 days. After 30 days, if the customer wishes to continue the use of the remapped configuration, the emergency activation NRC will be applied once for each 30 day additional period.

/1/ DS1 Ports will be provided via a subtended OC-3 or OC-12 shelf.

6. OC-*n* DEDICATED RING SERVICE (cont'd)

C. TERMS AND CONDITIONS (cont'd)

9. Once the customer notifies the Company that they are ready to receive signals at the re-map node site the Company will re-map up to 50 circuits within the initial 4 hours and 20 circuits every hour thereafter. The Emergency Activation Nonrecurring Charge will not be applied if the first 50 circuits are not remapped within 4 hours due to a Company caused delay.

10. Re-Map testing or activation for OC-3 or OC-12 DDN service requires a minimum of one DS1 (VT1.5), or 1 DS3 (STS-1) between one customer premises node and the Re-Map node.

11. Re-Map testing or activation for OC-12, OC-48 or OC-192 service requires a minimum incremental group of from 1 to 28 DS1s or one DS3 or EC-1 (equals one STS-1) between one customer premises node and the Re-Map node. In addition, Re-Map capability on an OC-192 Dedicated Ring is limited to those rings utilizing UPSR (Unidirectional Path Switched Ring) protection. (N) (N) (N)

12. Effective June 13, 2003, new orders for OC-*n* Dedicated Ring Service with the EoS enhancement will be served by different equipment than the equipment used for customers who placed OC-*n* Dedicated Ring Service orders that were completed prior to June 13, 2003. Customers subscribing to OC-*n* Dedicated Ring Service prior to June 13, 2003 requesting a change to the new equipment will incur early termination charges for their existing OC-*n* Dedicated Ring Service. Disconnect of the existing OC-*n* Dedicated Ring Service and placement of an order for new OC-*n* Dedicated Ring Service with the EoS enhancement is required. The monthly rates for the new service(s) shall be those rates in effect at the time the new service(s) is installed.

13. EoS interfaces have distance limitations from the Company Serving Wire Center to the customer's demarcation point. These limitations will be discussed with the customer during the planning process, and the Company and the customer will determine the appropriate EoS interface for the customer's OC-*n* Dedicated Ring Service.

/1/

/1/ Material now appears on 1st Revised Sheet 73.3 in this Section.

6. OC-*n* DEDICATED RING SERVICE (cont'd)

C. TERMS AND CONDITIONS (cont'd)

14. EoS requires that customers utilize certain settings for their Customer Provided Equipment (CPE). The Company will work cooperatively with the customer to make sure that the customer utilizes the correct settings. In some cases, the customer may be required to make modifications (including upgrades) to their CPE, which will be entirely at the customer's expense. Failure to use these settings will result in service problems possibly leading to outages for which the customer will not hold the Company liable. EoS throughputs may vary depending on the type of equipment used to provide the service. Certain protocols may not be available. /1/ /1/

15. Flex Ring (multiple rings) is available only with Next Generation SONET equipment. Effective March 6, 2006, new orders for OC-n Dedicated Ring Service with the Flex Ring feature will be served by different equipment than the equipment used for customers who placed OC-n Dedicated Ring Service orders that were completed prior to March 6, 2006. Customers subscribing to OC-n Dedicated Ring Service prior to March 6, 2006 requesting a change to the new equipment will be allowed when the customer orders a new ring with a TPP and revenue of equal to or greater than the existing ring. Disconnect of the existing OC-n Dedicated Ring Service and placement of an order for new OC-n Dedicated Ring Service with the Flex Ring feature is required. The monthly rates for the new service(s) shall be those rates in effect at the time the new service(s) is installed.

16. Only one Flex Ring customer may reside on a Dedicated Ring Node in the Central Office or Customer Premise. Although the equipment can support multiple Dedicated Rings, all rings must be owned by the same customer. Multiple Dedicated Ring customers can not share a single piece of Network Terminating Equipment. Where possible, the Company will provision a second ring (on the same shelf) with the same line rate to provide the customer with additional bandwidth. This will provide the customer with an aggregate bandwidth of 24 STS-1s (2 OC-12s) and 96 STS-1s (2 OC-48s) without purchasing an additional shelf. Capability of the second ring and limitations on the available direct drop ports off the second ring will be similar to the first ring and subject to the availability of card slots on the shelf.

/1/ Material formerly appeared on 4th Revised Sheet 73.2 of this Section.

6. OC-*n* DEDICATED RING SERVICE (cont'd)

D. FEATURES

1. Standard Features

Shared Network Arrangement
A Shared Network Arrangement is available with OC-n Dedicated Ring Service. Refer to Shared Network Arrangement in Part 15, Section 1.

Expanded Interconnection
Provides for the connection of customer-provided dedicated ring channels to specified Company provided Dedicated Communications Services.

Transmux
Provides for the ability to multiplex from a VT-mapped DS-1 to a DS-3 within an OC-3, OC-12 or OC-48 Dedicated Ring Service and also on a single card. DS-1s mapped to VT1.5s are aggregated across the SONET network and terminated into a single DS-3 card at a central location. The hand-off will be a channelized DS-3. (C)

6. OC-*n* DEDICATED RING SERVICE (cont'd)

E. TECHNICAL REFERENCES

The Network Channel Interface (NCI) and the Network Channel Codes (NC) and all other associated material are contained in Technical Publication AM TR-TMO-000080 and AM TR-TMO-000101.

Subject	Technical Reference
Ameritech Services Network Channel and Network Channel Interface Codes	AM TR-TMO-000080
Ameritech Digital Service Transmission Parameters	AM TR-TMO-000101
Ameritech OC-3, OC-12, OC-48 and OC-192 Dedicated Ring Service Interface Specifications	AM TR-NIS-000111

The Technical Reference can be obtained from:

APEx Support Team (T)
(734) 523-7348 (T)

6. OC-*n* DEDICATED RING SERVICE (cont'd)

F. PRICES

1. Service Elements

(D)
(D)

Description /Billing Code/	Nonrecurring Charge
Administrative Charge	
- per order	
• OC-3 Dedicated Ring /ORCMX/	$ 50.00
• OC-12 Dedicated Ring /ORCMX/	50.00
• OC-48 Dedicated Ring /ORCMX/	50.00
• OC-192 Dedicated Ring /ORCMX/	50.00
Design and Central Office Connection Charge	
- per circuit /1/	
• OC-3 Dedicated Ring /NRBCL/	600.00
• OC-12 Dedicated Ring /NRBCL/	600.00
• OC-48 Dedicated Ring /NRBCL/	600.00
• OC-192 Dedicated Ring /NRBCL/	2,250.00

/1/ Per circuit is applied once per the total original ring design.

6. OC-n DEDICATED RING SERVICE (cont'd)

F. PRICES (cont'd)

1. Service Elements (cont'd)

(D)
(D)

Description /Billing Code/	Nonrecurring Charge
Re-Map Service	
Initial service script establishment/test charge	
Per OC-3 Ring /NRMR1/	$2,000.00
Per OC-12 Ring /NRMR1/	3,500.00
Per OC-12 DDN Ring /NRMR2/	2,000.00
Per OC-48 Ring /NRMR1/	4,500.00
Per OC-192 Ring /NRMR1/	5,500.00
Subsequent script activity charge	
Per OC-3 Ring /NRMR3/	1,200.00
Per OC-12 Ring /NRMR3/	2,100.00
Per OC-12 DDN Ring /NRMR4/	1,200.00
Per OC-48 Ring /NRMR3/	2,700.00
Per OC-192 Ring /NRMR3/	3,200.00
Scheduled test charge	
Per OC-3 Ring /NRMR5/	1,600.00
Per OC-12 Ring /NRMR5/	2,800.00
Per OC-12 DDN Ring /NRMR6/	1,600.00
Per OC-48 Ring /NRMR5/	3,600.00
Per OC-192 Ring /NRMR5/	4,200.00
Emergency Re-map activation (per request)	
Per OC-3 Ring /NRMR7/	1,800.00
Per OC-12 Ring /NRMR7/	3,150.00
Per OC-12 DDN Ring /NRMR8/	1,800.00
Per OC-48 Ring /NRMR7/	4,050.00
Per OC-192 Ring /NRMR7/	5,000.00

6. OC-*n* DEDICATED RING SERVICE (cont'd)

F. PRICES (cont'd)

1. Service Elements (cont'd)

(D)
(D)

Description /Billing Code/	Nonrecurring Charge	Monthly Payment *Term Payment Plans* 36 Months	60 Months
Node			
- per node type:			
OC-3			
Customer Premises			
First /FP5CX/		$1,770.00	$1,415.00
Additional /FP5CA/		1,000.00	800.00
Central Office /FC5CX/		1,000.00	800.00
OC-3			
Customer Premises			
First Re-Map /RN8CX/		1,770.00	1,415.00
Additional Re-Map /RN8CA/		1,000.00	800.00

6. OC-*n* DEDICATED RING SERVICE (cont'd)

F. PRICES (cont'd)

1. Service Elements (cont'd)

(D)
(D)

Description /Billing Code/	Nonrecurring Charge	Monthly Payment *Term Payment Plans* 36 Months	60 Months
Node (cont'd)			
OC-12			
Customer Premises			
First /FP5DX/		$3,850.00	$3,080.00
Additional /FP5DA/		2,620.00	2,095.00
Central Office /FC5DX/		2,620.00	2,095.00
Direct Drop			
Customer Premises			
First /L8NDX/		3,750.00	2,980.00
Additional /L8NDA/		2,520.00	1,995.00
Central Office /L9NDX/		2,520.00	1,995.00
OC-12			
Customer Premises			
First Re-Map /RN8DX/		3,850.00	3,080.00
Additional Re-Map /RN8DA/		2,620.00	2,095.00
Direct Drop			
Customer Premises			
First Re-Map /RN8DX/		3,750.00	2,980.00
Additional Re-Map /RL8DA/		2,520.00	1,995.00

6. OC-*n* DEDICATED RING SERVICE (cont'd)

F. PRICES (cont'd)

1. Service Elements (cont'd)

(D)
(D)

Description /Billing Code/	Nonrecurring Charge	Monthly Payment *Term Payment Plans* 36 Months	60 Months
Node (cont'd)			
OC-48			
Customer Premises			
First /FP5EX/		$5,890.00	$4,715.00
Additional /FP5EA/		5,240.00	4,190.00
Central Office /FC5EX/		5,240.00	4,190.00
OC-48			
Customer Premises			
First Re-Map /RN8EX/		$5,890.00	$4,715.00
Additional Re-Map /RN8EA/		5,240.00	4,190.00

6. OC-n DEDICATED RING SERVICE (cont'd)

F. PRICES (cont'd)

1. Service Elements (cont'd)

(D)
(D)

Description /Billing Code/		Nonrecurring Charge	Monthly Payment *Term Payment Plans* 36 Months	60 Months
Node (cont'd)				
OC-192				
Customer Premises				
First	/GP5AX/		$22,000.00	$17,650.00
Additional	/GP5AA/		19,650.00	15,700.00
Central Office	/GC5AX/		19,650.00	15,700.00
OC-192				
Customer Premises				
First Re-Map	/RNFAX/		22,000.00	17,650.00
Additional Re-Map	/RNFAA/		19,650.00	15,700.00

6. OC-*n* DEDICATED RING SERVICE (cont'd)

F. PRICES (cont'd)

1. Service Elements (cont'd)

(D)
(D)

Description /Billing Code/	Nonrecurring Charge	Monthly Payment *Term Payment Plans* 36 Months	60 Months
Node (cont'd)			
Nonrecurring Charges for subsequent installation			
- per node			
Customer Premises /NRBS7/	$400.00		
Central Office /NRBSV/	325.00		
Nonrecurring Charges for subsequent installation			
- per node			
Customer Premises - Re-Map /NRBS7/	400.00		

6. OC-*n* DEDICATED RING SERVICE (cont'd)

F. PRICES (cont'd)

1. Service Elements (cont'd)

(D)
(D)

Description /Billing Code/	Monthly Payment *Term Payment Plans* 36 Months	60 Months	Monthly Extension
Node (cont'd)			
- per node:			
Flex Ring			
OC-12			
Customer Premises Node /GP5FX/	$2,200.00	$1,800.00	$2,900.00
Central Office Node /GC5FX/	1,850.00	1,500.00	2,200.00
OC-48			
Customer Premises Node /GP5GX/	3,900.00	3,000.00	4,500.00
Central Office Node /GC5GX/	3,500.00	2,800.00	4,100.00

6. OC-*n* DEDICATED RING SERVICE (cont'd)

F. PRICES (cont'd)

1. Service Elements (cont'd)

(D)
(D)

Description /Billing Code/	Nonrecurring Charge	Monthly Payment *Term Payment Plans* 36 Months	60 Months	Monthly Extension
Transmux[/1/]				
- per DS-3 port /S4NGX/		$550.00	$450.00	$675.00
Nonrecurring Charges for subsequent installation - per DS-3 port /NRBSX/	$385.00			

(N)
(N)

/1/ Available only with OC-3, OC-12 or OC-48 Dedicated Ring Service. (C)

In accordance with an Order issued by the Public Utilities Commission of Ohio, dated January 6, 2003, Case No. 02-3069-TP-ALT.

By Connie Browning, President, Cleveland, Ohio

6. OC-*n* DEDICATED RING SERVICE (cont'd)

F. PRICES (cont'd)

1. Service Elements (cont'd)

(D)
(D)

Description /Billing Code/	Nonrecurring Charge	Monthly Payment *Term Payment Plans* 36 Months	60 Months
OC-48 Add/Drop Capability[1/] - per arrangement (per node) (not to exceed 12 DS3s or equivalent) /MPEFX/		$1,170.00	$965.00
Re-Map per arrangement (not to exceed 12 DS3s or equivalent) /M8RFX/		1,170.00	965.00
Nonrecurring Charges for subsequent installation - per arrangement /NRBS8/	$490.00		

/1/ When Next Generation (NG) SONET equipment is utilized, the Add/Drop Capability Charge may be applied when the maximum number of Direct Drop ports are exceeded.

6. OC-n DEDICATED RING SERVICE (cont'd)

F. PRICES (cont'd)

1. Service Elements (cont'd)

(D)
(D)

Description /Billing Code/	Nonrecurring Charge	Monthly Payment *Term Payment Plans* 36 Months	60 Months
OC-192 Add/Drop Capability /1//2/ - per node /MXRGX/		$5,000.00	$4,000.00

/1/ The OC-192 Add/Drop Capability Charge is applied to all nodes, excluding regenerators.
/2/ When Next Generation (NG) SONET equipment is utilized, the Add/Drop Capability Charge may be applied when the maximum number of Direct Drop ports are exceeded.

6. OC-*n* DEDICATED RING SERVICE (cont'd)

F. PRICES (cont'd)

1. Service Elements (cont'd)

(D)
(D)

Description /Billing Code/	Nonrecurring Charge	Monthly Payment *Term Payment Plans* 36 Months	Monthly Payment *Term Payment Plans* 60 Months
Ports			
- per node:		$ 50.00	$ 45.00
DS1 at OC-3 node /SPRAX/		120.00	110.00
DS3 at OC-3 node /SPRBX/		120.00	110.00
DS3 at OC-12 (DDN) /SPRMX/		120.00	110.00
DS3 at OC-12 node /SPRCX/		150.00	135.00
EC-1 at OC-3 node /S9NSX/		120.00	110.00
EC-1 at OC-12 node /S9NUX/		120.00	110.00
EC-1 at OC-48 node /S9NVX/		120.00	110.00
EC-1 at OC-192 node /S9TZX/		120.00	110.00
OC-3,OC-3c at OC-12 node /SPREX/		50.00	45.00
DS1 at OC-12 (DNN)[/1/] /SPRNX/		50.00	45.00
DS1 at OC-12 node[/1/] /SPRGX/		375.00	360.00
OC-12,OC-12c at OC-48 node /SPRHX/		150.00	135.00
OC-3,OC-3c at OC-48 node /SPRJX/		120.00	110.00
DS3 at OC-48 node /SPRKX/		50.00	45.00
DS1 at OC-48 node[/1/] /SPRLX/			
OC-48,OC-48c at OC-192 node /S9NJX/		950.00	900.00
OC-12,OC-12c at OC-192 node /S9NGX/		375.00	360.00
OC-3,OC-3c at OC-192 node /S9NEX/		150.00	135.00
DS3 at OC-192 node /S9QGX/		120.00	110.00
DS1 at OC-192 node /S9QWX/		50.00	45.00

/1/ Optical to Electrical DS1 Add/Drop Capability is needed along with an OC-3 port unless the customer has chosen an OC-12 DDN. When Next Generation (NG) SONET equipment is utilized, Optical to Electrical Add/Drop Capability may be needed when the maximum number of Direct Drop ports are exceeded.

6. OC-n DEDICATED RING SERVICE (cont'd)

F. PRICES (cont'd)

1. Service Elements (cont'd)

(D)
(D)

Description /Billing Code/	Nonrecurring Charge	Monthly Payment *Term Payment Plans* 36 Months	Monthly Payment *Term Payment Plans* 60 Months
Nonrecurring Charges for subsequent installation			
- per port			
OC-48,OC-48c /NRBN9/	$500.00		
OC-12,OC-12c /NRBSZ/	400.00		
OC-3,OC-3c /NRBSW/	400.00		
DS3 /NRBSX/	385.00		
EC-1 /1CREC/	110.00		
DS1 /NRBSY/	350.00		

6. OC-*n* DEDICATED RING SERVICE (cont'd)

F. PRICES (cont'd)

1. Service Elements (cont'd)

(D)
(D)

Description /Billing Code/	Monthly Payment *Term Payment Plans* 36 Months	60 Months	Monthly Extension
EoS Ports - per node:			
100 Mbps Ethernet (STS-1)at OC-3 node /S9TAX/	$145.00	$130.00	$ 225.00
100 Mbps Ethernet (STS-1)at OC-12 node /S9TBX/	145.00	130.00	225.00
100 Mbps Ethernet (STS-3c)at OC-12 node /S9TCX/	180.00	160.00	280.00
1 Gbps Ethernet (STS-1) at OC-12 node /S9TDX/	250.00	200.00	350.00
1 Gbps Ethernet (STS-3c) at OC-12 node /S9TEX/	250.00	200.00	350.00
100 Mbps Ethernet (STS-1)at OC-48 node /S9TGX/	145.00	130.00	225.00
100 Mbps Ethernet (STS-3c)at OC-48 node /S9THX/	180.00	160.00	280.00
1 Gbps Ethernet (STS-1) at OC-48 node /S9TJX/	250.00	200.00	350.00
1 Gbps Ethernet (STS-3c) at OC-48 node /S9TKX/	250.00	200.00	350.00
1 Gbps Ethernet (STS-12c) at OC-48 node /S9TLX/	600.00	500.00	875.00
1 Gbps Ethernet (STS-24) at OC-48 node /S9TMX/	900.00	850.00	1,500.00
100 Mbps Ethernet (STS-1)at OC-192 node /S9TNX/	145.00	130.00	225.00
100 Mbps Ethernet (STS-3c)at OC-192 node/S9TOX/	180.00	160.00	280.00
1 Gbps Ethernet (STS-1) at OC-192 node /S9TPX/	250.00	200.00	350.00
1 Gbps Ethernet (STS-3c) at OC-192 node /S9TQX/	250.00	200.00	350.00

6. OC-*n* DEDICATED RING SERVICE (cont'd)

F. Prices (cont'd)

1. Service Elements (cont'd)

Description /Billing Code/	Monthly Payment *Term Payment Plans* 36 Months	60 Months	Monthly Extension
EoS Ports - per node: (cont'd)			
1 Gbps Ethernet (STS-12c) at OC-192 node /S9TRX/	$600.00	$500.00	$ 875.00
1 Gbps Ethernet (STS-24c) at OC-192 node /S9TSX/	900.00	850.00	1,500.00

	Nonrecurring Charge	
Nonrecurring Charges for subsequent installation, per port type		(T)
100 Mbps Ethernet /NRBY4/	$385.00	
1 Gbps Ethernet /NRBY5/	425.00	(T)

6. OC-*n* DEDICATED RING SERVICE (cont'd) (N)

F. Prices (cont'd)

1. Service Elements (cont'd)

Description /Billing Code/	Monthly Payment *Term Payment Plans* 36 Months	60 Months	Monthly Extension
EoS Ports			
Virtual Concatenation (VCAT)/1//2/			
- per OC-3, OC-12, OC-48 or OC-192 node			
10/100BaseT VCAT Ethernet Port /S5P1X/3/	$250.00	$180.00	$350.00
VT1.5-1v (1.6 Mbps)			
VT1.5-2v (3.2 Mbps)			
VT1.5-3v (4.8 Mbps)			
VT1.5-4v (6.4 Mbps)			
VT1.5-5v (8.0 Mbps)			
VT1.5-6v (9.6 Mbps)			
VT1.5-7v (11.2 Mbps)			
VT1.5-8v (12.4 Mbps)			
VT1.5-10v (16.0 Mbps)			
VT1.5-13v (20.8 Mbps)			
STS-1-1v (48.384 Mbps)			
STS-1-2v (96.768 Mbps)			

/1/ Nonrecurring charges apply to EoS Ports, Virtual Concatenation (VCAT). See EoS Port charges on Sheet 78.3 for applicable nonrecurring charges.
/2/ The bandwidth options shown represent the actual payload capacity for the selected bandwidth.
/3/ EoS port interfaces offered as 10/100BaseT are only available at the customer premises location. (N)

6. OC-*n* DEDICATED RING SERVICE (cont'd) (N)

F. Prices (cont'd)

1. Service Elements (cont'd)

Description /Billing Code/	Monthly Payment *Term Payment Plans* 36 Months	60 Months	Monthly Extension
EoS Ports			
Virtual Concatenation (VCAT)/1//2/ (cont'd)			
- per OC-3, OC-12, OC-48 or OC-192 node (cont'd)			
1000BaseSX VCAT Ethernet Port /S5P2X/	$425.00	$350.00	$500.00
1000BaseLX VCAT Ethernet Port /S5P3X/	425.00	350.00	500.00
STS-1-1v (48.384 Mbps)			
STS-1-2v (96.768 Mbps)			
STS-1-3v (145.152 Mbps)			
STS-1-4v (193.536 Mbps)			
STS-1-5v (241.92 Mbps)			
STS-1-6v (290.304 Mbps)			
STS-1-9v (435.456 Mbps)			
STS-1-12v (580.608 Mbps)			
STS-1-21v (1016.064 Mbps)			
STS-3c-1v (149.76 Mbps)			
STS-3c-2v (299.52 Mbps)			
STS-3c-3v (449.28 Mbps)			
STS-3c-4v (599.04 Mbps)			
STS-3c-7v (1048.32 Mbps)			

/1/ Nonrecurring charges apply to EoS Ports, Virtual Concatenation (VCAT). See EoS Port charges on Sheet 78.3 for applicable nonrecurring charges.

/2/ The bandwidth options shown represent the actual payload capacity for the selected bandwidth. (N)

6. OC-*n* DEDICATED RING SERVICE (cont'd)

F. PRICES

1. Service Elements

(D)
(D)

Description /Billing Code/	Nonrecurring Charge	Monthly Payment *Term Payment Plans* 36 Months	60 Months
Mileage			
- per mile between nodes by ring type			
• OC-3 /IL5XX/		$ 260.00	$ 220.00
• OC-12 /IL5XX/		260.00	220.00
• OC-48 /IL5XX/		260.00	220.00
• OC-192 /IL5XX/		260.00	220.00
Optical to Electrical Add/Drop Capability			
- per OC-3 to DS1 add/drop /MXJDX/		875.00	700.00
- per arrangement /1/ (per OC-192 node) /2/ /MXJGX/		2,500.00	2,000.00
Re-Map			
- per OC-3 to DS1 add/drop /M8RDX/		875.00	700.00
Nonrecurring Charges for subsequent installation			
- per OC-3 to DS1 add/drop capability /NRBS6/	$490.00		

/1/ When electrical DS3 or EC-1 drops are required, the OC-192 Optical to Electrical Add/Drop Capability Charge is applied in addition to the OC-192 Add/Drop Capability Charge preceding. When Next Generation (NG) SONET equipment is utilized, the Optical to Electrical Add/Drop Capability Charge may be needed only when the maximum number of Direct Drop ports are exceeded.

/2/ Not to exceed any configurable combination of ports beyond 192 STS-1 equivalents.

6. OC-*n* DEDICATED RING SERVICE (cont'd)

F. PRICES (cont'd)

1. Service Elements (cont'd)

(D)
(D)

Description /Billing Code/	Monthly Payment *Term Payment Plans* 36 Months	60 Months	
Re-Map Capability			
per DS1 Re-Map Block (consists of 28 DS1 ports) at			
OC-3 Ring /P8RAX/	$1,400.00	$1,260.00	
OC-12 Ring /P8RGX/	1,400.00	1,260.00	
OC-12 DDN Ring /P8RNX/	1,400.00	1,260.00	
OC-48 Ring /P8RLX/	1,400.00	1,260.00	
per DS3 Re-Map Port at			
OC-3 Ring /P8RBX/	120.00	110.00	
OC-12 Ring /P8RBX/	120.00	110.00	
OC-12 DDN Ring /P8RMX/	120.00	110.00	
OC-48 Ring /P8RMX/	120.00	110.00	
per EC-1 Re-Map Port at			
OC-3 Ring /S9N6X/	120.00	110.00	
OC-12 Ring /S9N8X/	120.00	110.00	
OC-48 Ring /S9N9X/	120.00	110.00	
per DS3 Re-Map Block (consists of 3 DS3 ports) at			
OC-12 Ring /P8RCX/	360.00	330.00	
OC-48 Ring /P8RKX/	360.00	330.00	
per DS3 TransMux Re-Map Port at			(N)
OC-3 Ring /RN7TX/	550.00	450.00	|
OC-12 Ring /RN7TX/	550.00	450.00	|
OC-48 Ring /RN7TX/	550.00	450.00	(N)

/1/

/1/ Material now appears on 8th Revised Sheet 80 in this Section.

6. OC-n DEDICATED RING SERVICE (cont'd)

F. PRICES (cont'd)

1. Service Elements (cont'd)

(D)
(D)

Description /Billing Code/	Nonrecurring Charge	Monthly Payment *Term Payment Plans* 36 Months	60 Months	(C)
Re-Map Capability				
per OC-3 Re-Map Port at				/1/
OC-12 Ring /P8REX/		$ 150.00	$ 135.00	
OC-48 Ring /P8RJX/		150.00	135.00	
OC-192 Ring /RN72X/		150.00	135.00	
per OC-12 Re-Map Port at				
OC-48 Ring /P8RHX/		375.00	360.00	
OC-192 Ring /RN73X/		375.00	360.00	
per OC-48 Re-Map Port at				
OC-192 Ring /RN74X/		825.00	700.00	/1/
- per EC-1 Re-Map Port				
Nonrecurring Charges for subsequent installation of EC-1 Re-Map Port /1CREC/	$110.00			
Dedicated Ring Regenerator				
- each (as required)				
• OC-3 /RGY/		1,000.00	800.00	
• OC-12 /RGY/		2,620.00	2,095.00	
• OC-48 /RGY/		3,275.00	2,620.00	
• OC-192 /RGY/		9,250.00	7,400.00	
Nonrecurring Charges for subsequent installation of Regenerator				
- each (as required) /NRBS5/	270.00			
Shared Network Arrangement				
- processing charge, per service order /NRBOP/	30.00			

/1/ Material formerly appeared on 3rd Revised Sheet 79.1 in this Section.

6. OC-*n* DEDICATED RING SERVICE (cont'd)

F. Prices (cont'd)

2. Payment Plans

- *Term Payment Plans*
  OC-*n* Dedicated Ring Service is only available under the Term Payment Plan (TPP) whereby customers must select either a 36-month or 60-month period. If a node is added after the initial installation of the dedicated ring, the new node will carry the same TPP rate as the initial ring and be co-terminus with that TPP. However, if a node is added during the last 12 months or less of a TPP, the customer will be billed the initial TPP ring rate for a minimum period of 12 months. After the selected Term Payment Plan period is satisfied, the prevailing prices of the current plan will continue until the customer cancels or renews the service. Refer to *Term Payment Plans* in Part 15, Section 1.

- *Single Payment Option (SPO)*
  A Single Payment Option is available for this service. Refer to *Term Payment Plans - Single Payment Option* in Part 15, Section 1.

3. Termination Charges

Termination Charges will apply to service termination prior to the contracted period. The termination charge for all TPP terms for OC-*n* Dedicated Ring Service will be calculated as described in *Term Payments Plans – Termination Charges* in Part 15, Section 1.

Commission approval of the above termination liability language is not intended to indicate that the Commission has sanctioned any particular legal result should a dispute arise between the parties. In the event of dispute, signators to such contracts may pursue whatever legal remedies they deem appropriate to resolve the dispute.

Logical changes in the ring (change in mapping content) are not considered to be a dedicated ring termination.

(D)
(D)

6. OC-*n* DEDICATED RING SERVICE (cont'd)

F. Prices (cont'd)

3. Termination Charges (cont'd)

For service installed after July 10, 2007, customers will be permitted to upgrade to a higher-speed Ring-based service provided by the Company, without incurring Termination Charges, given the following conditions are met: (N)

- an upgrade is considered an increase in speed or capacity when comparing OC-n Dedicated Ring Service to the new service.
- the customer must issue a disconnect order for the existing OC-n Dedicated Ring 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 OC-n Dedicated Ring Service.
- the existing OC-n Dedicated Ring Service must have been in service for a minimum period of 15 months for a 36-month contract or 18 months for a 60-month contract. (N)

/1/

/1/ Material now appears on Original Sheet 81.1.1 in this Section.

6. OC-*n* DEDICATED RING SERVICE (cont'd) (N)

F. Prices (cont'd)

3. Termination Charges (cont'd) (N)

For customers upgrading from a lower speed OC-n Dedicated Ring Service to a higher speed OC-n Dedicated Ring Service, such an upgrade will be permitted without incurring Termination Liability charges, providing the following criteria are met: (C)/1/ (C) (T)

- The customer subscribes to a Term Pricing Plan period that is equal to, or greater than 36 months;
- The expiration date for the new Term Pricing Plan period is beyond the end of the original Term Pricing Plan period;
- No lapse in service occurs;
- Nonrecurring Charges will apply, when applicable;
- The monthly rates for the new service(s) will be those rates in effect at the time the new service(s) is(are) installed;
- The new service is provided between the same customer locations and with the same customer of record as the disconnected service;
- The original location of all nodes must be included in the new service;
- The billed monthly recurring revenue for each month of the first eighteen months of the new service is equal to or greater than the billed monthly recurring revenue for the last month of the services being converted;
- The customer agrees not to convert the new service Term Pricing Plan to a pricing plan with a lower rate for the period of eighteen months after the conversion; and
- Spare facilities and equipment must be available or a nonrecurring up-front payment, which is a Special Construction Charge, may apply. /1/

/1/ Material formerly appeared on 2nd Revised Sheet 81.1 in this Section.

6. OC-*n* DEDICATED RING SERVICE (cont'd)

F. PRICES (cont'd)

3. Termination Charges (cont'd)

Customers will be permitted to move one end of an OC-n Dedicated Ring Service to another location, without incurring Termination Charges, given the following conditions are met: (N)

- The customer must issue a disconnect order for the existing location and place a new service order for OC-n Dedicated Ring Service at the new location. Termination Charges for the existing location will be waived. Standard nonrecurring charges to install OC-n Dedicated Ring Service as a new circuit will apply.

- In addition to standard nonrecurring charges, additional charges for moving one end of the OC-n Dedicated Ring Service will be calculated on a time and material charge basis.

- 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 OC-n Dedicated Ring contract.

- The existing OC-n Dedicated Ring Service must have been in service for a minimum period of 12 months.

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

6. OC-*n* DEDICATED RING SERVICE (cont'd)

F. Prices (cont'd)

4. Credit Allowance

A service interruption will result in a credit equal to one month's bill for the individual port-to-port connection involved. An interruption of service will start when an inoperative service is reported to the Company and end when the service is operative. 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.

The OC-n Dedicated Ring Service credit allowance does not apply to a failure which occurs on a service where the customer has intentionally requested to provision riding services without SONET protection (see Unprotected Channel Transport described earlier in this tariff) or an unprotected facility where the customer has chosen not to utilize Special Construction to have such facilities constructed. This provision includes the entrance facility where the customer has chosen not to establish dual entrance facilities (diversity) from their property line to their building equipment location. The Credit allowance determination for service outages utilizing non-diverse entrance facilities is found in Part 15, Section 1 of this tariff. Additional information regarding Credit Allowance limits may be found in AM TR-TMO-000101. (N) (N)

Unprotected services may be interrupted to repair other circuits. In cases where the customer orders OC-192 Dedicated Ring Service with an unprotected 2-fiber service interface, the Company may provision this unprotected service, with other unprotected services, via a multi-port card. If one unprotected service on the card incurs an outage, the Company may repair the 2-fiber service interface device by replacing the card, which may temporarily interrupt service on any unprotected tributary circuits that subtend this same multi-port circuit card. In the event of a service interruption, credit allowance will be provided for the service that suffered the unplanned outage.

7. PROTECTPATH® SERVICE (T)

A. DESCRIPTION

ProtectPath® Service utilizes the SONET overlay network (shared ring) to provision DS1 (ProtectPath® 1.5) and/or DS3 (non-channelized) (ProtectPath® 45) service. (T) | (T)

ProtectPath® Service provides superior network reliability because it utilizes a self healing SONET ring architecture to deliver the customer's DS1 Service or DS3 Service. (T) (T)

All DS1 Service and DS3 Service rates and charges apply in addition to the appropriate ProtectPath® Service charges. (T) (T)

The National Exchange Carrier Association (NECA) Tariff F.C.C. No. 4 lists the Company wire center locations from which ProtectPath® Service is available. (T)

7. PROTECTPATH® SERVICE (cont'd) (T)

B. DEFINITIONS

B8ZS
An arrangement which allows a customer to transport 1.536 Mbps of information on DS1 Service with no constraint on the quantity or sequence of one and zero bits. (T)

Extended Superframe (ESF) Format
A signaling framing format for DS1 services consisting of frames with 192 information digit time slots preceded by a one digit time slot containing a Frame (F) bit. The ESF framing format consists of 24 consecutive frames as above in a structure where the F bits are divided into three groups used for framing, monitoring and datalink functions according to detailed specifications contained in industry standard ANSI T1.403-1995.

Superframe (SF or D4) Format
A signal framing format for DS1 services consisting of frames with 192 information digit time slots preceded by a one digit time slot containing a Frame (F) bit. The SF or D4 framing format consists of twelve consecutive frames as above in a structure where the F bits are used for framing only and are divided into two groups used for terminal framing and signaling framing functions according to detailed specifications contained in industry standard ANSI T1.403-1995.

7. PROTECTPATH® SERVICE (cont'd) (T)

C. TERMS AND CONDITIONS

In addition to regulations set forth elsewhere in this Tariff, the following regulations apply to ProtectPath® Service: (T)

1. The minimum service period for ProtectPath® Service is 36 months. (T)

2. ProtectPath® Service is only available when both ends of the service are located on the SONET overlay network. However, both ends cannot terminate at the same SONET node location. (T) (T)

3. At least one end of ProtectPath® Service must terminate at a customer premises. (T)

4. Channelized DS1 service is allowed, however the channelization must occur outside of the SONET overlay network.

5. Existing customers may convert to ProtectPath® Service, paying only the ProtectPath® service charge, as long as the speed ordered is greater than or equal to their existing service and the ProtectPath® contract length is either greater than or equal to their existing contract length. If the time remaining on the existing customer's TPP is less than 36 months, see Part 15, Section 1, Term Payment Plans. (T) (T)

7. PROTECTPATH® SERVICE (cont'd) (T)

D. FEATURES

1. Optional Features

B8ZS
Is available as a non-chargeable, customer specified option.

Extended Super Frame
Is available as a non-chargeable, customer specified option.

Super Frame
Is available as a non-chargeable, customer specified option.

7. PROTECTPATH® SERVICE (cont'd)

E. Technical References

Technical specifications for ProtectPath® Service are found in:

Subject	Technical Reference
Ameritech Digital Service Transmission Parameters	AM TR-TMO-000101
Ameritech Services Network Channel and Network Channel Interface Codes	AM TR-TMO-000080
High Capacity Digital Service (1.544 Mbps) Interface Generic Requirements for End Users	GR-54-CORE (Telcordia)
High Capacity Digital Special Access Service Transmission Parameter Limits and Interface Specifications	GR-342-CORE (Telcordia)
Network Rolls and Responsibilities for ProtectPath SONET Services	AM-002-531-007

The Technical Reference can be obtained from:

APEX Support Team (T)
(734) 523-7348 (T)

The Telcordia Technologies (formerly known as Bellcore) Publication(s) can be obtained from:

Telcordia Technologies, Inc.
8 Corporate Place, PYA 3A-184
Piscataway, New Jersey 08854-4156

7. PROTECTPATH® SERVICE (cont'd) (T)

F. PRICES

1. Service Elements

Description /Billing Code/	Nonrecurring Charge	
Administrative Charge		
- per service order, see:		
DS1 Service /NRBA+/	/1/	(T)
DS3 Service /NRBA+/	/2/	(T)
Design and Central Office Connection Charge		
- per circuit, see:		
DS1 Service /NRBD+/	/1/	(T)
Customer Connection Charge		
- per termination, see:		
DS1 Service /NRBB+/	/1/	(T)
ProtectPath® 1.5 Service Charge		(T)
- per arrangement /NR9DV/	$200.00	
ProtectPath® 45 Service Charge		(T)
- per arrangement /NR9DW/	200.00	

/1/ DS1 Service as specified in 15.3.3 apply. (T)

/2/ DS3 Service as specified in 15.3.4 apply. (T)

7. PROTECTPATH® SERVICE (cont'd) (T)

F. PRICES (cont'd)

1. Service Elements (cont'd)

Description /Billing Code/	Monthly Payment *Term Payment Plans* 12 Months	36 Months	60 Months	Monthly Extension
ProtectPath® 1.5 Service: (T)				
Local Distribution Channel - per point of termination /TZ4X+/	-	/2/	/2/	/1/
Channel Mileage Termination - per point of termination /CZ4X+/	-	/2/	/2/	/1/
Channel Mileage - per mile /1YZX+/	-	/2/	/2/	/1/

/1/ Applicable only after completion of a Term Payment Plan, DS1 Service as specified in 15.3.3 apply. (T)

/2/ DS1 Service as specified in 15.3.3 apply. (T)

7. PROTECTPATH® SERVICE (cont'd)

F. PRICES (cont'd)

1. Service Elements (cont'd)

Description /Billing Code/	Monthly Payment *Term Payment Plans* 12 Months	36 Months	60 Months	Monthly Extension	
ProtectPath® 45 Service:					
Local Distribution Channel - per point of termination Electrical Interface - per service package /TZUP+/	-	/1/	/1/	/2/	(T) (D) | (D)
Channel Mileage Termination - per point of termination /CZ4X+/	-	/1/	/1/	/2/	
Channel Mileage - per mile /1YZX+/	-	/1/	/1/	/2/	

/1/ DS3 Service as specified in 15.3.4 apply.
/2/ Applicable only after completion of a Term Payment Plan, DS3 Service as specified in 15.3.4 apply.

In accordance with an Order issued by the Public Utilities Commission of Ohio, dated January 6, 2003, Case No. 02-3069-TP-ALT.

By Connie Browning, President, Cleveland, Ohio

7. PROTECTPATH® SERVICE (cont'd) (T)

F. PRICES (cont'd)

2. Payment Plans

- ***Term Payment Plans***
  ProtectPath® Service is only available under the Term Payment Plan (TPP) whereby customers must select either a 36 or 60 month period. After the selected Term Payment Plan period is satisfied, the monthly price for DS1 service or the monthly extension price for DS3 service will apply unless a new TPP is selected. Refer to Term Payment Plans in Part 15, Section 1. (T)

- ***Single Payment Option (SPO)***
  A single payment option is available for this service. Refer to Term Payment Plans - Single Payment Option in Part 15, Section 1.

7. PROTECTPATH® SERVICE (cont'd) (T)

F. PRICES (cont'd)

3. *Termination Charges*

Termination Charges will apply to service terminated prior to the contracted period. The termination charge for all TPP terms for ProtectPath® Service will be calculated as described in Term Payment Plans - Termination Charges in Part 15, Section 1. (T)

7. PROTECTPATH® SERVICE (cont'd) (T)

F. PRICES (cont'd)

4. Credit Allowance

A credit allowance will be given for failure to meet the installation interval service date or for interruption of service. Refer to Credit Allowances in Part 15, Section 1 for calculating credit allowances.

7.

Reserved for future use.

7.

Reserved for future use.

7.

Reserved for future use.

8. CENTRAL OFFICE MULTIPLEXING AND CROSS CONNECT SERVICES

A. DESCRIPTION

Central Office Multiplexing is a wire center based optional service that either derives multiple transmission paths from a single transmission source or combines multiple transmission sources into a single transmission path. Central Office Multiplexing may be available in the following configurations:

- DS3/DS1 is a serving arrangement that either converts an electrical DS3 channel to twenty-eight DS1 channels or converts twenty-eight DS1 channels to an electrical DS3 channel. Timing for the DS1 channels utilizes digital time division multiplexing.

- DS1/(Analog, Base Rate Service or 128, 256, 384 Service) is a serving arrangement that either converts a DS1 into twenty-four channels for use with Analog, Base Rate Service or 128, 256, 384 Service or converts twenty-four Analog, Base Rate Service or 128, 256, 384 Service channels into a DS1 channel. (¢) (C)

Cross Connect is a wire center based optional service that cross-connects an OC-3 or OC-12 Service to another service of the same speed or to an add/drop function of the same speed at a wire center for the same or different customer on a per circuit basis. (C)

Fiber Hub Cross Connect is an optional service arrangement that cross-connects a DS1 Service, DS3 Service, or Base Rate Service termination to another service termination of the same speed at a designated Fiber Hub location. (C) (C)

Multiplexer Cross-Connection (MCC) is an arrangement that allows one channel of a multiplexed DS1 or DS3 Service to be connected to one channel of the same bit rate and like signaling of another multiplexed DS1 or DS3 Service. The lesser speed channel may be either an analog channel or a Base Rate channel provided at 64 Kbps of bandwidth between the two DS1 multiplexers, or DS1 Service between two DS3 multiplexers. MCC will be provided at all, or between two, Company locations where multiplexing is performed. (C) (¢) (C)

8. CENTRAL OFFICE MULTIPLEXING AND CROSS CONNECT SERVICES (cont'd)

B. DEFINITIONS

Cascade Multiplexing
Occurs when a higher speed channel is de-multiplexed to provide channels of a lesser capacity and one of the lesser capacity channels is further de-multiplexed.

Hub Rearrangement
Occurs when an existing channelized digital service between a customer premises and a hub location is multiplexed onto a new higher speed digital service at the hub. (C) (C)

8. CENTRAL OFFICE MULTIPLEXING AND CROSS CONNECT SERVICES (cont'd)

C. TERMS AND CONDITIONS

1. Central Office Multiplexing can only be ordered in conjunction with DS3 Service, DS1 Service and/or Network Reconfiguration Service, and is provided at the option of the Company where facilities permit. If appropriate facilities are not available, **Special Construction** may apply. Subject to availability, the customer may choose the multiplexing site. (C)

2. End to end services may be provided via Central Office Multiplexing. The transmission parameters of the end to end service thus provided will be that of the lower capacity or bit rate.

3. A customer of the Cross Connect service must purchase service to the wire center from his designated premises. One charge applies per service cross-connected.

4. Customers utilizing Fiber Hub Cross-Connect must purchase service from their designated premises to the Fiber Hub location. Fiber Hub locations may be found in the National Exchange Carrier Association (NECA) Tariff, F.C.C. No. 4.

5. When service is provided between a customer designated premises and a Fiber Hub Cross-Connect site, service is considered to end at the hub locations. Performance is measured between the customer premises and the hub location.

6. It is the customer's responsibility to assure that the channels connected at a Fiber Hub Cross-Connect site are compatible.

7. When Fiber Hub Cross-Connect is utilized to connect two services, the two cross-connected services are treated separately for service performance measurement and service interruption credit purposes.

8. CENTRAL OFFICE MULTIPLEXING AND CROSS CONNECT SERVICES (cont'd)

C. TERMS AND CONDITIONS (cont'd)

8. A Hub Rearrangement charge applies only when; neither customer location changes, the existing multiplexer associated with the lower speed services is not physically moved, and all rearranged facilities are included in one customer request.

9. When Cascade Multiplexing is performed, whether in the same or different locations, a charge for the additional multiplexing unit also applies. Channel Mileage Termination and Channel Mileage charges apply between multiplexer locations.

10. Each Company wire center has been assigned to a Rate Zone. A table listing all Rate Zone assignments can be found in Part 15, Section 1, Paragraph X of this tariff.

D. FEATURES

Reserved for future use.

8. CENTRAL OFFICE MULTIPLEXING AND CROSS CONNECT SERVICES (cont'd)

E. Technical References

Subject	Technical Reference
OPTINET 64 Interface Specifications	AM TR-OAT-000070
Digital Service Transmission Parameters	AM TR-TMO-000101
Service Description and Interface Requirements for FT-1 Digital Service	AM TR-TMO-000106
Service Description and Interface for OPTINET Optical Service	AM TR-TMO-000072
Digital Data Special Access Service Transmission Parameters and Interface Combinations	TR-NWT-000341 (Telcordia)
High-Capacity Digital Service (1.544 Mbps) Interface Generic Requirements for End Users	GR-54-CORE (Telcordia)
High Capacity Digital Special Access Service - Transmission Parameter Limits and Interface Specifications	GR-342-CORE (Telcordia)

The Technical Reference(s) can be obtained from:

APEX Support Team (T)
(734) 523-7348 (T)

The Telcordia (formerly known as Bellcore) Publication(s) can be obtained from:

Telcordia Technologies, Inc.
8 Corporate Place, PYA 3A-187
Piscataway, New Jersey 08854-4156

8. CENTRAL OFFICE MULTIPLEXING AND CROSS CONNECT SERVICES (cont'd)

F. PRICES

1. Service Elements

The following charges apply to channels provided in those Central Offices that are not designated in paragraph V.3 of Section 1 preceding.

Description /Billing Code/	Monthly Price	
Cross Connection of Services		
OC-3 to OC-3		
- per circuit /OCCCX/	$ 104.00	
OC-12 to OC-12		
- per circuit /OCCDX/	550.00	
OC-48 to OC-48		
- per circuit /OCCFX/	1,100.00	
Multiplexer Cross-Connection		
- per central office		
• DS1 Service		(C)
- per analog or Base Rate channel /CMO1X/	.42	(C)
• DS3 Service		(C)
- per DS1 Service		(C)
Zone 1 /CMO31/	6.54	
Zone 2 /CMO32/	6.54	
Zone 3 /CMO33/	6.54	

8. CENTRAL OFFICE MULTIPLEXING AND CROSS CONNECT SERVICES (cont'd)

F. PRICES (cont'd)

1. Service Elements (cont'd)

The following charges apply to channels provided in those Central Offices that are not designated in paragraph V.3 of Section 1 preceding.

Description /Billing Code/	Nonrecurring Charge
Fiber Hub Cross-Connect	
- DS0 to DS0 (Analog to Analog)	
1 day response /CX901/	$200.00
3 day response /CX903/	150.00
- DS0 to DS0 (Base Rate to Base Rate) (C)	
1 day response /CX901/	200.00
3 day response /CX903/	150.00
- DS1 to DS1	
1 day response	
Zone 1 /CCUA1/	290.00
Zone 2 /CCUA2/	290.00
Zone 3 /CCUA3/	290.00
3 day response	
Zone 1 /CCUB1/	190.00
Zone 2 /CCUB2/	190.00
Zone 3 /CCUB3/	190.00
- DS3 to DS3	
1 day response	
Zone 1 /CCUC1/	305.00
Zone 2 /CCUC2/	305.00
Zone 3 /CCUC3/	305.00
3 day response	
Zone 1 /CCUD1/	205.00
Zone 2 /CCUD2/	205.00
Zone 3 /CCUD3/	205.00

8. CENTRAL OFFICE MULTIPLEXING AND CROSS CONNECT SERVICES (cont'd)

F. PRICES (cont'd)

1. Service Elements (cont'd)

The following charges apply to channels provided in those Central Offices that are not designated in paragraph V.3 of Section 1 preceding.

Description /Billing Code/	Nonrecurring Charge	
Hub Rearrangement Record Charge		
- per DS3 to DS1 multiplexer rearranged		(C)
Zone 1 /NRBE1/	$500.00	
Zone 2 /NRBE2/	500.00	
Zone 3 /NRBE3/	500.00	
- per DS1 to Analog/Base Rate multiplexer rearranged		(C)
Zone 1 /NRBE1/	400.00	
Zone 2 /NRBE2/	400.00	
Zone 3 /NRBE3/	400.00	

8. CENTRAL OFFICE MULTIPLEXING AND CROSS CONNECT SERVICES (cont'd)

F. Prices (cont'd)

1. Service Elements (cont'd)

Description /Billing Code/	Monthly	Monthly Payment *Term Payment Plans* 12 Months	24 Months	36 Months	60 Months
Central Office Multiplexing					
- DS1 to Analog/Base Rate/128, 256 or 384					
Zone 1 /QMVX1/	$575.00(I)	$400.00	$325.00	$300.00	$285.00
Zone 2 /QMVX2/	575.00	400.00	325.00	300.00	285.00
Zone 3 /QMVX3/	575.00(I)	400.00	325.00	300.00	285.00
- DS3 to DS1					
Zone 1 /QM3X1/	900.00	700.00	650.00	600.00	550.00
Zone 2 /QM3X2/	900.00	700.00	650.00	600.00	550.00
Zone 3 /QM3X3/	900.00	715.00	650.00	600.00	550.00

8. CENTRAL OFFICE MULTIPLEXING AND CROSS CONNECT SERVICES (cont'd)

F. PRICES (cont'd)

2. Payment Plans

- ***Month to Month***
  Cross Connection of Services (OC-3 to OC-3 and OC-12 to OC-12) is available on a month to month basis.

  Central Office Multiplexing is available on a month to month basis.

- ***Term Payment Plans***
  Central Office Multiplexing is available under a Term Payment Plan (TPP) whereby customers must select either a 12, 24, 36 or 60 month period. After the selected Term Payment Plan period is satisfied, the monthly rate will apply unless a new TPP is selected. Refer to ***Term Payment Plans*** in Part 15, Section 1. (C)

- ***Single Payment Option (SPO)***
  A Single Payment Option is available for Central Office Multiplexing. Refer to ***Term Payment Plans - Single Payment Option*** in Part 15, Section 1.

3. Termination Charges

Termination Charges will apply to service terminated prior to the contracted period. The termination charge for all TPP terms for Central Office Multiplexing and Cross Connect Services will be calculated as described in ***Term Payment Plans - Termination Charges*** in Part 15, Section 1.

8. CENTRAL OFFICE MULTIPLEXING AND CROSS CONNECT SERVICES (cont'd)

F. PRICES (cont'd)

4. Credit Allowance

A credit allowance will be given for interruption of service when the outage consists of 30 consecutive minutes, or more, from the time that the Company is notified, or the outage is discovered by the Company, whichever is earlier. Refer to ***Credit Allowances*** in Part 15, Section 1 for calculating credit allowances. (Utilize Step 2 "for two-point services" to compute the credit allowance.) Credit allowances for circuits affected by a mux or cross-connect failure are calculated on a "by circuit" basis according to the type of circuit affected.

9. NETWORK RECONFIGURATION SERVICE (NRS) (T)

A. DESCRIPTION

Network Reconfiguration Service (NRS) gives customers the ability to reconfigure individual channel segments within their networks via electronic cross-connections. These segments may consist of DS3 Service, DS1 Service, 128, 256 and 384 Service and Base Rate Service. Customers may also reconfigure individual channels that are part of a reconfigurable multiplexed DS1 Service or multiplexed DS3 Service. Although NRS is focused primarily on digital services, customers may utilize NRS with analog services by ordering reconfigurable DS1's equipped with Central Office Multiplexing in addition to the NRS DS1 Terminations and then using the multiplexed DS1 for the transport of the analog services. Customer access to NRS may be made directly by the customer utilizing customer-provided terminal equipment on the customer's premises in conjunction with a dial-in line. Access is also available through a Company attendant reached by a dial-access telephone line. (T)

9. NETWORK RECONFIGURATION SERVICE (cont'd) (T)

B. DEFINITIONS

Access Arrangement
Provides the interface between the customer and the NRS system. An Access Arrangement must be purchased for each concurrent customer user of the NRS system. The Company issues a SecurID card to the customer user for each Access Arrangement when Attendant Service is not utilized. (T) (T)

NRS Training (T)
Provides for additional training requested by the customer beyond the training session included with the initial installation of the NRS system. (T)

Attendant Access
Provides for reconfiguration activities to be performed by a Company attendant at the direction of the customer. The customer may request that the commands be performed on demand or at a later, scheduled time. Attendant Access cannot be purchased independently, but is available to customers that access NRS through a dial-up arrangement. (T)

Database Modification
A customer initiated change to their network database subsequent to the initial database setup. These changes include:

- Addition or deletion of channel/facility terminations at the NRS system location. (T)
- Addition, deletion or change in the customer's master security word.

Port Termination
Connects a local distribution channel, or channel mileage, to an NRS location allowing the connected service to be reconfigured. All services in a customer's NRS database must be terminated at an NRS system location. Only services included in a customer's NRS database may utilize the NRS termination feature. (T) (T) (T)

9. NETWORK RECONFIGURATION SERVICE (cont'd) (T)

C. TERMS AND CONDITIONS

1. NRS will be available on a continuous basis except for the performance of scheduled preventative and routine maintenance or scheduled software updates. The customer will be notified at least 24 hours in advance of any scheduled service interruptions. (T)

2. NRS system locations are found in the National Exchange Carrier Association, Inc., Tariff F.C.C. No. 4. (T)

3. Services that are cross-connected by the Network Reconfiguration Service will not operate properly unless they have identical technical characteristics to ensure compatibility and proper operation. NRS customers are responsible for the compatibility of the services they choose to cross-connect. (T) (T)

   If the Company determines that the technical characteristics of services selected for cross-connection by the customer are not compatible, they will advise the customer and give them the opportunity to change the order.

4. Network Reconfiguration Service is provided at the option of the Company where facilities permit. If appropriate facilities are not available, **Special Construction** charges may apply. (T)

5. Each Company wire center has been assigned to a Rate Zone. A table listing all Rate Zone assignments can be found in Part 15, Section 1, Paragraph X of this tariff.

9. NETWORK RECONFIGURATION SERVICE (cont'd)

D. Features

1. Optional Features

NRS Training
Additional training, beyond that provided with the initial installation, is available.

Attendant Access
The customer may chose to have reconfiguration activities performed by the Company. (See *Definitions* preceding.)

Database Modification
Subsequent to the initial installation, the customer may request modification to the database. (See *Definitions* preceding.)

E. Technical References

Subject	Technical Reference
Ameritech OPTINET Reconfiguration Interface Specifications	AM TR-TMO-000064

The Technical Reference can be obtained from:

APEX Support Team (T)
(734) 523-7348 (T)

9. NETWORK RECONFIGURATION SERVICE (cont'd) (T)

F. PRICES

1. Service Elements

The following charges apply to channels provided in those Central Offices that are not designated in paragraph V.3 of Section 1 preceding.

Description /Billing Code/	Nonrecurring Charge	Monthly Payment *Term Payment Plans* 12 Months	36 Months	60 Months	Monthly	
NRS Service Charge						(T)
- per customer database /FN6DD/	$4,800.00	$228.00	$204.00	$192.00	$240.00	
NRS Access Arrangement						(T)
- per arrangement /RNQPA/	75.00	199.50	178.50	168.00	210.00	

9. NETWORK RECONFIGURATION SERVICE (cont'd) (T)

F. PRICES (cont'd)

1. Service Elements (cont'd)

The following charges apply to channels provided in those Central Offices that are not designated in paragraph V.3 of Section 1 preceding.

Description /Billing Code/	Monthly Payment *Term Payment Plans* 12 Months	36 Months	60 Months	Monthly	(T)
NRS System Location Port Termination - per termination					(T)
• Base Rate /PT5/	$ 19.00	$ 17.00	$ 16.00	$20.00	
• DS1					
Zone 1 /PQD11/	45.60	40.80	38.40	48.00	
Zone 2 /PQD12/	45.60	40.80	38.40	48.00	
Zone 3 /PQD13/	45.60	40.80	38.40	48.00	
• DS3					
Zone 1 /R6SX1/	166.25	148.75	140.00	175.00	
Zone 2 /R6SX2/	166.25	148.75	140.00	175.00	
Zone 3 /R6SX3/	166.25	148.75	140.00	175.00	

9. NETWORK RECONFIGURATION SERVICE (cont'd) (T)

F. PRICES (cont'd)

1. Service Elements (cont'd)

The following charges apply to channels provided in those Central Offices that are not designated in paragraph V.3 of Section 1 preceding.

Description /Billing Code/	Nonrecurring Charge
Optional Features	
Database Modification	
- per modification /FN6DC/	$50.00
Attendant Access	
- per first 30 minutes (per occurrence) /NRBN1/	55.00
- per additional 15 minute increments /NRBNA/	10.00
NRS Training (T)	
- per hour of additional training /NRBNT/	50.00

9. NETWORK RECONFIGURATION SERVICE (cont'd) (T)

F. PRICES (cont'd)

2. Payment Plans

- ***Month to Month***
  Network Reconfiguration Service is available on a month to month basis. (T)

- ***Term Payment Plans***
  Network Reconfiguration Service is available under the Term Payment Plan (TPP) whereby customers must select either a 12, 36 or 60 month period. After the selected Term Payment Plan period is satisfied, the monthly rate will apply unless a new TPP is selected. Refer to ***Term Payment Plans*** in Part 15, Section 1. (T)

- ***Single Payment Option (SPO)***
  A Single Payment Option is available for this service. Refer to ***Term Payment Plans - Single Payment Option*** in Part 15, Section 1.

3. Termination Charges

Termination Charges will apply to service terminated prior to the contracted period. The termination charge for all TPP terms for Network Reconfiguration Service will be calculated as described in ***Term Payment Plans - Termination Charges*** in Part 15, Section 1. (T)

4. Credit Allowance

A credit allowance will be given for failure to meet the installation interval service date or for interruption of service. Refer to ***Credit Allowances*** in Part 15, Section 1 for calculating credit allowances. (Utilize Step 2 "for two-point services" to compute the credit allowance.) Credit allowances for circuits affected by an NRS failure are calculated on a "by circuit" basis according to the type of circuit affected. (T)

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11. MULTI-SERVICE OPTICAL NETWORK RING SERVICE

A. *DESCRIPTION*

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.

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/1/ Material now appears on Original Sheet No. 139.2 in this Section.

11. MULTI-SERVICE OPTICAL NETWORK RING SERVICE (N)

A. DESCRIPTION

Sub-Rate Systems

- Sub-Rate System – provides a multiplexing system operating at 1.25 Gbps with 4 ports. Applicable to ESCON™, 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./1/

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

- GigE/FC/FICON™ 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™ Channels (1.0625 Gbps) or any combination thereof totaling two channels on the sub-rate system. Fibre Channel (2.125 Gbps) and FICON™ (2.125 bps) 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./1/ /3/

- 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./2/

/3/

/1/ Available where facilities and equipment permit.
/2/ Available where facilities and equipment permit beginning November 30, 2005.
/3/ Material formerly appeared on 1st Revised Sheet No. 140.1 in this Section. (N)

11. MULTI-SERVICE OPTICAL NETWORK RING SERVICE

A. DESCRIPTION

/2/

MON Ring Service offers the following port interfaces:

IBM Protocols

- 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. (N) (N)

- 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/CLO™ is limited to a maximum distance of 40 km./1/ (C) | (C)

- 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. (N) | (N)

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

- 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 100 km. (N) | (N)

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

/2/ Material formerly appeared on 1st Revised Sheet No. 139 in this Section. /2/

11. MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)

A. *DESCRIPTION*

Other Protocols

- Fibre Channel (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. (N) (N)

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

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

- 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.

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

- 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. (N) (N)

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/1/ Material now appears on Original Sheet No. 140.01 in this Section.

11. MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)

A. DESCRIPTION (cont'd)

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Other Protocols (cont'd)

- 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.[/1/] (N) (N)
- 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.[/1/] (N) (N)
- 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.[/1/] (N) (N)
- SONET OC-192/OC-192c - provides a fiber-based 9953.28 Mbps synchronous optical full duplex data transmission capability.[/1/]

/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.
/2/ Material formerly appeared on 4th Revised Sheet No. 140 in this Section. /2/

11. MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)

A. DESCRIPTION (cont'd)

Other Protocols (cont'd)

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/1/ Material now appears on Original Sheet No. 139.1 in this Section. (N) (D)

(D)

11. MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd) (N)

B. DEFINITIONS

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

(N)

11. 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 (CM)
Provides for the transmission facilities between the serving wire centers associated with each node involved on the MON Ring. Channel mileage is calculated using the V and H coordinate method described in Part 15, Section 1 of this Tariff. 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.

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. Optional amplifiers may be located at a Customer Premises 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 and on a per circuit, per each location the circuit is regenerated basis for up to 10 Gigabit Ethernet service. (T)

11. MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)

C. TERMS AND CONDITIONS

In addition to regulations set forth elsewhere in this and other Company Tariffs, the following regulations apply to MON Ring Service:

1. The customer-provided equipment must deliver the data signals for the MON Ring Service transport within the industry specification for the subscribed data services.

2. 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.

3. 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.

4. MON Ring Service may have distance limitations based on the services carried and may require routing through 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.

5. Optical Amplifiers and/or Regenerators may have to be added to an MON Ring Service subsequent to the initial installation.

6. When additional services are added, such installation may cause a service interruption to existing unprotected channels, or a protection switch on protected channels.

7. 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. (C) (C) (C) /1/

/1/ Material now appears on Original Sheet No. 142.1 in this Section.

11. MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)

C. Terms and Conditions (cont'd)

8. The minimum service period for MON Ring Service is 36 months or 60 months.

9. MON Ring Service is provided at the option of the Company where facilities permit. If appropriate facilities are not available, *Special Construction* charges may apply.

10. 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.

11. Prior to confirming an order for service, the Company will provide a proposed route diagram to the customer.

12. Installation of service will not begin until the customer has accepted the proposed routing by the Company.

13. Channel protection may not be available for all interface types.

14. Conversion from MON Service to MON Ring Service is not available. (T)

15. Conversions from any other lower speed services to MON Ring Service are not available.

16. 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 a MON Ring Sub-rate System over which these 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.

11. MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)

C. TERMS AND CONDITIONS (cont'd)

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17. 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 customers designated premises.

18. Neither electrical interfaces nor optical add/drop multiplexing are available with this service.

19. 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.

/1/ Material now appears on Original Sheet No. 142.1 in this Section.

11. MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)

D. FEATURES

1. Standard Features

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. (N) (N) (D) (D)

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.

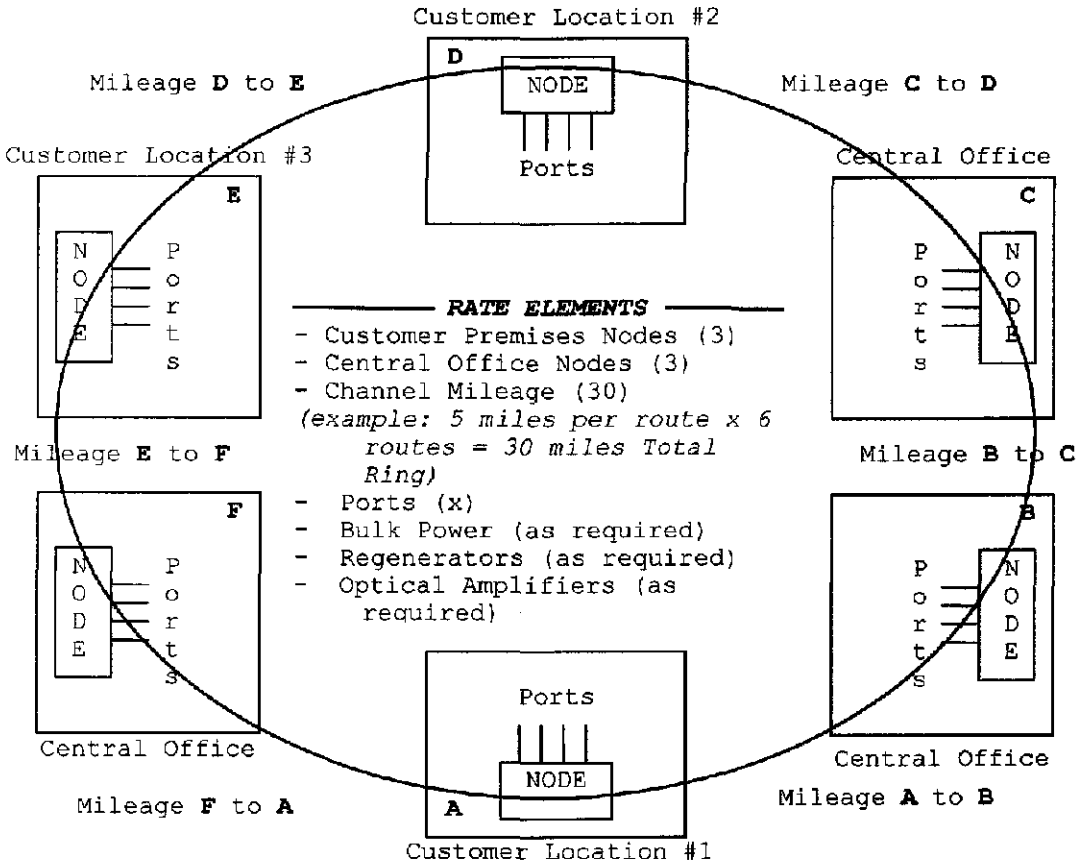
A combination of these configurations may be used in a network design depending on the customer's traffic pattern.

11. MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd) (T)

D. FEATURES (cont'd)

1. Standard Features (cont'd)

Diagram of MON Ring



11. MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd) (T)

D. FEATURES (cont'd)

1. Standard Features (cont'd)

Route Diversity

- 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. (T) (T)

- Routing of fiber may be diversified from the customer's property line to their serving wire center or alternate serving wire center to ensure that loop fibers follow separate paths to the serving central office. In addition, IOF fiber (if applicable) 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 central office 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.

- At the customer's request, additional protection to the Customer Premises Nodes can be provided via diverse dual entrance facilities. This special request will 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.

- 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.

11. MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)

E. Technical References

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

Subject	Technical Reference
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, OC-48 and OC-192 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 (ESCON™)	AM-TR-NIS-000096 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 IEEE802.3ae
D1 Video	ANSI/SMPTE 259M

The Technical References can be obtained from:

APEX Support Team (T)
(734) 523-7348 (T)

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

Telcordia Technologies, Inc.
8 Corporate Place, PYA 3A-184
Piscataway, New Jersey 08854-4156

11. MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd) (T)

F. PRICES

1. Service Elements

Description /Billing Code/	Nonrecurring Charge
Administrative Charge	
- per service order /ORCMX/	$ 125.00
Design and Central Office Connection Charge	
- per riding circuit /NRBCL/	600.00
Customer Connection Charge	
Service Establishment	
- per node /NRBBL/	7,500.00
Subsequent Installation	
- per subsequent shelf /NHCNL/	1,000.00

11. MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)

F. PRICES (cont'd)

1. Service Elements (cont'd)

Description /Billing Code/	Monthly Payment Term Payment Plans 36 Months	Monthly Payment Term Payment Plans 60 Months	Monthly Extension	
MON Ring Transport System				
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	
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	
Channel Mileage - per V&H mile or fraction thereof /1L5XX/	325.00	260.00	455.00	
Optical Amplifier (as required) - C band(per location) /67QXX/	5,400.00	3,600.00	7,600.00	
- L band(per location) /67QSX/[1/]	5,400.00	3,600.00	7,600.00	(C)
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 each location) /V8R2C/	15,000.00	10,000.00	21,000.00	
Bulk Power (as required) - per first shelf (shelves 1-4) /CBVDX/	2,000.00	1,600.00	2,600.00	
- per subsequent shelf (shelves 5-8) /CBVDS/	1,600.00	1,300.00	2,100.00	

/1/ Available where facilities and equipment permit.

11. MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)

F. PRICES (cont'd)

1. Service Elements (cont'd)

Description /Billing Code/	Monthly Payment *Term Payment Plans* 36 Months	60 Months	Monthly Extension	
MON Ring Channels				
Ports				
- per port/per circuit terminating location				
ETR/CLO™				(C)
- 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™				(C)
- unprotected channel /POYJW/	3,250.00	1,250.00	4,600.00	
- protected channel /POYJP/	3,600.00	2,500.00	5,000.00	(N)
ISC-3™				(N)
- unprotected channel /POY9W/	3,750.00	2,500.00	5,000.00	|
- protected channel /POY9P/	7,500.00	5,000.00	10,000.00	(N)
				/1/
				|
				/1/

/1/ Material now appears on Original Sheet No. 150.1 in this Section.

11. MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)

F. PRICES (cont'd)

1. Service Elements (cont'd)

Description /Billing Code/	Monthly Payment *Term Payment Plans* 36 Months	60 Months	Monthly Extension	
MON Ring Channels (cont'd)				
Ports (cont'd)				
- per port/per circuit terminating location (cont'd)				
Fibre Channel (1.0625 Gbps)				/1/
- 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	/1/

/1/ Material formerly appeared on 2nd Revised Sheet No. 150 in this Section.

11. MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)

F. PRICES (cont'd)

1. Service Elements (cont'd)

Description /Billing Code/	Monthly Payment *Term Payment Plans* 36 Months	60 Months	Monthly Extension	
MON Ring Channels (cont'd)				
Ports (cont'd)				
- per port/per circuit terminating location (cont'd)				
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/1/				(C)
- 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.

11. MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd) (N)

F. PRICES (cont'd)

1. Service Elements (cont'd)

Description /Billing Code/	Monthly Payment *Term Payment Plans* 36 Months	60 Months	Monthly Extension	
MON Ring Channels (cont'd)				
Ports (cont'd)				
- per port/per circuit terminating location (cont'd)				
GigE/FC/FICON™ Sub-Rate System				/2/
- 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/1/				
- unprotected channel /POY4W/	500.00	400.00	650.00	
- protected channel /POY4P/	1,000.00	800.00	1,300.00	
Fibre Channel (1.065Gbps) Riding Circuit/1/				
- unprotected channel /POY6W/	500.00	400.00	650.00	
- protected channel /POY6P/	1,000.00	800.00	1,300.00	
FICON™ (1.065 Gbps) Riding Circuit/1/				
- unprotected channel /POY7W/	400.00	320.00	480.00	
- protected channel /POY7P/	800.00	640.00	960.00	/2/

/1/ Available only when ordered with GigE/FC/FICON™ Sub-Rate System.
/2/ Material formerly appeared on 1st Revised Sheet No. 152.1 in this Section. (N)

11. MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd) (N)

F. PRICES (cont'd)

1. Service Elements (cont'd)

Description /Billing Code/	Monthly Payment *Term Payment Plans* 36 Months	60 Months	Monthly Extension
MON Ring Channels (cont'd)			
Ports (cont'd)			
- per port/per circuit terminating location (cont'd)			
ESCON ™/1/			
- 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/1/			
- 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 Circuit/1/			
- 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/1/			
- 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/1/			
- unprotected channel /PWY4W/	1,300.00	1,000.00	1,900.00
- protected channel /PWY4P/	2,600.00	2,000.00	3,700.00 (N)

/1/ Available only where facilities and equipment permit beginning November 30, 2005. (N)

In accordance with an Order issued by the Public Utilities Commission of Ohio, dated January 6, 2003, Case No. 02-3069-TP-ALT.

By Connie Browning, President, Cleveland, Ohio

11. MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd) (N)

F. PRICES (cont'd)

1. Service Elements (cont'd)

Description /Billing Code/	Monthly Payment *Term Payment Plans* 36 Months	60 Months	Monthly Extension
MON Ring Channels (cont'd)			
Ports (cont'd)			
- per port/per circuit terminating location (cont'd)			
OC-48 Sub-Rate System[1/]			
- 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[1//2/]			
- 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 only where facilities and equipment permit beginning November 30, 2005.
/2/ Available only when ordered with OC-48 Sub-Rate System beginning November 30, 2005. (N)

11. MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd) (N)

F. PRICES (cont'd)

1. Service Elements (cont'd)

Description /Billing Code/	Monthly Payment Term Payment Plans 36 Months	60 Months	Monthly Extension	
MON Ring Channels (cont'd)				
Ports (cont'd)				
- per port/per circuit terminating location (cont'd)				
Sub-Rate System[1/]				(C)
- 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™ Riding Circuit[1//2//3/]				(C)
- unprotected channel /POYHW/	100.00	100.00	150.00	
- protected channel /POYHP/	100.00	100.00	150.00	
Fast Ethernet Riding Circuit[1//2/]				(C)
- unprotected channel /POYCW/	325.00	250.00	400.00	
- protected channel /POYCP/	500.00	400.00	650.00	
D1 Video Riding Circuit [1//2/]				
- unprotected channel /POYVW/	100.00	100.00	150.00	
- protected channel /POYVP/	100.00	100.00	150.00	
DVB-ASI Video Riding Circuit[1//2/]				(N)
- unprotected channel /PWY5W/	100.00	100.00	100.00	|
- protected channel /PWY5P/	100.00	100.00	100.00	(N)
				(D)
SONET OC-3/OC-3c Riding Circuit[1//2//4/]				(C) (C)
- 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 a Sub-Rate System.
/3/ Also available with ESCON Sub-Rate System.
/4/ Also available with SONET OC-3/OC-12 Sub-Rate System.

11. MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)

F. PRICES (cont'd)

1. Service Elements (cont'd)

Description /Billing Code/	Monthly Payment *Term Payment Plans* 36 Months	60 Months	Monthly Extension	
MON Ring Channels (cont'd)				
Ports(cont'd)				
- per port/per circuit terminating location(cont'd)				/3/ /3/
ESCON™ Sub-Rate System[1/]				(C)
- 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[1/]				(C)
- 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[1//2/]				(C) (C)
- unprotected channel /POY5W/	500.00	375.00	700.00	
- protected channel /POY5P/	1,000.00	750.00	1,400.00	

/1/ Available only where facilities and equipment permit.
/2/ Available only when ordered with OC-3/OC-12 Sub-Rate System.
/3/ Material now appears on Original Sheet No. 151.1 in this Section.

11. MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd) (T)

F. PRICES (cont'd)

2. Payment Plans

- ***Term Payment Plans***

  MON Ring Service TPP provides the customer with discounted tariff rates for a 36 or 60-month period. (T)

  After the expiration of 25 months of a 36-month TPP term or 42 months of a 60-month TPP term, any MON Ring components added to the existing service configuration provided under that TPP will be billed under the tariffed monthly extension rates.

  Refer to Term Payment Plans in Part 15, Section 1.

- ***Single Payment Option (SPO)***

  A single payment option is available for this service. Refer to Term Payment Plans in Part 15, Section 1 for calculating Single Payment Options.

3. Termination Charges

Termination Charges will apply to services terminated prior to the contracted period. For purposes of applying Termination Charges, all rate elements making up a MON Ring service are subject to Termination Charges.

If during the duration of the TPP, the customer wishes to rearrange or move a Customer Premises Node, a Termination Charge will apply.

Refer to Termination Charges in Part 15, Section 1 for calculating Termination Charges.

11. MULTI-SERVICE OPTICAL NETWORK RING SERVICE (cont'd)

F. PRICES (cont'd)

4. Credit Allowance

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.

Any protected service interruption of greater than 10 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 will apply.

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.

Refer to Credit Allowance in Part 15, Section 1 for calculating Credit Allowances.

PART 15 – SECTION 3

EXHIBIT B

Material now located in the AT&T Ohio Guidebook, Part 15, Section 3. (N)

PART 15 – SECTION 4

EXHIBIT A

1. GIGAMAN® SERVICE

A. DESCRIPTION

GigaMAN Service is a service which provides the transmission of data at a discrete bit rate of 1 Gbps, in Ethernet format. This service can be used to connect customer-designated premises in a Node-to-Node configuration. Within a single network, one or more channels may be provided.

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. DEFINITIONS

Channel Mileage (CM)
Provides for the transmission facilities between the serving wire centers associated with the designated customer premises.

Repeater (RPTR)
A repeater (circuit regenerator) will be used to extend the transmission of GigaMAN Service. The Company will determine when repeaters are necessary. In addition, the first repeater in a multi-repeater circuit will be used for service alarming and monitoring purpose. (T)

Node Termination (NT)
Provides for the communications path between the customer-designated premises and the serving wire center of that premise, or between two customer-designated premises.

Wire Center Termination (WCT)
Provides for the termination of digital transmission facilities between two or more serving wire centers. These transmission facilities are categorized as channel mileage, as described above.

GigaMAN is a registered trademark of AT&T Knowledge Ventures (T)

1. GIGAMAN® SERVICE (cont'd) (T)

C. TERMS AND CONDITIONS

In addition to regulations set forth elsewhere in this Tariff, the following regulations apply to GigaMAN Service:

1. The customer provided equipment (CPE) must deliver the data signal for the GigaMAN transport within the industry specification for the subscribed data service. See Paragraph E. - ***Technical References.*** (T)

2. GigaMAN provides physical layer transport only. The Company assumes no responsibility for the through transmission of signals generated 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. GigaMAN Service is provided at the option of the Company where facilities permit. If appropriate facilities are not available, **Special Construction** charges may apply.

5. Node terminations are not allowed in Company wire centers.

6. Interoffice mileage is calculated using the V and H coordinate method described in Part 15, Section 1 of this Tariff. (T)

1. GIGAMAN® SERVICE (cont'd)

C. TERMS AND CONDITIONS (cont'd)

7. 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). GigaMAN circuits provisioned prior to November 19, 2003 may not have required a repeater. (T)

8. Route diversity options are available where facilities exist. If appropriate facilities do not exist, Special Construction charges may apply. Route diversity is only available to customers with service installed after November 19, 2003. (T)

9. 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. (N)

10. Channel Mileage charges are applicable on both paths of the GigaMAN Service when any of the Protection Options are ordered.

11. If Protection Options are added to an existing GigaMAN circuit that was installed after November 19, 2003, 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.

12. GigaMAN Service is not available in a meet-point billing arrangement involving other Carrier's. (N)

1. GIGAMAN® SERVICE (cont'd) (T)

D. FEATURES

1. Standard Features

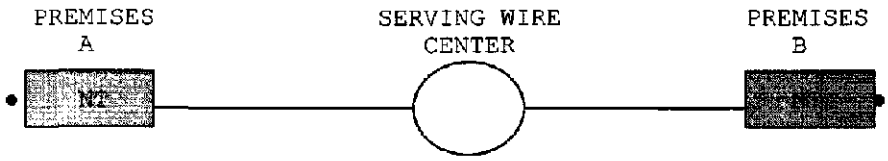
All basic service configurations provide full duplex transmission. There is one type of GigaMAN Service configuration: Node-to-Node Service.

Node-to-Node Service

A Node-to-Node configuration connects two customer-designated premises either inter- or intra-wire center. (T)

The following diagram depicts a Node-to-Node configuration connecting two customer-designated premises served from the same wire center.

Node-to-Node Configuration (N)
(Intra-Wire Center)



NT = Node Termination

Applicable service elements are:

- Node Termination (two applicable)

1. GIGAMAN® SERVICE (cont'd) (T)

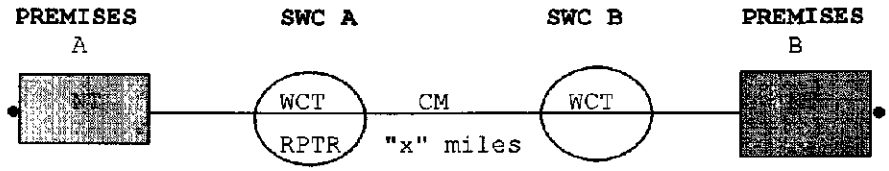
D. FEATURES (cont'd)

1. Standard Features

Node-to-Node Service (cont'd)

The following diagram depicts a Node-to-Node configuration connecting two customer-designated premises with serving wire centers located "x" miles apart.

Node-to-Node Configuration ("x" miles apart)
(Inter-Wire Center) (N)



(T)

NT = Node Termination
WCT = Wire Center Termination
CM = Channel Mileage
SWC = Serving Wire Center
RPTR = Repeater (where required) (T)

Applicable service elements are:

- Node Termination (two applicable)
- Wire Center Termination (two applicable)
- Channel Mileage ("x" miles)
- Repeater (where required) (T)

1. GIGAMAN® SERVICE (cont'd)

D. FEATURES (cont'd)

2. Optional Features

Diversity and Protection 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, in those instances where each end of a circuit is served out of different serving wire centers. Diversity and Protection Options are only available to customers with service installed after November 19, 2003. In addition to charges for the various Protection Options, normal charges for the Node Termination, Wire Center Termination and 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). (N) (N)

The following options are available for Diversity:

- Local Channel Diversity
- Inter-Wire Center Diversity
- Alternate Wire Center Diversity

The following options are available for Protection:

- Equipment Only Protection
- Equipment Plus Fiber Path Protection, with …
  - Alternate Wire Center Path Protection, or
  - Local Channel Path Protection
- Inter-Wire Center Path Protection/1/
- Power Protection

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

In accordance with an Order issued by the Public Utilities Commission of Ohio, dated January 6, 2003, Case No. 02-3069-TP-ALT.

By Connie Browning, President, Cleveland, Ohio

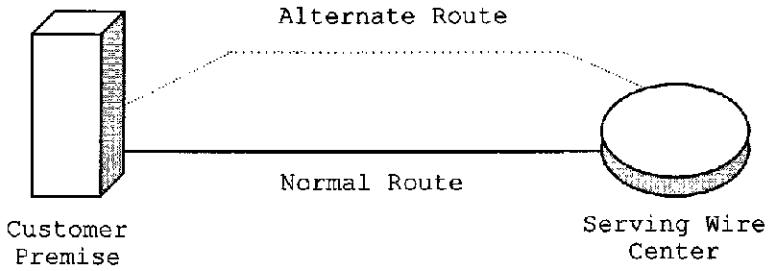
1. GIGAMAN® SERVICE (cont'd)

D. FEATURES (cont'd)

2. Optional Features (cont'd)

Local Channel Diversity

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 node termination channels will be provisioned over the standard route and one or more node termination channels will be provisioned over a 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. (C) (C)



In accordance with an Order issued by the Public Utilities Commission of Ohio, dated January 6, 2003, Case No. 02-3069-TP-ALT.

By Connie Browning, President, Cleveland, Ohio

1. GIGAMAN® SERVICE (cont'd)

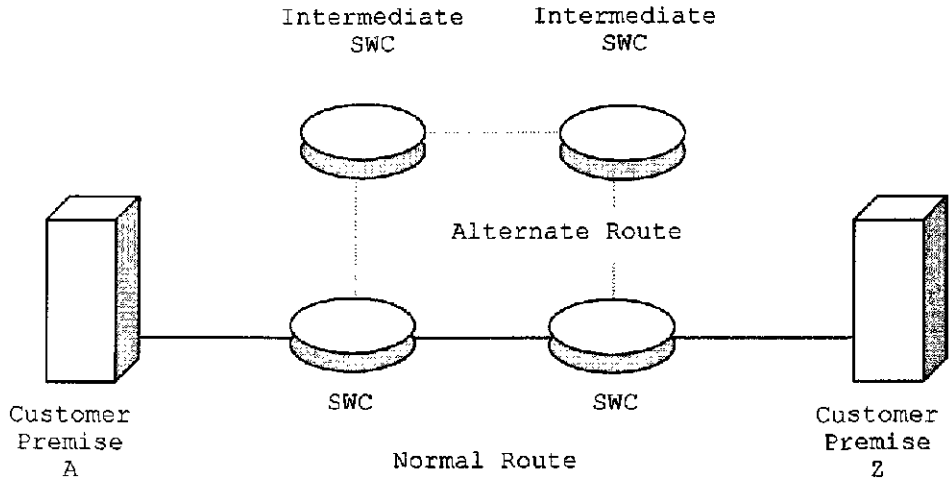
D. FEATURES (cont'd)

2. Optional Features (cont'd)

Inter-Wire Center Diversity

Inter-Wire Center Diversity arrangements presume that each end of a GigaMAN node termination channel is served out of a different serving wire center (SWC). This arrangement provides a transmission path for GigaMAN node termination 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. (C) (C)

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.



In accordance with an Order issued by the Public Utilities Commission of Ohio, dated January 6, 2003, Case No. 02-3069-TP-ALT.

By Connie Browning, President, Cleveland, Ohio

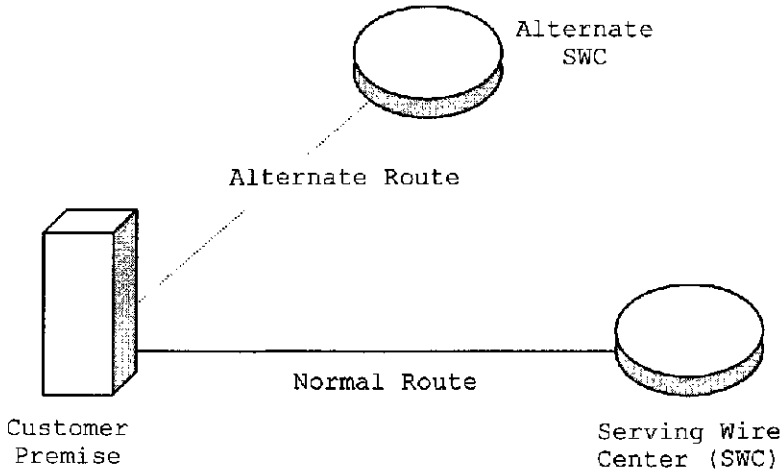
1. **GIGAMAN® SERVICE (cont'd)**

D. FEATURES (cont'd)

2. Optional Features (cont'd)

Alternate Wire Center Diversity

Alternate Wire Center Diversity is for the local loop only. It provides a node termination 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 customers 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 node termination 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. (T) (T)



In accordance with an Order issued by the Public Utilities Commission of Ohio, dated January 6, 2003, Case No. 02-3069-TP-ALT.

By Connie Browning, President, Cleveland, Ohio

1. GIGAMAN® SERVICE (cont'd)

D. FEATURES (cont'd)

2. Optional Features (cont'd)

Equipment Only Protection (N)

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

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. (N)

1. **GIGAMAN® SERVICE (cont'd)**

D. *FEATURES (cont'd)*

2. Optional Features (cont'd)

Equipment Plus Fiber Path Protection (cont'd) (N)

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

Local Channel Path Protection
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
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. (N)

1. GIGAMAN® SERVICE (cont'd)

D. Features (cont'd)

2. Optional Features (cont'd)

Power Protection

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. The addition of Power Protection to existing GigaMAN Service will result in a temporary service interruption. (T) (T) (T)

1. GIGAMAN® SERVICE (cont'd)

E. TECHNICAL REFERENCES

The customer interface to GigaMAN Service is as specified in:

Subject	Technical Reference
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 Reference can be obtained from: (T)

APEx Support Team (T)
(734) 523-7348 (T)

The ANSI publication can be obtained from:

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

1. GIGAMAN® SERVICE (cont'd)

F. PRICES

1. Service Elements

Description /Billing Code/	Nonrecurring Charge	
Nonrecurring Charges		
Administrative Charge[1]		(C)
- per service order /ORCMX/	$140.00	
Design and Central Office Connection Charge[1]		(C)
- per circuit /NRBCL/	230.00	(T)
Customer Connection Charge[1]		(C)
- per premises node and wire center terminations /NRBBL/	755.00	
Protection Options		(N)
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[2] /CPAHX/	625.00	(N)

/1/ Nonrecurring charges will be waived for those customers selecting the 36 or 60 month Term Payment Plan (TPP) period for new service. (N)

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

1. GIGAMAN® SERVICE (cont'd) (T)

F. PRICES (cont'd)

1. Service Elements (cont'd)

Description /Billing Code/	Monthly Payment *Term Payment Plans* 12 Months	24 Months	36 Months	60 Months	Monthly Extension	(N)
Node Termination						
- per point of termination /N2TDX/	$3,300.00	$3,100.00	$2,850.00	$2,500.00	$3,800.00	
Wire Center Termination						
- per termination /CTJ/	125.00	110.00	100.00	50.00	125.00	
Channel Mileage						
- per inter-wire center mile /3LN5S/	125.00	115.00	100.00	75.00	125.00	
Repeater						(T)
- each /VU4/	2,400.00	1,700.00	1,150.00	850.00	2,500.00	(N)
- each /M1RGX/[1/]	2,400.00	N/A	1,150.00	850.00	2,500.00	(C)
Diversity Options						(N)
- Local Channel /CPALX/	750.00	750.00	750.00	750.00	750.00	
- Inter-Wire Center /CPATX/	500.00	500.00	500.00	500.00	500.00	
- Alternate Wire Center /CPAAX/	1,200.00	1,200.00	1,200.00	1,200.00	1,200.00	(N) (N)

/1/ Effective September 24, 2003, service arrangements utilizing a legacy mid-span repeater (/M1RGX/) are grandfathered and no longer available for new customers. Should existing customers utilizing a legacy mid-span repeater disconnect (or relocate one end of) their service, the legacy mid-span repeater will no longer be available. The new equipment platform must be used in those scenarios. (N) (N)

1. GIGAMAN® SERVICE (cont'd)

F. PRICES (cont'd)

1. Service Elements (cont'd)

Description /Billing Code/	Monthly Payment *Term Payment Plans* 12 Months	24 Months	36 Months	60 Months	Monthly Extension	
Protection Options						(N)
Per terminating end						
- Equipment Only /CPAEX/	$1,375.00	$1,225.00	$1,050.00	$900.00	$1,500.00	
- Equipment Plus Fiber Path Protection, with						
Alternate Wire Center Path Protection /CPAFX/	2,050.00	1,840.00	1,600.00	1,400.00	2,460.00	
Local Channel Path Protection /CPAGX/	1,825.00	1,650.00	1,425.00	1,225.00	2,190.00	
Per rack or cabinet						
- Power Protection /VBBGX/	625.00	525.00	480.00	435.00	700.00	
Per circuit						
- Inter-Wire Center Path Protection[/1/] /CPAHX/	375.00	200.00	150.00	100.00	475.00	(N)

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

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By Connie Browning, President, Cleveland, Ohio

1. GIGAMAN® SERVICE (cont'd)

F. Prices

2. Payment Plan

Term Payment Plans
GigaMAN Service is only available under the Term Payment Plan (TPP) whereby customers must select either a 12, 24, 36 or 60 month period. After the selected Term Payment Plan period is satisfied, the monthly extension price will apply unless a new TPP is selected. Refer to ***Term Payment Plans*** in Part 15, Section 1. Customers re-negotiating an existing term payment plan contract expiring after November 19, 2003 will be required to migrate to the new equipment platform.

Single Payment Option (SPO)
A single payment option is available for this service. Refer to ***Term Payment Plans*** in Part 15, Section 1 for calculating Single Payment Options.

Deferred Payment Option (DPO)
A deferred payment option is not available for this service

3. Termination Charges

Termination Charges will apply to service terminated prior to the contracted period. Refer to ***Termination Charges*** in Part 15, Section 1 for calculating Termination Charges.

Effective September 24, 2003, the Company migrated to a new equipment platform in support of GigaMAN Service. As of September 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: (T)

- 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.

1. GIGAMAN® SERVICE (cont'd)

F. Prices (cont'd)

3. Termination Charges (cont'd)

(D)

(D)

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

For circuits installed after November 19, 2003, 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 issued 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. GIGAMAN® SERVICE (cont'd)

F. PRICES (cont'd)

3. Termination Charges (cont'd)

Customers will be permitted to add Protection Options to existing GigaMAN Service that was installed after November 19, 2003, 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). (N) (N)

- 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). (N) (N)

- 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). (N) (N)

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.

1. GIGAMAN® SERVICE (cont'd) (N)

F. Prices (cont'd)

3. Termination Charges (cont'd)

For service installed after July 10, 2007, 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. (N)

1. GIGAMAN® SERVICE (cont'd)

F. PRICES (cont'd)

4. Credit Allowance /1/

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 tariff 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 tariff /1/ (T)
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. (T)

/1/ Material formerly appeared on Original Sheet 9.1 of this Section. (N)

1. GIGAMAN® SERVICE (cont'd)

F. PRICES (cont'd)

4. Credit Allowance (cont'd) (N)

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***).

- 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 end of the month when the unavailability event occurred. (N)

2. FibreMAN® SERVICE (T)

A. DESCRIPTION

FibreMAN Service is a dedicated point-to-point service connecting customer's premises. FibreMAN Service is based on the Fibre Channel protocol. FibreMAN Service provides transport of the customer's data between computer devices at a data rate of up to 2 Gbps (two billion bits per second). FibreMAN extends the connectivity between customer premise sites to enable storage connectivity between servers.

FibreMAN provides interconnection functionality which supports concurrent communications among workstations, mainframes, servers, data storage systems, and other peripherals.

FibreMAN will be offered in the metropolitan marketplace as a point-to-point, dedicated service. FibreMAN will provide connectivity between end user customer premise locations, and extends connectivity between customer premise sites to enable access between storage devices.

B. DEFINITIONS

Interoffice Channel Mileage (ICM)
Defined as the component of the service between serving wire centers, consisting of a fixed charge and a per mile charge.

Local Distribution Channel (LDC)
Defined as the channel between the customer's premises and the serving wire center that normally provides service to that customer's premise.

Repeater
A repeater (circuit regenerator) will be used to extend the transmission of FibreMAN Service. The Company will determine when repeaters are necessary. In addition, the first repeater in a multi-repeater circuit will be used for service alarming and monitoring purposes.

FibreMAN is a registered trademark of AT&T Knowledge Ventures (T)

2. FibreMAN® SERVICE (cont'd) (T)

C. TERMS AND CONDITIONS

In addition to regulations set forth elsewhere in this Tariff, the following regulations apply to FibreMAN Service:

1. The customer provided equipment (CPE) must deliver the data signal for the FibreMAN transport within the industry specification for the subscribed data service. See Paragraph E. - ***Technical References***.

2. FibreMAN provides physical layer transport only. The Company assumes no responsibility for the through transmission of signals generated by the customer's CPE, for the quality of or defects in such transmission, for the reception of signals by the customer's CPE, or address signaling to the extent addressing is performed by CPE. Error detection and correction of data generated by the customer's CPE is the customer's responsibility.

3. FibreMAN is designed to provide connectivity at the discrete bit rate of up to 2 Gbps. The service is considered interrupted when the customer reports to the Company and the Company confirms that continuity has been lost.

4. FibreMAN Service is provided at the option of the Company where facilities permit. If appropriate facilities are not available, Special Construction charges may apply.

5. FibreMAN Service is not available in a meet-point billing arrangement involving other Carriers.

6. Interoffice channel mileage is calculated using the V and H coordinate method described in Part 15, Section 1 of this Tariff.

7. The actual throughput obtained with FibreMAN Service is distance sensitive, based on the Customer Provided Equipment (CPE) provided by the customer. FibreMAN Service will not be offered with guaranteed throughput thresholds since this is determined by the CPE provided by the customer.

8. 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).

2. FibreMAN® SERVICE (cont'd) (T)

D. FEATURES

1. Standard Features

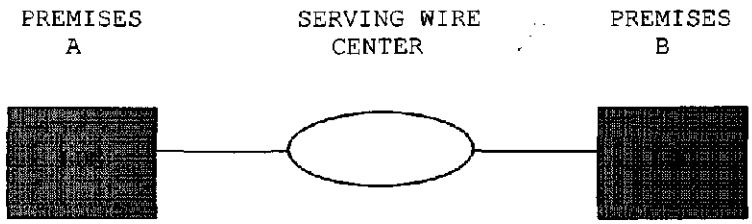
All basic service configurations provide full duplex transmission. There is one type of FibreMAN Service configuration: Node-to-Node Service. All Node Terminations connected in a Node-to-Node configuration must be the same type and transmit data at the same speed, i.e., either 1 Gbps or 2 Gbps Ethernet.

Node-To-Node Service

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

The following diagram depicts a Node-to-Node configuration connecting two customer-designated premises served from the same wire center.

Node-to-Node Configuration
(Intra-Wire Center)



LDC = Local Distribution Channel

Applicable service elements are:

- Local Distribution Channel (two applicable)

2. FibreMAN® SERVICE (cont'd) (T)

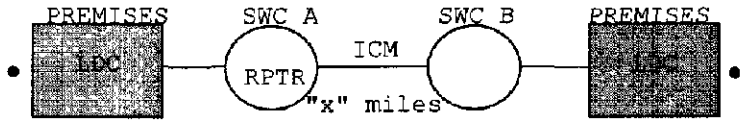
D. FEATURES (cont'd)

1. Standard Features (cont'd)

Node-To-Node Service (cont'd)

The following diagram depicts a Node-to-Node configuration connecting two customer-designated premises with serving wire centers located "x" miles apart.

Node-to-Node Configuration ("x" miles apart)
(Inter-Wire Center)



LDC = Local Distribution Channel
ICM = Interoffice Channel Mileage
SWC = Serving Wire Center
RPTR = Repeater (where required)

Applicable service elements are:

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

2. FibreMAN® Service (cont'd) (T)

D. FEATURES (cont'd)

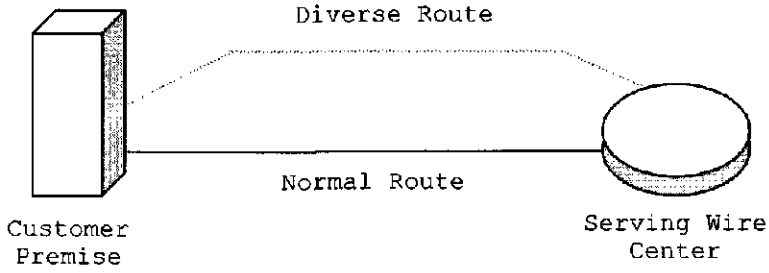
2. Optional Features

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 Alternate Wire Center Diversity with Inter-Wire Center Diversity, in those instances where each end of a circuit is served out of different serving wire centers.

FibreMAN offers the following diversity options:

Local Channel Diversity

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 a 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.



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By Connie Browning, President, Cleveland, Ohio

2. FibreMAN® Service (cont'd) (T)

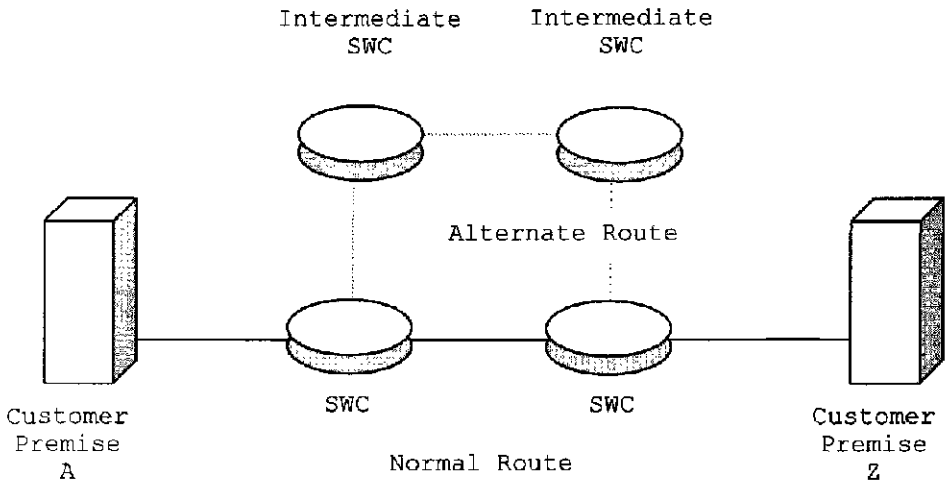
D. FEATURES (cont'd)

2. Optional Features (cont'd)

Inter-Wire Center Diversity

Inter-Wire Center Diversity arrangements presume that each end of a FibreMAN local distribution channel is served out of a different serving wire center (SWC). This arrangement provides a transmission path for FibreMAN 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 FibreMAN 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.

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.



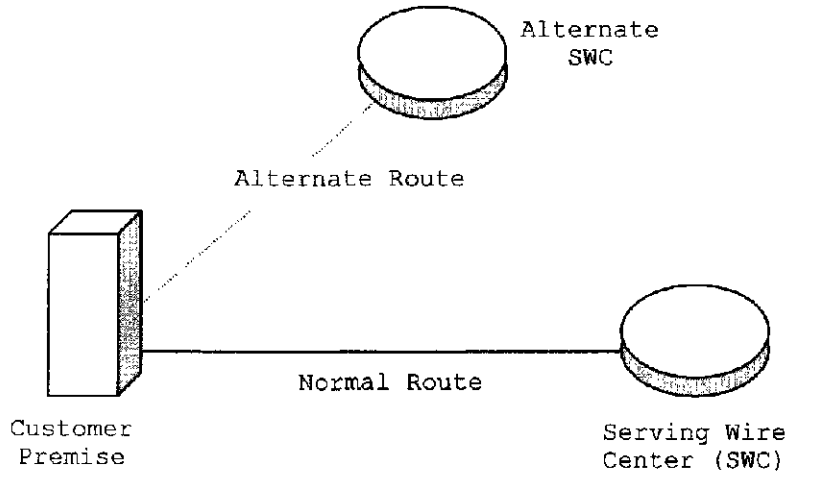
2. FibreMAN® Service (cont'd) (T)

D. FEATURES (cont'd)

2. Optional Features (cont'd)

Alternate Wire Center Diversity

Alternate Wire Center Diversity is for the local loop only. It provides a local channel transmission path for FibreMAN 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 FibreMAN Service over the alternate route. Alternate Wire Center Diversity does not require the purchase of two FibreMAN Services by (or for the benefit of) the same customer, nor does it require the customer to have an existing FibreMAN 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.



2. FibreMAN® Service (cont'd) (T)

E. TECHNICAL REFERENCES

FibreMAN standards are defined in American National Standards Institute (ANSI) document X3.230-1994, which is also International Organization for Standardization document 14165-1.

The customer interface to FibreMAN Service is as specified in:

Subject	Technical Reference
Ethernet Standards	SBC TP-76412-000
Fibre Channel Physical and Signaling Interface	ANSI X3.230

The Technical Reference can be obtained from:

APEx Support Team (T)
(734) 523-7348 (T)

2. FibreMAN® Service (cont'd) (T)

F. PRICES

1. Service Elements

Description /Billing Code/	Nonrecurring Charge
Installation Charge - per channel	$1,500.00

2. FibreMAN® SERVICE (cont'd) (T)

F. PRICES

1. Service Elements (cont'd)

Description /Billing Code/	Monthly Payment *Term Payment Plans* 12 Months	24 Months	36 Months	60 Months	Monthly Extension
Local Distribution Channel (LDC)					
- per channel					
- 2 Gbps /1D99X/	$5,145.00	$4,200.00	$4,000.00	$3,500.00	$6,174.00
- 1 Gbps /1D98X/	3,675.00	3,100.00	2,850.00	2,500.00	4,410.00
Interoffice Channel Mileage (ICM)					
- Fixed, Per End /FL1XX/	125.00	112.50	100.00	50.00	125.00
- Per Mile /JZ4YS/	125.00	115.00	100.00	75.00	125.00
Repeater					
- each /VU4/	2,400.00	1,700.00	1,150.00	850.00	2,500.00
Diversity Options					
- Local Channel /DJVYX/	750.00	750.00	750.00	750.00	750.00
- Inter-Wire Center /DEQYX/	500.00	500.00	500.00	500.00	500.00
- Alternate Wire Center /AVOYX/	1,200.00	1,200.00	1,200.00	1,200.00	1,200.00

2. FibreMAN® Service (cont'd) (T)

F. PRICES (cont'd)

2. Payment Plans

- ***Term Payment Plans***
  FibreMAN Service is only available under the Term Payment Plan (TPP) whereby customers must select either a 12, 24, 36 or 60 month period. After the selected Term Payment Plan period is satisfied, the monthly extension price will apply unless a new TPP is selected. Refer to ***Term Payment Plans*** in Part 15, Section 1.

- ***Single Payment Option (SPO)***
  A single payment option is available for this service. Refer to ***Term Payment Plans*** in Part 15, Section 1 for calculating Single Payment Options.

- ***Deferred Payment Option (DPO)***
  A deferred payment option is not available for this service.

3. Termination Charges

Termination Charges will apply to service terminated prior to the contracted period. Refer to ***Termination Charges*** in Part 15, Section 1, for calculating Termination Charges.

2. FibreMAN® Service (cont'd) (T)

F. PRICES (cont'd)

3. Termination Charges (cont'd)

Customers will be permitted to move one end of a FibreMAN 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 FibreMAN Service at the new location. Termination Charges for the existing location will be waived. Standard nonrecurring charges to install FibreMAN 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 FibreMAN contract.

- The existing FibreMAN 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 FibreMAN 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.

2. FIBREMAN® SERVICE (cont'd) (N)

F. Prices (cont'd)

3. Termination Charges (cont'd)

For service installed after July 10, 2007, 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 FibreMAN Service to the new service.

- the customer must issue a disconnect order for the existing FibreMAN 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 FibreMAN Service.

- the existing FibreMAN 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 FibreMAN Service with 12-month contracts will not be eligible for this Upgrade option. (N)

2. FibreMAN® Service (cont'd) (T)

F. PRICES (cont'd)

4. Credit Allowance

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 tariff 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 tariff 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.

PART 15 - Dedicated Telecommunications Services
SECTION 4 - Extension Services of Customer Networks

4th Revised Sheet 21.01
Cancels 3rd Revised Sheet 21.01
4th Revised Sheet 22 (N)
5th Revised Sheet 23 |
and 5th Revised Sheet 24 (N)

PART 15 – SECTION 4

EXHIBIT B

Material now located in the AT&T Ohio Guidebook, Part 15, Section 4. (N)

PART 15 – SECTION 5

EXHIBIT A

1. SERIES 10000 CHANNELS (T) /1/

A. Types and Description

Series 10000 Channels are furnished by the Company for the purpose of extending customer-provided communications systems to a premise of the customer or to Centrex Control Switching Equipment serving the premises of the customer for use at such premises. Channels are furnished for half-duplex or duplex operation on a two-point basis for service 7 days per week, 24 hours per day, for a minimum period of one month.

Type 10001 - Approximate bandwidth of 300-3000 Hertz. Furnished, to the extent permitted by the normal transmission characteristics of this grade of channel, for types of transmission similar to those set forth for Series 1000, 2000 and 3000 channels.

B. Regulations

In addition to the regulations set forth in Section 1 proceeding, the following regulations apply to Series 10000 channels as specified below.

Type 10001 - The customer's premises must be located 25 airline miles or less from the point at which the customer-provided communication channel is connected to the Company entrance facility.

C. Rates - Monthly Service

Type 10001 Channels

Entrance facilities will be furnished at rates and charges based upon costs incurred. /1/

/1/ Material formerly appeared on 3rd Revised Sheet 10 in this Section.

2. SIGNALING ARRANGEMENTS (T) /1/

A. Automatic ringing

	Monthly Rate	Nonrecurring Charge	Termination Liability	USOC
One-way or two-way single ring arrangement where two point interexchange service terminates in a telephone, private branch exchange system, key equipment or key telephone system, per station equipped	$16.15	$39.20	-	27M

B. Automatic signaling

1. Automatic signaling line equipment, per local service area channel	8.20	-	-	47R
2. Where two point interexchange service is arranged for automatic intermittent signaling, two-way automatic signaling, per service point arranged	41.55	-	-	27L

C. Dial signaling

Arrangement to permit direct dialing between stations suitably equipped to transmit dial signals on two-point inter-exchange service when one termination is a PBX or similar system, Centrex system, key telephone system, key equipment and the other termination is either such equipment or a dial telephone, each service point so arranged	35.75	-	-	27EKE

D. Key selective signaling

1. Initial station code	39.20	-	$714.10	BYM
2. Additional station code on same continuous property as an initial code	15.85	-	406.10	BNM /1/

/1/ Material formerly appeared on 1st Revised Sheet 13 in this Section.

2. SIGNALING ARRANGEMENTS (cont'd) (T) /1/

E. The following signaling arrangements are furnished for registered and grandfathered PBX (or similar) systems in accordance with Part 68 of the Federal Communications Commission's Rules and Regulations:

	Monthly Rate	Nonrecurring Charge	USOC	
1. Signaling arrangements, interexchange or intraexchange				
Type A	$34.05	-	SAL	
Type B	23.65	-	SAU	
Type C	4.20	-	SAY	
2. Tie line signaling arrangement	15.00	-	SLM	
3. Voice Connecting Arrangement				(T)
Arrangement to connect voice communication system to a private line with dial or automatic signaling, terminating in a PBX or Centrex system, each	8.20	$10.75	CDQ	
4. Arrangement to transfer a 100 Series DATA-PHONE data set				(T)
Arrangement to transfer a l00 Series DATA-PHONE data set between an exchange line, with the exception of a two party line, and a line used with Western Union TWX Service, when such DATA-PHONE data set is associated with Company-provided teletypewriter equipment	13.25	81.90	D66	(T)
This arrangement is provided on a manual basis for outgoing service and on an automatic basis for incoming service.				

	Nonrecurring Charge	USOC	
5. Simulated Direct Current (DC) Arrangement			(T)
Arrangement to emulate direct current (DC) capability, where necessary, per channel	$1,603.00	DUT	/1/

/1/ Material formerly appeared on 1st Revised Sheet 14 in this Section.

Effective November 2, 2007, the following tariff sheets are deleted from this Tariff: (N)

2nd Revised Sheet No. 5
2nd Revised Sheet No. 6
2nd Revised Sheet No. 7
1st Revised Sheet No. 7.1
1st Revised Sheet No. 7.2
2nd Revised Sheet No. 8
2nd Revised Sheet No. 9
3rd Revised Sheet No. 10
2nd Revised Sheet No. 11
2nd Revised Sheet No. 12
1st Revised Sheet No. 13
1st Revised Sheet No. 14

Material formerly located on Sheet 10 now located on 3rd Revised Sheet 1.

Material formerly located on Sheet 13 now located on 3rd Revised Sheet 2.

Material formerly located on Sheet 14 now located on 3rd Revised Sheet 3. (N)

PART 15 – SECTION 5

EXHIBIT B

Material now located in the AT&T Ohio Guidebook, Part 15, Section 5. (N)

PART 17 – SECTION 1

EXHIBIT A

1. ISDN DIRECT (T)

A. General

ISDN Direct is a local exchange telecommunications service that provides customer access to Circuit Switched Voice and Circuit Switched Data Services. ISDN Direct consists of a Network Access Line, an ISDN Direct CO Termination, and individual ISDN Direct services. Individual ISDN Direct services require the use of the Network Access Line and the Direct CO Termination components. Each ISDN Direct "B" channel service includes a telephone number as required. (T) (T)/1/ (C) (C)

ISDN Direct utilizes a Basic Rate Interface which consists of two B channels operating at 64 Kbps and one D channel operating at 16 Kbps. (T) /1/

A variety of standard and optional features and capabilities are offered. The availability and functions of the features may vary by serving central office.

B. Definitions

ISDN Direct CO Termination /2/

Terminates the Network Access Line in the serving central office.

ISDN Direct Line

The physical connection between and including the customer Network Interface and the ISDN Direct CO termination. /2/

"B" Channel

A 64 Kbps portion of an ISDN Direct service used for information transfer (voice/data) from user to user. (T)

"D" Channel

A 16 Kbps portion of an ISDN Direct service used for out of band signaling and control of "B" channels. (T)

/1/ Material now appears on 2nd Revised Sheet 1 in Part 20, Section 17 of this Tariff. (C) (C)

/2/ Material relating to ISDN BRI Single B Channel Packet Service now appears on Original Sheet 1 in Part 17, Section 3 of this Tariff.

In accordance with an Order issued by the Public Utilities Commission of Ohio, dated January 6, 2003, Case No. 02-3069-TP-ALT.

By Connie Browning, President, Cleveland, Ohio

1. ISDN DIRECT (cont'd) (T)

B. Definitions (cont'd)

Flat Rate ISDN

A plan that provides a flat monthly rate for unlimited local usage on Circuit Switched Voice and Circuit Switched Data traffic. Flat Rate ISDN is provided using the same technology, network and switching architecture as non-Flat Rate ISDN Direct. Flat Rate ISDN is only available on a Month-to-Month basis. (T) (C) (C) (T)

1. ISDN DIRECT (cont'd) (T)

C. Regulations

1. ISDN Direct is offered under both a Month-to-Month as well as Term Payment Plan basis. (T)

Month-to-Month

Integrated Services Digital Network (ISDN) Direct Service is offered on a Month-to-Month basis. Month-to-Month prices are subject to Company initiated price adjustments. (T) (T)

Term Payment Plans

ISDN Direct Service is offered under the Term Payment Plan (TPP) which allows the customer to pay for the service over a customer selected Term Payment Plan. (T) (T)

Customers may elect to subscribe to ISDN Direct Service for an extended period under a Term Payment Plan (TPP) option which allows the customer to select a 36- or 60-month payment plan. During the length of the selected TPP, monthly prices for service ordered under the plan will 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. (T) (T)

1. ISDN DIRECT (cont'd) (T)

C. Regulations (cont'd)

1. (cont'd)

Term Payment Plans (cont'd)

In addition to other regulations of this Tariff, the following terms and conditions apply to Term Payment Plans: (T)

a. Changes

With the written permission of the Company, the obligation to pay the TPP charges may be assumed by another customer if the service has not been terminated and if the other customer intends to continue using the service at the present location and actually continues such use. Such assumption of service does not relieve or discharge the original customer from remaining jointly or severally liable with the transferee for any and all obligations existing at the time of the transfer.

During a customer's TPP term, conversion may be made to a new TPP term of the same or different length, if the expiration date for the TPP is beyond the end of the original TPP. The new TPP becomes effective upon execution. Customers may also change from a Month-to-Month Payment Plan to a TPP. No credit for months under the previous TPP or under the Month-to-Month plan may be (T) transferred to the new TPP. The customer incurs no liability for the remaining months on the original TPP, since the change is not considered a termination of service. The prices applicable for the new term are those currently in effect for new customers.

b. Renewal Options

If the customer does not elect a new TPP and does not request discontinuance of service, service will be continued at the Month-to-Month price then currently in effect for the (T) Month-to-Month payment plan. At a later date, the customer may (T) elect any TPP option currently in effect for new customers.

The monthly TPP prices applicable for the new term are those currently in effect for new customers.

There are no nonrecurring charges associated with renewing a TPP.

In accordance with an Order issued by the Public Utilities Commission of Ohio, dated January 6, 2003, Case No. 02-3069-TP-ALT.

By Connie Browning, President, Cleveland, Ohio

1. ISDN DIRECT (cont'd) (C)

C. Regulations (cont'd)

1. (cont'd)

Termination Charges

In the event of termination of the service provided under the Term Payment Plan (TPP) during the TPP term, the customer will remain liable for payment of a percentage of the monthly TPP charges for the remainder of the term as indicated below, which shall upon any such termination immediately become due and payable in its entirety.

Customers requesting termination of service prior to the expiration date of the TPP term will be liable for a termination charge.

a. The termination charge for all TPP terms will be calculated as follows:

For service term agreements which become effective on or after May 3, 2004: (N)

- in addition to any unpaid Special Construction or Nonrecurring Charges (excluding waived charges), customer termination liability for cancellation of ISDN Direct Service shall be equal to fifty percent (50%) of all recurring charges for the remaining months of the customer's TPP term

For service term agreements in effect prior to May 3, 2004: (N)

- The dollar difference between the current monthly TPP price for the TPP term that could have been completed during the time the service was actually in service and the customer's current TPP price for each month the service was provided.

  EXAMPLE:

  A customer subscribed to a 60 month TPP term and disconnected service during the 37th month. This customer's termination charge would be:

  (36-month TPP price - 60-month TPP price) x 37 = Termination Charge

  The 36-month TPP term could have been completed during the months the service was actually in service.

All termination charges will be based on the TPP prices in effect at the time of termination.

/1/

/1/ Material now appears on 2nd Revised Sheet 2.3 in this Section.

1. ISDN DIRECT (cont'd)

C. Regulations (cont'd)

1. (cont'd)

   b. Termination charges are not applicable to changes in the physical location of the customer's ISDN Direct Services as long as the service originates in the same serving central office area.

2. Standard configurations of services are listed in the ISDN Technical Reference Specifications. On request non-standard configurations may be provided at an additional charge based on costs incurred. All customer-provided equipment used to interface with ISDN Direct is required to conform with the Technical Reference Specifications as used by the Company Technical References and found in:

Subject	Technical Reference
ISDN Interface Specifications	AM-TR-NIS-000068

   The Technical References can be obtained from:

   APEX Support Team (T)
   (734) 523-7348 (T)

3. Distance Extension Charges, as set forth in Paragraph E. will apply for customers who are within the serving central office and who are served beyond the normal transmission range specified in the interface specifications.

4. ISDN Direct is offered only from central offices where the Company has arranged facilities for such service.

5. When the customer's premises and the central office providing ISDN Direct service are located in different Service Areas, Base Rate Service, contained in Part 15, Section 3, rates and charges will apply. Customers provided this service arrangement will require three Interexchange Mileage component charges and six Channel Mileage Termination charges for each ISDN direct line they purchase.

6. In cases where the customer's premises are in Independent Telephone Company (ITC) serving areas, the Company will assess Base Rate Interexchange Mileage charges only to the point of meet with the ITC or intermediate ITC. Charges for ITC services will be assessed by the ITC.

1. ISDN DIRECT (Cont'd) (T)

C. Regulations (Cont'd)

/1/

7. Rates and charges for other services normally applied on a per line basis apply on a per channel basis for this service. (T)

D. Service Descriptions

1. Circuit Switched Voice Service - "B" Channel

a. Provides the ability to originate and receive voice switched calls, as well as, an electronic key set capability over a 64 Kbps "B" channel.

b. The following capabilities are standard:

- Analog Line Appearance
  Allows analog lines to have a line appearance on the ISDN CPE. This capability is limited to analog lines that exist in the same central office switch that provides the ISDN Direct service. This capability may result in the loss of some features and/or functionality on the analog line. (T)

- Call Hold

  Allows the customer to hold a call in progress by depressing a button on the customer's telephone equipment.

- Call Transfer

  Incoming and outgoing calls may be transferred to other exchange access lines (Customer is responsible for any local or toll charges on transferred calls).

- Called Number Display

  The called number is displayed on compatible customer premises equipment when an outgoing call is placed.

/1/ Material now appears on 3rd Revised Sheet 2.3 in Part 17, Section 1 of this Tariff.

In accordance with an Order issued by the Public Utilities Commission of Ohio, dated January 6, 2003, Case No. 02-3069-TP-ALT.

By Connie Browning, President, Cleveland, Ohio

1. ISDN DIRECT (Cont'd) (T)

D. Service Descriptions (Cont'd)

1. Circuit Switched Voice Service - "B" Channel (Cont'd)

b. (Cont'd)

- Caller ID

  The caller's number, if not blocked, is displayed on compatible customer premises equipment when an incoming call is received.

  Caller ID is offered in appropriately equipped central offices.

- Conference Calling, 3 Way

  Allows a user to add a third party to an existing call.

- Consultation Hold

  Allows a station user to hold a call in progress (incoming or outgoing) and originate another call with privacy.

- Denied Origination

  The user/terminal can only receive calls with this capability. Calls can not be originated from this terminal.

- Denied Termination

  The user/terminal can only originate calls with this capability. Incoming calls can not be received by this terminal.

- Hunting

  Incoming calls to a busy line appearance are redirected to a predetermined telephone number to search for a line on which to complete the call. This may be another Circuit Switched Voice channel, another ISDN station or an analog line. This feature may impact the use of Shared Call Appearance and Multiple Call Appearances in certain serving central offices. (T)

- Shared Call Appearance

  Provides capability to terminate telephone numbers from one ISDN station on another. These numbers will be configured in a Single Call Arrangement.

  Single Call Arrangement allows only one set to be active (either originating or terminating) on the Shared Call Appearance at any given time. Manual exclusion capabilities are available in this arrangement.

In accordance with an Order issued by the Public Utilities Commission of Ohio, dated January 6, 2003, Case No. 02-3069-TP-ALT.

By Connie Browning, President, Cleveland, Ohio

1. ISDN DIRECT (Cont'd) (T)

D. Service Descriptions (Cont'd)

1. Circuit Switched Voice Service - "B" Channel (Cont'd)

b. (Cont'd)

- Multiple Call Appearances

Provides up to four appearances of station's own telephone number or an additional telephone number on the same instrument. These appearances may provide additional access from the public network, and/or may originate unique dial tone for additional outgoing access (see Additional Multiple Call Appearances under c. following for applications that require more than four call appearances on the same set). This feature may impact the use of Shared Call Appearance in certain serving central offices.

c. The following capabilities are optional:

- Additional Call Offering

Provides notification to an ISDN user that a call directed to that user is present at the service switch, even though no B-Channel can be allocated for the call. Once notified, the user may free up a B-Channel (by clearing another call or placing another call on hold) in order to accept the additional call. This feature provides similar functionality as that provided by Call Waiting for the analog telephone user.

- Additional Multiple Call Appearances

Provides additional appearances, beyond the initial four appearances, of a station's own directory or secondary directory number on the same instrument.

These appearances may provide additional access from the public network, and/or may originate unique dial tone for additional outgoing access.

- Alternate Answer

Provides for the automatic transfer of all incoming calls to a fixed telephone number when the called telephone number is not answered by a specified number of rings (See Part 7, Section 3 of this Tariff).

- Automatic Callback

By dialing a special code, the customer is able to return the last call received whether or not it was answered (see Part 7, Section 2 of this Tariff).

1. ISDN DIRECT (Cont'd) (T)

D. Service Descriptions (Cont'd)

1. Circuit Switched Voice Service - "B" Channel (cont'd)

c. The following capabilities are optional: (cont'd)

- Busy Line Transfer

  Provides for the automatic transfer of all incoming calls to a fixed telephone number when the called telephone number is busy (see Part 7, Section 3 of this Tariff).

- Call Forwarding

  Permits customer to transfer incoming calls to another line (see Part 7, Section 1 of this Tariff).

- Call Screening

  Allows customer to prevent repeated calls from an unwanted caller whose number may or may not be known (see Part 7, Section 2 of this Tariff).

- Intercom Calling

  This capability allows a voice user to be able to call another voice user within the Electronic Key Telephone Service (EKTS) (T)
  intercom group without affecting the busy/idle status of any of the directory numbers (DNs) of the calling voice user. Intercom (T)
  groups can consist of just one other voice user, requiring no intercom address, can consist of two to ten voice users, requiring a one-digit intercom address, can consist of two to ten voice users, requiring a one-digit intercom address, or can consist of two to one hundred voice users, requiring a two-digit intercom address. This is a form of abbreviated dialing in that, one voice user can dial another by simply hitting the intercom button and then dialing no digits, one or two digits respectively.

1. ISDN DIRECT (Cont'd) (T)

D. Service Descriptions (Cont'd)

1. Circuit Switched Voice Service - "B" Channel (cont'd)

c. The following capabilities are optional: (cont'd)

- Message Waiting Indicator

  Provides the ability to indicate to the ISDN station user that they have a voice or electronic message waiting at their Message Storage and Retrieval (MSR) System. The Message Waiting Indicator may be used to present either a visual or audible signal to the user as determined by the customer's equipment.

- Repeat Dialing

  Enables a customer to reach a called party whose line is busy without having to continually redial the telephone number (see Part 7, Section 2 of this Tariff).

- Secondary Telephone Numbers (including call appearance) (T)

  Provides an additional telephone number and a call appearance which is not physically terminated, but exists in the programming of Circuit Switched Voice.

  The Secondary Telephone Number, while not terminated on a dedicated facility, may be accessed from the network, and may originate unique outgoing dial tone from an instrument that has another telephone number as its primary number.

- Speed Calling

  Permits the customer to place calls to a preselected group of telephone numbers by dialing abbreviated codes. Speed calling is provided in capacities of eight or thirty telephone numbers (see Part 7, Section 1 of this Tariff). (C)

- Station-Controlled Conference (6 Port)

  Allows a station user to establish a conference call consisting of a maximum of six conferees, including the originator of the call.

1. ISDN DIRECT (Cont'd) (T)

D. Service Descriptions (Cont'd)

2. Circuit Switched Data Service - "B" Channel

a. Provides the ability to originate and receive switched data calls over the 64 Kbps "B" channel. Data line speeds up to 64 Kbps are permitted.

b. The following capabilities are standard:

- Caller ID

  The caller's number, if not blocked, is displayed on compatible customer premises equipment when an incoming call is received.

  Caller ID is offered in appropriately equipped central offices.

- Clear Channel Capability

  All ISDN Direct signaling and control functions are handled by the "D" channel. This allows all 64 Kbps on each "B" channel to be used for customer information over the ISDN Direct. Calls may either be 56 Kbps or 64 Kbps depending on the network capabilities in place between ISDN Direct and the distant end on the call.

- Denied Origination

  The user/terminal can only receive calls with this capability. Calls cannot be originated from this terminal.

- Denied Termination

  The user/terminal can only originate calls with this capability. Calls cannot be received by this terminal.

- Hunt Group for Shared Data Access

  Provides for the automatic search of a group of shared ports to find an available port in response to a connection request.

c. The following data capabilities are optional:

- Additional Call Offering

  Provides notification to an ISDN user that a call directed to that user is present at the service switch, even though no B-Channel can be allocated for the call. Once notified, the user may free up a B-Channel (by clearing another call or placing another call on hold) in order to accept the additional call. This feature provides similar functionality as that provided by Call Waiting for the analog telephone user.

1. ISDN DIRECT (Cont'd) (T)

D. Service Descriptions (Cont'd)

2. Circuit Switched Data Service - "B" Channel

c. The following data capabilities are optional (Cont'd)

- Alternate Answering

  Provides for the automatic transfer of all incoming calls to a fixed telephone number when the called telephone number is not answered by a specified number of rings (see Part 7, Section 3 of this Tariff).

- Busy Line Transfer

  Provides for the automatic transfer of all incoming calls to a fixed telephone number when the called telephone number is busy (see Part 7, Section 3 of this Tariff).

- Call Forwarding

  Permits customer to transfer incoming calls to another line (see Part 7, Section 1 of this Tariff).

3. Alternate Circuit Switched Voice Service/Circuit Switched Data Service "B" Channel

a. Where technology permits, provides the ability to originate and receive either Circuit Switched Voice or Circuit Switched Data calls over a single "B" channel, but not simultaneously.

b. The standard capabilities and features are those listed in Paragraph 1.(b) and 2.(b) preceding.

c. Optional capabilities and features are those listed in Paragraph 1.(c) and 2.(c) preceding.

/1/

/1/ Material relating to ISDN BRI Single B Channel Packet Service now appears on Original Sheet 2 in Part 17, Section 3 of this Tariff. Material relating to ISDN Direct Packet Switched Service now appears on 2nd Revised Sheet 2 in Part 20, Section 17 of this Tariff.

1. ISDN DIRECT (Cont'd) (T)

/1/

/1/ Material now appears on 2nd Revised Sheet 3 in Part 20, Section 17 of this Tariff.

In accordance with an Order issued by the Public Utilities Commission of Ohio, dated January 6, 2003, Case No. 02-3069-TP-ALT.

By Connie Browning, President, Cleveland, Ohio

1. ISDN DIRECT (cont'd)

E. Rates and Charges

1. General

a. The rate structure for each ISDN Direct shall include charges for an ISDN Direct Line, ISDN Direct CO Termination, optional services (see 2. following) and End User Common Line Charge (EUCL).

b. Calls are subject to the usage charges for the services provisioned on the channels. With the exception of Flat Rate ISDN, measured Local Message Charges for usage will apply to Local Service Area voice and Circuit Switched Data calls provisioned on the channel. Message Toll charges will apply to calls outside the Local Service Area. Success 800 and WATS usage charges apply. (T)

c. ISDN Direct is available as a residence or non-residence exchange service. Rates charged for End User Common Line and optional services such as Custom Calling Service are based upon the ISDN Direct class of service.

1. ISDN DIRECT (cont'd)

E. Rates and Charges (cont'd)

1. General (cont'd)

d. References:

Service	Reference
End User Common Line Charges	Ameritech Operating Companies Access Service Tariff, F.C.C. No. 2, Section 4.1.7 (T)
Circuit Switched Voice/Data: Exchange Service, Measured Rate	Part 4, Section 2 of this Tariff
Message Toll Service	Part 9, Section 1 of this Tariff

1. ISDN DIRECT (cont'd)

E. Rates and Charges (cont'd)

2. Service Elements and Optional Features

Description /Billing Code/	Nonrecurring Charge	Variable Term Option *Monthly Rates* 1 Month	36 Month	60 Month
a. ISDN Direct Line /OBQ/	-	$12.00	$11.75	$11.50
b. ISDN Direct CO Termination /N2Q/ /P2B/ /1/	$50.00	45.00(I)	/1/	/1/
c. Distance extension charge for beyond normal transmission range per ISDN Line /XTN/ /1/	-	26.00	/1/	/1/
d. Circuit Switched Voice Service Element, per "B" Channel equipped /LTQ5X/	15.00	3.00	2.80	2.60
e. Circuit Switched Data Service Element, per "B" Channel equipped /LTQ6X/	15.00	8.00	7.80	7.60

/1/ Term Payment Plan (TPP) rates no longer available for this Rate Element as of September 1, 2004. TPPs in existence prior to September 1, 2004 are rate protected as per Paragraph 1.C.1 in this Section, through the end of the existing TPP term.

1. ISDN DIRECT (cont'd)

E. Rates and Charges (cont'd)

2. Service Elements and Optional Features (cont'd)

Description /Billing Code/	Nonrecurring Charge	Variable Term Option *Monthly Rates* 1 Month	36 Month	60 Month
f. Alternate Circuit Switched Voice Service/Circuit Switched Data Service Element Charge, per "B" Channel equipped /LTQ1X/	$15.00	$8.50	$8.30	$8.10

1. ISDN DIRECT (cont'd)

E. Rates and Charges (cont'd)

2. Service Elements and Optional Features (cont'd)

Description /Billing Code/	Non-recurring Charge	Variable Term Option *Monthly Rates* 1 Month	36 Month	60 Month	
j. Subsequent changes for Circuit Switched Voice and/or Circuit Switched Data rearrangement to add line appearance or move line or feature appearances, per occasion /REA1B/	$15.00	-	-	-	
k. Additional Call offering, each /NCO/	5.00	$ 2.50	-	-	
l. Additional Multiple Call Appearances, each /ACSPB/	5.00	2.00	-	-	
m. Intercom Calling, Each /NZV/	5.00	2.50	/1/	/1/	(T)
n. Secondary Telephone Numbers, including call appearance, each /D06/	5.00	2.00	/1/	/1/	(T)
o. Station Controlled Conference 6 port /EQ6/	15.00	14.00	-	-	

/1/ Term Payment Plan (TPP) rates are no longer available for this Rate Element as of September 1, 2004. TPPs in existence prior to September 1, 2004 are rate protected as per Paragraph 1.C.1 in this Section, through the end of the existing TPP term. (T)

1. ISDN DIRECT (cont'd)

E. Rates and Charges (cont'd)

2. Service Elements and Optional Features (cont'd)

Description /Billing Code/	Nonrecurring Charge	Variable Term Option *Monthly Rates* 1 Month	36 Month	60 Month
p. Message Waiting Indicator each /MLN/	$5.00	$ 2.50	-	-
q. Flat Rate Usage				
(Residence)	-	31.25	-	-
(Business) /UXG1X/	-	35.00(I)	-	-

2. NATIONAL INTEGRATED SERVICES DIGITAL NETWORK (ISDN) DIRECT (T)

A. Description

1. National Integrated Services Digital Network (ISDN) Direct is a telecommunications service that provides an integrated voice/data communications capability for the transmission of Circuit Switched Voice and data signals on an incoming and outgoing basis utilizing Integrated Services Digital Network architecture as recommended by the International Telephone and Telegraph Consultative Committee (CCITT) and the American National Standards Institute (ANSI), as defined by Telcordia Technical References, and consistent with the North American ISDN Users Forum (NIUF) Implementation Agreements (specifically, Implementation Agreements NIU.301 and NIU.302). (T) (T) (T)

2. National ISDN Direct provides the customer with the ability to combine Circuit Switched Voice and Circuit Switched Data services over a single National ISDN Direct line. (T) (T) (D)

3. The two 64 Kbps "B" channels are used to transmit any combination of Circuit Switched Voice or Circuit Switched Data services. (T) (D)

4. The "D" channel is used to carry network signaling only. (C)

5. National ISDN Direct service is available as a residence service. (T)

6. The service is available from specially equipped digital switching equipment located in the Company's central offices and is provided where facilities permit and where capacity is available. /1/ (T) /1/

B. Regulations

1. A variety of standard and optional features and capabilities are offered. The availability and functions of the features may vary by serving central office. (D) (T)

2. National ISDN Direct lines are also subject to End User Common Line (EUCL) charges as filed by the SBC Operating Companies in Tariff F.C.C. No. 2. The customer shall be liable for all adjustments to the EUCL charge per National ISDN Direct line, per month, as authorized or mandated by the Federal Communications Commission (or by any regulatory body or commission or court of competent jurisdiction). (T) /2/ (T) (T)

/1/ Material relating to ISDN BRI Single B Channel Packet Service now appears on Original Sheet 4 in Part 17, Section 3 of this Tariff. /2/

/2/ Material relating to ISDN BRI Single B Channel Packet Service now appears on Original Sheet 5 in Part 17, Section 3 of this Tariff.

In accordance with an Order issued by the Public Utilities Commission of Ohio, dated January 6, 2003, Case No. 02-3069-TP-ALT.

By Connie Browning, President, Cleveland, Ohio

2. NATIONAL INTEGRATED SERVICES DIGITAL NETWORK (ISDN) DIRECT (cont'd) (T)

B. Regulations (cont'd)

3. The rates shown for National ISDN Direct are exclusive of local and toll charges and associated customer premises equipment. (T) /1/ /1/

4. Distance Extension charges, as specified in Paragraph 1.E.2. preceding, will apply for customers served beyond the normal transmission range specified in the Company's ISDN Interface Specifications. (T) (T)

5. When the customer's premises and the central office providing National ISDN Direct service are located in different Service Areas, Base Rate Service, contained in Part 15, Section 1 of this Tariff, rates and charges will apply. Customers provided this service arrangement will require three Interexchange Mileage component charges and six Channel Mileage Termination charges for each National ISDN Direct line they purchase. (T) (T) (T)

6. In cases where the customer's premises are in Independent Telephone Company (ITC) serving areas, the Company will assess Base Rate Interexchange Mileage charges only to the point of meet with the ITC or intermediate ITC. Charges for ITC services will be assessed by the ITC. (T) (T)

7. Rates and charges for other services normally applied on a per line basis apply on a per channel basis for this service. (T)

/1/ Material relating to ISDN BRI Single B Channel Packet Service now appears on Original Sheet 5 in Part 17, Section 3 of this Part.

In accordance with an Order issued by the Public Utilities Commission of Ohio, dated January 6, 2003, Case No. 02-3069-TP-ALT.

By Connie Browning, President, Cleveland, Ohio

2. NATIONAL INTEGRATED SERVICES DIGITAL NETWORK (ISDN) DIRECT (cont'd)

B. Regulations (cont'd)

8. All customer provided equipment used to interface with National ISDN Direct service is required to conform with the Technical Reference Specifications as used by the Company and found in the following publication:

Subject	Technical Reference
ISDN Interface Specifications	AM-TR-NIS-000068

The Technical Reference can be obtained from:

APEX Support Team (T)
(734) 523-7348 (T)

9. Residential ISDN customer premises equipment must be Class B compliant as set forth by the Code of Federal Regulations 47 CFR Part 15, Subpart A, Section 15.3, Paragraph I.

2. NATIONAL INTEGRATED SERVICES DIGITAL NETWORK (ISDN) DIRECT (Cont'd) (T)

B. Regulations (Cont'd)

10. A National ISDN CO Termination is required for each National ISDN Direct Line. This enables the subscriber to configure circuit switched service elements and on the 2B+D National ISDN Direct Line. (T)

(D)

(D)

In accordance with an Order issued by the Public Utilities Commission of Ohio, dated January 6, 2003, Case No. 02-3069-TP-ALT.

By Connie Browning, President, Cleveland, Ohio

2. NATIONAL INTEGRATED SERVICES DIGITAL NETWORK (ISDN) DIRECT (Cont'd) (T)

(D)

(D)

D. Channel Services

1. Circuit Switched Service (Voice capabilities)

a. Provides the ability to originate and receive Circuit Switched Voice calls, as well as an electronic key set capability over a 64 Kbps "B" channel. Voice calls are subject to local and toll usage charges based upon the type of service selected by the customer. Local usage charges are specified in Part 4, Section 2 of this Tariff. Toll usage charges are specified in Part 9, Section 1 of this Tariff. (T) (T) (T) (T)

b. The following voice capabilities are standard:

1. Analog Line Appearance - Allows analog lines to have a line appearance on the ISDN CPE with Circuit Switched Voice service. This capability is limited to analog lines that exist in the same switching entity that provides the National ISDN Direct service. This capability may result in the loss of some features and/or functionality on the analog line. (T) (T)

2. NATIONAL INTEGRATED SERVICES DIGITAL NETWORK (ISDN) DIRECT (Cont'd) (T)

D. Channel Services (Cont'd)

1. Circuit Switched Service (Voice capabilities) (Cont'd)

b. The following voice capabilities are standard: (Cont'd)

2. Call Hold - Allows the customer to place a call on hold at the central office, making the channel available for another call (either incoming or outgoing). This can be done through software in the customer's equipment or, often, by depressing a properly programmed button on the customer's telephone equipment.

3. Call Transfer - Incoming and outgoing calls may be transferred to other lines. The customer initiating the transfer is responsible for any local or toll charges on transferred calls.

4. Called Number Display - The called number is displayed on compatible customer premises equipment when an outgoing call is placed.

5. Caller ID - The caller's number, if not blocked, is displayed on compatible customer premises equipment when an incoming call is received. The Caller ID feature will forward the calling number from the appropriately equipped originating central office to the customer provided display device.

6. Conference Calling-3 Way - Allows a user to hold incoming or outgoing calls, initiate another call, then return to the original call, adding on the last party.

7. Denied Origination - Allows call terminations, but prevents the origination of a call.

8. Denied Termination - Allows call originations, but prevents the termination of a call.

9. Hunting - Incoming calls to a busy line appearance are redirected to a predetermined telephone number to search for a line on which to complete the call. This may be another Circuit Switched Voice channel, another ISDN station or an analog line. The types of hunting are limited to Series Completion, Multi-Line and Circular. This feature may impact the use of Shared Call Appearance and Multiple Call Appearance in certain serving central offices (T)

2. National Integrated Services Digital Network (ISDN) Direct (Cont'd) (T)

D. Channel Services

1. Circuit Switched Service (Voice capabilities)

b. The following voice capabilities are standard: (Cont'd)

10. Multiple Call Appearance - Provides up to four appearances of the station's primary directory number or secondary telephone number on the same instrument. These appearances may provide additional access from the public network, and/or may originate unique dial tone for additional outgoing access (see Additional Multiple Call Appearance for applications that require more than four call appearances on the same device). This feature may impact the use of Shared Call Appearance in certain serving central offices.

11. Shared Call Appearance - Provides the capability to terminate telephone numbers from one ISDN station to another. These numbers are configured in a Single Call Arrangement (SCA). (T)
SCA allows only one set to be active (either originating or terminating) on the Shared Call Appearance at any given time. Manual Exclusion capabilities are available in this arrangement.

c. The following voice capabilities are optional:

1. Additional Call Offering - Provides notification to an ISDN user that a call directed to that user is present at the service switch, even though no B-Channel can be allocated for the call. Once notified, the user may free up a B-Channel (by clearing another call or placing another call on hold) in order to accept the additional call. This feature provides similar functionality as that provided by Call Waiting for the analog telephone user.

2. Additional Multiple Call Appearances - Provides additional call appearances, beyond the initial four appearances, of a station's primary directory number or secondary telephone number on the same instrument. These appearances may provide additional access from the public network, and/or may originate unique dial tone for additional outgoing access.

3. Alternate Answer - Provides for the automatic transfer of all incoming calls to a fixed telephone number when the called telephone number is not answered by a specified number of rings (see Part 7, Section 3 of this Tariff).

In accordance with an Order issued by the Public Utilities Commission of Ohio, dated January 6, 2003, Case No. 02-3069-TP-ALT.

By Connie Browning, President, Cleveland, Ohio

2. NATIONAL INTEGRATED SERVICES DIGITAL NETWORK (ISDN) DIRECT (Cont'd) (T)

D. Channel Services (Cont'd)

1. Circuit Switched Service (Voice capabilities) (Cont'd)

c. The following voice capabilities are optional: (Cont'd)

4. Automatic Callback - By dialing a special code, the customer is able to return the last call received whether or not it was answered (see Part 7, Section 2 of this Tariff).

5. Busy Line Transfer - Provides for the automatic transfer of all incoming calls to a fixed telephone number when the called telephone number is busy (see Part 7, Section 3 of this Tariff).

6. Call Forwarding - Permits customer to transfer incoming calls to another line (see Part 7, Section 1 of this Tariff).

7. Call Screening - Allows customer to prevent repeated calls from an unwanted caller whose number may or may not be known (see Part 7, Section 2 of this Tariff).

8. Intercom Calling - This capability allows a voice user to be able to call another voice user within the Electronic Key Telephone Service (EKTS) intercom group without affecting the busy/idle status of any of the directory numbers (DNs) of the calling voice user. Intercom groups can consist of just one other voice user, requiring no intercom address, can consist of two to ten voice users, requiring a one-digit intercom address, or can consist of two to one hundred voice users, requiring a two-digit intercom address. This is a form of abbreviated dialing in that, one voice user can dial another by simply hitting the intercom button and then dialing no digits, one or two digits respectively. (T) | (T)

9. Message Waiting Indicator - Provides the ability to indicate to the ISDN station user that they have a voice or electronic message waiting at their Message Storage and Retrieval (MSR) System. The Message Waiting Indicator may be used to present either a visual or audible signal to the user as determined by the customer's equipment. (T)

2. NATIONAL INTEGRATED SERVICES DIGITAL NETWORK (ISDN) DIRECT (Cont'd) (T)

D. Channel Services (Cont'd)

1. Circuit Switched Service (Voice capabilities) (Cont'd)

c. The following voice capabilities are optional: (Cont'd)

10. Repeat Dialing - Enables a customer to reach a called party whose line is busy without having to continually redial the telephone number (see Part 7, Section 2 of this Tariff). (T) (T)

11. Secondary Telephone Number - Provides an additional telephone number and one call appearance which is not physically terminated, but exists in the programming of Circuit Switched Voice. The additional directory number, while not terminated on a dedicated facility, may be accessed from the network, and may originate unique outgoing dial tone from one instrument that has another directory number as its primary directory number. (T) (T) (T)

12. Station-Controlled Conference (6 Port) - Allows a station user to establish a conference call consisting of a maximum of six conferees, including the originator of the call. (T)

13. Speed Calling - Permits the customer to place calls to a preselected group of telephone numbers by dialing abbreviated codes. Speed Calling is provided in capacities of eight or thirty telephone numbers (see Part 7, Section 1 of this Tariff). (T) (T)

2. Circuit Switched Service (Data capabilities)

a. Provides the ability to originate and receive Circuit Switched Data calls over the 64 Kbps "B" channel. Data line speeds up to 64 Kbps are permitted. Circuit Switched Data calls are subject to local usage charges based upon the type of service selected by the customer. Local usage charges are specified in Part 4, Section 2 of this Tariff. (T) (T) (T)

b. The following data capabilities are standard:

1. Caller ID - The caller's number, if not blocked, is displayed on compatible customer premises equipment when an incoming call is received. The Caller ID feature will forward the calling number from the appropriately equipped originating central office to the customer-provided display device.

2. Clear Channel Capability - Clear channel capability is provided since all signaling and control functions are handled by the "D" channel. This allows all 64 Kbps on each "B" channel to be used for customer information over the National ISDN Direct line. Calls may be either 56 or 64 Kbps depending on the network capabilities in place between the National ISDN Direct line and the distant end of the call. (T) (T)