ACCESS SERVICE

REGULATIONS, RATES, AND CHARGES
APPLYING TO THE PROVISION OF ACCESS SERVICES
FOR CONNECTION TO INTERSTATE COMMUNICATION
FACILITIES FOR INTERSTATE CUSTOMERS RELATED TO
THE PROVISION OF SWITCHED AND SPECIAL ACCESS SERVICES

Access Services are provided by means of wire, fiber optics, radio or any other suitable technology or a combination thereof.
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Transmittal No. 4

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David Stoll  
Vice President/Chief Executive Officer  
123 W. Orchard Street, P.O. Box 127  
Delton, Michigan 49046  
(269) 623-2311  
dstoll@mei.net
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Vice President/Chief Executive Officer  
123 W. Orchard Street, P.O. Box 127  
Delton, Michigan 49046  
(269) 623-2311  
dstoll@mei.net
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Delton, Michigan 49046
(269) 623-2311
dstoll@mei.net
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David Stoll
Vice President/Chief Executive Officer
123 W. Orchard Street, P.O. Box 127
Delton, Michigan 49046
(269) 623-2311
dstoll@mei.net
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David Stoll  
Vice President/Chief Executive Officer  
123 W. Orchard Street, P.O. Box 127  
Delton, Michigan 49046  
(269) 623-2311  
dstoll@mei.net
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David Stoll  
Vice President/Chief Executive Officer  
123 W. Orchard Street, P.O. Box 127  
Delton, Michigan 49046  
(269) 623-2311  
dstoll@mei.net
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Vice President/Chief Executive Officer  
123 W. Orchard Street, P.O. Box 127  
Delton, Michigan 49046  
(269) 623-2311  
dstoll@mei.net
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Vice President/Chief Executive Officer
123 W. Orchard Street, P.O. Box 127
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(269) 623-2311
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CONCURRING CARRIERS
NO CONCURRING CARRIERS

CONNECTING CARRIERS
NO CONNECTING CARRIERS

OTHER PARTICIPATING CARRIERS
NO PARTICIPATING CARRIERS
EXPLANATION OF SYMBOLS

C - to signify changed regulation.
D - to signify discontinued rate or regulation.
I - to signify increase.
M - to signify matter relocated without change.
N - to signify new rate or regulation.
R - to signify reduction.
S - to signify reissued matter.
T - to signify a change in text but no change in rate or regulation.
Z - to signify a correction.

EXPLANATION OF ABBREVIATIONS

ACR - Alternate Carrier Routing
ADA - Abbreviated Dialing Arrangement
ADM - Add/Drop Multiplexing
ADSL - Asymmetric Digital Subscriber Line
AIN - Advanced Intelligent Network
AML - Actual Measured Loss
ANI - Automatic Number Identification
AP - Program Audio
ARC - Access Recovery Charge
ATM - Asynchronous Transfer Mode
ATM-CRS - Asynchronous Transfer Mode Cell Relay Access Service
BHMC - Busy Hour Minutes of Capacity
CBR - Constant Bit Rate
CCS - Common Channel Signaling
CDP - Customer Designated Premises
CI - Channel Interface
CIR - Committed Information Rate
CN - Charge Number
CNP - Charge Number Parameter
CO - Central Office
Cont'd - Continued
CoS - Class of Service
CPE - Customer Provided Equipment
CPN - Calling Party Number
CSP - Carrier Selection Parameter
### EXPLANATION OF ABBREVIATIONS (Cont’d)

<table>
<thead>
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<th>Description</th>
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<tr>
<td>DA</td>
<td>Directory Assistance</td>
</tr>
<tr>
<td>dB</td>
<td>decibel</td>
</tr>
<tr>
<td>dBnC</td>
<td>Decibel Reference Noise C-Message Weighting</td>
</tr>
<tr>
<td>dBnCO</td>
<td>Decibel Reference Noise C-Message Weighted O</td>
</tr>
<tr>
<td>dc</td>
<td>direct current</td>
</tr>
<tr>
<td>DDD</td>
<td>Direct Distance Dialing</td>
</tr>
<tr>
<td>DSL</td>
<td>Digital Subscriber Line</td>
</tr>
<tr>
<td>EAS</td>
<td>Extended Area Service</td>
</tr>
<tr>
<td>EDD</td>
<td>Envelope Delay Distortion</td>
</tr>
<tr>
<td>EML</td>
<td>Expected Measured Loss</td>
</tr>
<tr>
<td>EPL</td>
<td>Echo Path Loss</td>
</tr>
<tr>
<td>ERL</td>
<td>Echo Return Loss</td>
</tr>
<tr>
<td>ESS</td>
<td>Electronic Switching System</td>
</tr>
<tr>
<td>ESSX</td>
<td>Electronic Switching System Exchange</td>
</tr>
<tr>
<td>ETS</td>
<td>Ethernet Transport Service</td>
</tr>
<tr>
<td>EVC</td>
<td>Ethernet Virtual Connection</td>
</tr>
<tr>
<td>E-EVC</td>
<td>Extended Ethernet Virtual Connection</td>
</tr>
<tr>
<td>f</td>
<td>frequency</td>
</tr>
<tr>
<td>F.C.C.</td>
<td>Federal Communications Commission</td>
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<tr>
<td>FRAS</td>
<td>Frame Relay Access Service</td>
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<tr>
<td>GETS</td>
<td>Government Emergency Telecommunications Service</td>
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<tr>
<td>HC</td>
<td>High Capacity</td>
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<td>HPC</td>
<td>High Probability of Completion</td>
</tr>
<tr>
<td>Hz</td>
<td>Hertz</td>
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<tr>
<td>IC</td>
<td>Interexchange Carrier</td>
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<tr>
<td>ICB</td>
<td>Individual Case Basis</td>
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<tr>
<td>ICL</td>
<td>Inserted Connection Loss</td>
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<tr>
<td>I-EVC</td>
<td>Interconnected Ethernet Virtual Connection</td>
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<tr>
<td>IP</td>
<td>Internet Protocol</td>
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<tr>
<td>IPG</td>
<td>Internet Protocol Gateway Access Service</td>
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<tr>
<td>ISDN BRI</td>
<td>Integrated Services Digital Network Basic Rate Interface</td>
</tr>
<tr>
<td>ISDN PRI</td>
<td>Integrated Services Digital Network Primary Rate Interface</td>
</tr>
<tr>
<td>Kbps</td>
<td>kilobits per second</td>
</tr>
<tr>
<td>kHz</td>
<td>kilohertz</td>
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<tr>
<td>LAN</td>
<td>Local Area Network</td>
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<td>LATA</td>
<td>Local Access and Transport Area</td>
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<td>LBR-VCC</td>
<td>Low Bit Rate Virtual Circuit Channel</td>
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<td>LNP</td>
<td>Local Number Portability</td>
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<td>LRN</td>
<td>Location Routing Number</td>
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EXPLANATION OF ABBREVIATIONS (Cont’d)

Ma  - milliamperes
Mbps - Megabits per second
Mcs - Microsecond
MHz - Megahertz
MM-VCC - MultiMedia Virtual Circuit Channel
MRC - Monthly Recurring Charge
MT  - Metallic
MTS - Message Telecommunications Service(s)
NNI - Network to Network Interface
NPA - Numbering Plan Area
NRC - Nonrecurring Charge
NXX - Three-Digit Central Office Prefix
OC  - Optical Carrier
OLT - Optical Line Termination
PBX - Private Branch Exchange
PIC - Presubscribed Interexchange Carrier
POT - Point of Termination
PSTN - Public Switched Telephone Network
PVC - Permanent Virtual Connection
SAC - Service Access Code
SDSL - Symmetric Digital Subscriber Line
SNAL - Signaling Network Access Line
SONET - Synchronous Optical Network
SP  - Signaling Point
SPOI - Signaling Point of Interface
SRL - Singing Return Loss
NNI - Network to Network Interface
NPA - Numbering Plan Area
NRC - Nonrecurring Charge
NXX - Three-Digit Central Office Prefix
OC  - Optical Carrier
OLT - Optical Line Termination
PBX - Private Branch Exchange
PIC - Presubscribed Interexchange Carrier
POT - Point of Termination
PSTN - Public Switched Telephone Network
PVC - Permanent Virtual Connection
SAC - Service Access Code
SDSL - Symmetric Digital Subscriber Line
SNAL - Signaling Network Access Line
**EXPLANATION OF ABBREVIATIONS (Cont’d)**

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<td>SONET</td>
<td>Synchronous Optical Network</td>
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<tr>
<td>SP</td>
<td>Signaling Point</td>
</tr>
<tr>
<td>SPOI</td>
<td>Signaling Point of Interface</td>
</tr>
<tr>
<td>SRL</td>
<td>Singing Return Loss</td>
</tr>
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<td>SSP</td>
<td>Service Switching Point</td>
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<td>SS7</td>
<td>Signaling System 7</td>
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<td>STP</td>
<td>Signal Transfer Point</td>
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<tr>
<td>STS</td>
<td>Synchronous Transport Signal</td>
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<tr>
<td>SWC</td>
<td>Serving Wire Center</td>
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<tr>
<td>TDM</td>
<td>Time Division Multiplexing</td>
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<tr>
<td>TG</td>
<td>Telegraph Grade</td>
</tr>
<tr>
<td>TLP</td>
<td>Transmission Level Point</td>
</tr>
<tr>
<td>TV</td>
<td>Television</td>
</tr>
<tr>
<td>UBR</td>
<td>Unspecified Bit Rate</td>
</tr>
<tr>
<td>UNI</td>
<td>User Network Interface</td>
</tr>
<tr>
<td>V &amp; H</td>
<td>Vertical &amp; Horizontal</td>
</tr>
<tr>
<td>VBR-nrt</td>
<td>Variable Bit Rate – non-real time</td>
</tr>
<tr>
<td>VBR-rt</td>
<td>Variable Bit Rate – real time</td>
</tr>
<tr>
<td>VCC</td>
<td>Virtual Circuit Channel</td>
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<tr>
<td>VG</td>
<td>Voice Grade</td>
</tr>
<tr>
<td>VP</td>
<td>Virtual Path</td>
</tr>
<tr>
<td>WATS</td>
<td>Wide Area Telecommunications Service(s)</td>
</tr>
<tr>
<td>WSC</td>
<td>Wireless Switching Center</td>
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<tr>
<td>WSO</td>
<td>WATS Serving Office</td>
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ACCESS SERVICE

1. Application of Tariff

1.1 This tariff contains regulations, rates and charges applicable to the provision of End User Access, Switched Access, Special Access, Digital Subscriber Line Access Service, Public Packet Data Network and other miscellaneous services hereinafter referred to collectively as service(s). The regulations, rates, and charges in this tariff apply to the provisioning of Access Services for connection to Intrastate Communications Facilities for Intrastate Customers.

These services are provided to customers by the Issuing Carrier(s) of this tariff, hereinafter the Telephone Company. This tariff also contains Access Ordering regulations and charges that are applicable when these services are ordered or modified by the customer.

1.2 The provision of such services by the Telephone Company as set forth in this tariff does not constitute a joint undertaking with the customer for the furnishing of any service.
2. General Regulations

2.1 Undertaking of the Telephone Company

2.1.1 Scope

(A) The Telephone Company does not undertake to transmit messages under this tariff.

(B) The Telephone Company shall be responsible only for the installation, operation and maintenance of the services it provides.

(C) The Telephone Company will, for maintenance purposes, test its service only to the extent necessary to detect and/or clear troubles.

(D) Services are provided 24 hours daily, seven days per week, except as set forth in other applicable sections of this tariff.

(E) The Telephone Company does not warrant that its facilities and services meet standards other than those set forth in this tariff.

2.1.2 Limitations

(A) Assignment or Transfer of Services

The customer may assign or transfer the use of services provided under this tariff only where there is no interruption of use or relocation of the services. Such assignment or transfer may be made to:

(1) Another customer, whether an individual, partnership, association or corporation, provided the assignee or transferee assumes all outstanding indebtedness for such services, and the unexpired portion of the minimum period and the termination liability applicable to such services, if any; or

(2) A court-appointed receiver, trustee or other person acting pursuant to law in bankruptcy, receivership, reorganization, insolvency, liquidation or other similar proceedings, provided the assignee or transferee assumes the unexpired portion of the minimum period and the termination liability applicable to such services, if any.
2. General Regulations

2.1 Undertaking of the Telephone Company (Cont’d)

2.1.2 Limitations (Cont’d)

(A) Assignment or Transfer of Services (Cont’d)

In all cases of assignment or transfer, the written acknowledgement of the Telephone Company is required prior to such assignment or transfer. This acknowledgement shall be made within 15 days from the receipt of notification. All regulations and conditions contained in this tariff shall apply to such assignee or transferee.

The assignment or transfer of services does not relieve or discharge the assignor or transferor from remaining jointly or severally liable with the assignee or transferee for any obligations existing at the time of the assignment or transfer.

(B) Use and Restoration of Services

The use and restoration of services shall be in accordance with Part 64, Subpart D, Appendix A, of the Federal Communications Commission's Rules and Regulations, which specifies the priority system for such activities.
2. **General Regulations**

2.1 **Undertaking of the Telephone Company (Cont’d)**

2.1.2 **Limitations (Cont’d)**

(C) **Sequence of Provisioning**

Subject to compliance with the rules mentioned in (B) preceding, the services offered herein will be provided to customers on a first-come, first-served basis.

The first-come, first-served sequence shall be based upon the received time and date recorded, by stamp or other notation, by the Telephone Company on customer access orders. These orders must contain all the information as required for each respective service as delineated in other sections of this tariff. Customer orders shall not be deemed to have been received until such information is provided. Should questions arise which preclude order issuance due to missing information or the need for clarification, the Telephone Company will attempt to seek such missing information or clarification on a verbal basis.

2.1.3 **Liability**

(A) **Limits of Liability**

The Telephone Company's liability, if any, for its willful misconduct is not limited by this tariff. With respect to any other claim or suit, by a customer or by any others, for damages associated with the installation, provision, termination, maintenance, repair or restoration of service, and subject to the provisions of (B) through (G) following, the Telephone Company's liability if any, shall not exceed an amount equal to the proportionate charge for the service for the period during which the service was affected. This liability for damages shall be in addition to any amounts that may otherwise be due the customer under this tariff as a Credit Allowance for a Service Interruption.
2. General Regulations (Cont’d)

2.1 Undertaking of the Telephone Company (Cont’d)

2.1.3 Liability (Cont’d)

(B) Acts or Omissions

The Telephone Company shall not be liable for any act or omission of any other carrier or customer providing a portion of a service, nor shall the Telephone Company for its own act or omission hold liable any other carrier or customer providing a portion of a service.

(C) Damages to Customer Premises

The Telephone Company is not liable for damages to the customer premises resulting from the furnishing of a service, including the installation and removal of equipment and associated wiring, unless the damage is caused by the Telephone Company's negligence.

(D) Indemnification of Telephone Company

(1) By the End User

The Telephone Company shall be indemnified, defended and held harmless by the end user against any claim, loss or damage arising from the end user's use of services offered under this tariff, involving:

(a) Claims for libel, slander, invasion of privacy, or infringement of copyright arising from the end user's own communications;

(b) Claims for patent infringement arising from the end user's acts combining or using the service furnished by the Telephone Company in connection with facilities or equipment furnished by the end user or customer or;

(c) All other claims arising out of any act or omission of the end user in the course of using services provided pursuant to this tariff.
2. General Regulations (Cont’d)

2.1 Undertaking of the Telephone Company (Cont’d)

2.1.3 Liability (Cont’d)

(D) Indemnification of Telephone Company (Cont’d)

(2) By the Customer

The Telephone Company shall be indemnified, defended and held harmless by the customer against any claim, loss or damage arising from the customer's use of services offered under this tariff, involving:

(a) Claims for libel, slander, invasion of privacy, or infringement of copyright arising from the customer's own communications;

(b) Claims for patent infringement arising from the customer's acts combining or using the service furnished by the Telephone Company in connection with facilities or equipment furnished by the end user or customer or;

(c) All other claims arising out of any act or omission of the customer in the course of using services provided pursuant to this tariff.
2. General Regulations (Cont’d)

2.1 Undertaking of the Telephone Company (Cont’d)

2.1.3 Liability (Cont’d)

(E) **Explosive Atmospheres**

The Telephone Company does not guarantee or make any warranty with respect to its services when used in an explosive atmosphere.

The Telephone Company shall be indemnified, defended and held harmless by the customer from any and all claims by any person relating to such customer's use of services so provided.

(F) **No License Granted**

No license under patents (other than the limited license to use) is granted by the Telephone Company or shall be implied or arise by estoppel, with respect to any service offered under this tariff.

The Telephone Company will defend the customer against claims of patent infringement arising solely from the use by the customer of services offered under this tariff and will indemnify such customer for any damages awarded based solely on such claims.

(G) **Circumstances Beyond the Telephone Company's Control**

The Telephone Company's failure to provide or maintain services under this tariff shall be excused by labor difficulties, governmental orders, civil commotions, criminal actions taken against the Telephone Company, acts of God and other circumstances beyond the Telephone Company's reasonable control, subject to the Credit Allowance for a Service Interruption as set forth in 2.4.4 following.
2. General Regulations (Cont’d)

2.1 Undertaking of the Telephone Company (Cont’d)

2.1.4 Provision of Services

The Telephone Company will provide to the customer, upon reasonable notice, services offered in other applicable sections of this tariff at rates and charges specified therein. Services will be made available to the extent that such services are or can be made available with reasonable effort, and after provision has been made for the Telephone Company's telephone exchange services.

2.1.5 Facility Terminations

The services provided under this tariff will include any entrance cable or drop wiring and wire or intra-building cable to that point where provision is made for termination of the Telephone Company's outside distribution network facilities at a suitable location inside a customer-designated premises. Such wiring or cable will be installed by the Telephone Company to the Point of Termination. Moves of the Point of Termination at the customer designated premises will be as set forth in 6.4.4 and 7.2.3 following.

2.1.6 Service Maintenance

The services provided under this tariff shall be maintained by the Telephone Company. The customer or others may not rearrange, move, disconnect, remove or attempt to repair any facilities provided by the Telephone Company, other than by connection or disconnection to any interface means used, except with the written consent of the Telephone Company.
2. **General Regulations (Cont’d)**

2.1 **Undertaking of the Telephone Company (Cont’d)**

2.1.7 **Changes and Substitutions**

Except as provided for equipment and systems subject to FCC Part 68 Regulations at 47 C.F.R. Section 68.110(b), the Telephone Company may, where such action is reasonably required in the operation of its business, substitute, change or rearrange any facilities used in providing service under this tariff. Such actions may include, without limitation:

- substitution of different metallic facilities,
- substitution of carrier or derived facilities for metallic facilities used to provide other than metallic facilities,
- substitution of metallic facilities for carrier or derived facilities used to provide other than metallic facilities,
- substitution of fiber or optical facilities,
- change of minimum protection criteria,
- change of operating or maintenance characteristics of facilities, or
- change of operations or procedures of the Telephone Company.

In case of any such substitution, change or rearrangement, the transmission parameters will be within the range as set forth in Section 15, following. The Telephone Company shall not be responsible if any such substitution, change or rearrangement renders any customer furnished services obsolete or requires modification or alteration thereof or otherwise affects their use or performance. If such substitution, change or rearrangement materially affects the operating characteristics of the facility, the Telephone Company will provide reasonable notification to the customer in writing. Reasonable time will be allowed for any redesign and implementation required by the change in operating characteristics. The Telephone Company will work cooperatively with the customer to determine reasonable notification procedures.
2. General Regulations (Cont’d)

2.1 Undertaking of the Telephone Company (Cont’d)

2.1.8 Refusal and Discontinuance of Service

(A) If a customer fails to comply with Section 2.1.6, preceding (Service Maintenance) or Sections 2.3.1, 2.3.4, 2.3.6, 2.3.11, 2.4.1 or 2.5, following, respectively, Damages; Availability for Testing; Balance; Jurisdictional Report and Certification Requirements; Payment of Rates, Charges or Deposits; or Connections, including any customer’s failure to make payments on the date and times therein specified, the Telephone Company may, on thirty (30) calendar days written notice by Certified U.S. Mail or overnight delivery to the person designated by that customer to receive such notices of noncompliance, take the following actions:

- refuse additional applications for service and/or refuse to complete any pending orders for service, and/or
- discontinue the provision of service to the customer.

In the case of discontinuance all applicable charges, including termination charges, shall become due.
2. General Regulations (Cont’d)

2.1 Undertaking of the Telephone Company (Cont’d)

2.1.8 Refusal and Discontinuance of Service (Cont’d)

(B) In addition to and not in limitation of the provisions in (A), above, if a customer fails to comply with Section 2.4.1, following (Payment of Rates, Charge and Deposits), including any payments to be made by it on the dates and times therein specified, the Telephone Company may take the actions specified in (A), above, with regard to services provided hereunder to that customer on fifteen (15) calendar days written notice to the person designated by that customer to receive such notices of noncompliance, such notice period to start the day after the notice is sent by overnight delivery, if the customer has not complied with respect to amounts due in a subject bill or subject deposit request and either:

(1) the Telephone Company has sent the subject bill to the customer within seven (7) business days of the bill date; or

(2) the Telephone Company has sent the subject bill to the customer more than thirty (30) calendar days before notice under this section is given; or

(3) the Telephone Company has sent the subject deposit request to the customer more than fifteen (15) business days before notice under this section is given.

In all other cases, the Telephone Company will give thirty (30) calendar days written notice pursuant to (A), above. The Telephone Company will maintain records sufficient to validate the date upon which a bill or deposit request was sent to the customer. Action specified in (A), above, will not be taken with regard to the subject bill or subject deposit request if the customer cures the noncompliance prior to the expiration of the fifteen (15) or thirty (30) days’ notice period, as applicable.

(C) If notice is given by overnight delivery under (A) or (B), above, it shall be performed by a reputable overnight delivery service such as, or comparable to, the U.S. Postal Service Express Mail, United Parcel Service, or Federal Express.
2. General Regulations (Cont'd)

2.1 Undertaking of the Telephone Company (Cont'd)

2.1.8 Refusal and Discontinuance of Service (Cont’d)

(D) The provisions in (A) and (B), above, shall not apply to charges that a customer does not pay based on the submission of a good faith dispute pursuant to Section 2.4.1(D), following. (Billing Disputes)

(E) If a customer fails to comply with Section 2.2.2, following (Unlawful and Abusive Use), the Telephone Company may, upon written request from a customer, or another exchange carrier, terminate service to any subscriber or customer identified as having utilized service provided under this tariff in the completion of abusive or unlawful telephone calls. Service shall be terminated by the Telephone Company as provided for in its general and/or local exchange service tariffs.

In such instances when termination occurs the Telephone Company shall be indemnified, defended and held harmless by any customer or Exchange Carrier requesting termination of service against any claim, loss or damage arising from the Telephone Company's actions in terminating such service, unless caused by the Telephone Company's negligence.
2. General Regulations (Cont’d)

2.1 Undertaking of the Telephone Company (Cont’d)

2.1.8 Refusal and Discontinuance of Service (Cont’d)

(F) Except as provided for equipment or systems subject to the FCC Part 68 Rules in 47 C.F.R. Section 68.108, if the customer fails to comply with Section 2.2.1, following (Interference or Impairment), the Telephone Company will, where practicable, notify the customer that temporary discontinuance of the use of a service may be required; however, where prior notice is not practicable, the Telephone Company may temporarily discontinue service forthwith if such action is reasonable in the circumstances. In case of such temporary discontinuance, the customer will be notified promptly and afforded the opportunity to correct the condition which gave rise to the temporary discontinuance. During such period of temporary discontinuance, credit allowance for service interruptions as set forth in Section 2.4.4, following, is not applicable.

(G) When access service is provided by more than one Telephone Company, the companies involved in providing the joint service may individually or collectively deny service to a customer for nonpayment. Where the Telephone Company(s) affected by the nonpayment is incapable of effecting discontinuance of service without cooperation from the other joint providers of Switched Access Service, such other Telephone Company(s) will, if technically feasible, assist in denying the joint service to the customer. Service denial for such joint service will only include calls originating or terminating within, or transiting, the operating territory of the Telephone Companies initiating the service denial for nonpayment. When more than one of the joint providers must deny service to effectuate termination for nonpayment, in cases where a conflict exists in the applicable tariff provisions, the tariff regulations of the end office Telephone Company shall apply for joint service discontinuance.
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2. General Regulations (Cont'd)

2.1 Undertaking of the Telephone Company (Cont'd)

2.1.8 Refusal and Discontinuance of Service (Cont’d)

(H) If the Telephone Company does not refuse additional applications for service and/or does not discontinue the provision of the services as specified for herein, and the customer's noncompliance continues, nothing contained herein shall preclude the Telephone Company's right to refuse additional applications for service and/or to discontinue the provision of the services to the non-complying customer without further notice.
2. General Regulations (Cont'd)

2.1 Undertaking of the Telephone Company (Cont'd)

2.1.9 Notification of Service-Affecting Activities

The Telephone Company will provide the customer reasonable notification of service-affecting activities that may occur in the normal operation of its business. Such activities may include, but are not limited to the following:

- equipment or facilities additions,
- removals or rearrangements,
- routine preventative maintenance, and
- major switching machine change-out.

Generally, such activities are not individual customer service specific, but may affect many customer services. No specific advance notification period is applicable to all service activities. The Telephone Company will work cooperatively with the customer to determine reasonable notification requirements.

2.1.10 Coordination with Respect to Network Contingencies

The Telephone Company intends to work cooperatively with the customer to develop network contingency plans in order to maintain maximum network capability following natural or man-made disasters which affect telecommunications services.

2.1.11 Provision and Ownership of Telephone Numbers

The Telephone Company reserves the reasonable right to assign, designate or change telephone numbers, any other call number designations associated with Access Services, or the Telephone Company serving central office prefixes associated with such numbers, when necessary in the conduct of its business. Should it become necessary to make a change in such number(s), the Telephone Company will furnish to the customer six (6) months’ notice, by Certified U.S. Mail, of the effective date and an explanation of the reason(s) for such change(s).
2. General Regulations (Cont'd)

2.2 Use

2.2.1 Interference or Impairment

The characteristics and methods of operation of any circuits, facilities or equipment provided by other than the Telephone Company and associated with the facilities utilized to provide services under this tariff shall not:

- interfere with or impair service over any facilities of the Telephone Company, its affiliated companies, or its connecting and concurring carriers involved in its services,

- cause damage to their plant,

- impair the privacy of any communications carried over their facilities, or

- create hazards to the employees of any of them or the public.

2.2.2 Unlawful and Abusive Use

(A) The service provided under this tariff shall not be used for an unlawful purpose or used in an abusive manner.

Abusive use includes:

(1) The use of the service of the Telephone Company for a call or calls, anonymous or otherwise, in a manner reasonably expected to frighten, abuse, torment, or harass another;

(2) The use of the service in such a manner as to interfere unreasonably with the use of the service by one or more other customers.
2. General Regulations (Cont'd)

2.3 Obligations of the Customer

2.3.1 Damages

The customer shall reimburse the Telephone Company for damages to Telephone Company facilities utilized to provide services under this tariff caused by the negligence or willful act of the customer or resulting from the customer's improper use of the Telephone Company facilities, or due to malfunction of any facilities or equipment provided by other than the Telephone Company. Nothing in the foregoing provision shall be interpreted to hold one customer liable for another customer's actions. The Telephone Company will, upon reimbursement for damages, cooperate with the customer in prosecuting a claim against the person causing such damage and the customer shall be subrogated to the right of recovery by the Telephone Company for the damages to the extent of such payment.

2.3.2 Ownership of Facilities and Theft

Facilities utilized by the Telephone Company to provide service under the provisions of this tariff shall remain the property of the Telephone Company. Such facilities shall be returned to the Telephone Company by the customer, whenever requested, within a reasonable period. The equipment shall be returned in as good condition as reasonable wear will permit.
2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.3 Equipment Space and Power

The customer shall furnish or arrange to have furnished to the Telephone Company, at no charge, equipment space and electrical power required by the Telephone Company to provide services under this tariff at the points of termination of such services. The selection of ac or dc power shall be mutually agreed to by the customer and the Telephone Company. The customer shall also make necessary arrangements in order that the Telephone Company will have access to such spaces at reasonable times for installing, testing, repairing or removing Telephone Company facilities used to provide services.

2.3.4 Availability for Testing

Access to facilities used to provide services under this tariff shall be available to the Telephone Company at times mutually agreed upon in order to permit the Telephone Company to make tests and adjustments appropriate for maintaining the services in satisfactory operating condition. Such tests and adjustments shall be completed within a reasonable time. As set forth in 2.4.4(C)(4) following, no credit will be allowed for any interruptions involved during such tests and adjustments.

2.3.5 Limitation of Use of Metallic Facilities

Signals applied to a metallic facility shall conform to the limitations set forth in Technical Reference Publication AS No. 1. In the case of application of dc telegraph signaling systems, the customer shall be responsible, at its expense, for the provision of current limiting devices to protect the Telephone Company facilities from excessive current due to abnormal conditions and for the provision of noise mitigation networks when required to reduce excessive noise.
2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.6 Balance

All signals for transmission over the facilities used to provide services under this tariff shall be delivered by the customer balanced to ground except for ground start, duplex (DX) and McCulloch-Loop (Alarm System) type signaling and dc telegraph transmission at speeds of 75 baud or less.

2.3.7 Design of Customer Services

Subject to the provisions of 2.1.7 preceding (Changes and Substitutions), the customer shall be solely responsible, at its own expense, for the overall design of its services and for any redesigning or rearrangement of its services which may be required because of changes in facilities, operations or procedures of the Telephone Company, minimum protection criteria or operating or maintenance characteristics of the facilities.

2.3.8 References to the Telephone Company

The customer may advise end users that certain services are provided by the Telephone Company in connection with the service the customer furnishes to end users; however, the customer shall not represent that the Telephone Company jointly participates in the customer's services.
2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.9 Claims and Demands for Damages

(A) With respect to claims of patent infringement made by third persons, the customer shall defend, indemnify, protect and save harmless the Telephone Company from and against all claims arising out of the combining with, or use in connection with, the services provided under this tariff, any circuit, apparatus, system or method provided by the customer.

(B) The customer shall defend, indemnify and save harmless the Telephone Company from and against any suits, claims, losses and damages, including punitive damages, attorney fees and court costs by third persons arising out of the construction, installation, operation, maintenance, or removal of the customer's circuits, facilities, or equipment connected to the Telephone Company's services provided under this tariff including, without limitation, Worker's Compensation claims, actions for infringement of copyright and/or unauthorized use of program material, libel and slander actions based on the content of communications transmitted over the customer's circuits, facilities or equipment, and proceedings to recover taxes, fines, or penalties for failure of the customer to obtain or maintain in effect any necessary certificates, permits, licenses, or other authority to acquire or operate the services provided under this tariff; provided, however, the foregoing indemnification shall not apply to suits, claims, and demands to recover damages for damage to property, death, or personal injury unless such suits, claims or demands are based on the tortious conduct of the customer, its officers, agents or employees.
2. General Regulations (Cont’d)

2.3 Obligations of the Customer (Cont’d)

2.3.9 Claims and Demands for Damages (Cont’d)

(C) The customer shall defend, indemnify and save harmless the Telephone Company from and against any suits, claims, losses or damages, including punitive damages, attorney fees and court costs by the customer or third parties arising out of any act of omission of the customer in the course of using services provided under this tariff.

2.3.10 Coordination with Respect to Network Contingencies

The customer shall, in cooperation with the Telephone Company, coordinate in planning the actions to be taken to maintain maximum network capability following natural or man-made disasters which affect telecommunications services.

2.3.11 Jurisdictional Report and Certification Requirements

(A) Certification Requirements - Special Access, Digital Subscriber Line Access and Public Packet Data Network Services

When the customer orders Special Access Service, Digital Subscriber Line Access Service or Public Packet Data Network Service, and the customer certifies to the Telephone Company in writing that more than ten percent of the traffic is interstate, the service is considered to be interstate and is provided under this Tariff.

Following initial certification, should the jurisdictional nature of the customer's Special Access, Digital Subscriber Line Access or Public Packet Data Network Services change, the customer should inform the Telephone Company in writing of the change. The effective date of the change will be the date the Telephone Company receives the customer's notice of change. No charge applies for the jurisdictional change.

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David Stoll
Vice President/Chief Executive Officer
123 W. Orchard Street, P.O. Box 127
Delton, Michigan 49046
(269) 623-2311
dstoll@mei.net
2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.11 Jurisdictional Report and Certification Requirements (Cont'd)

(B) Disputes Involving Jurisdictional Certification-Special Access and Public Packet Data Network

If a dispute arises concerning the certification of projected interstate traffic as described in (A) above, the Telephone Company will ask the customer to provide the data the customer used to determine that more than 10% of the traffic is interstate. The customer shall supply the data within thirty (30) days of the Telephone Company request. If the reply results in a jurisdictional change of a Special Access Service or Public Packet Data Network Service, the effective date of the change will be the date the Telephone Company receives the customer's reply. There is no charge when the customer's reply results in a jurisdictional change in the Special Access or Public Packet Data Network Service.

(C) Jurisdictional Reports - Switched Access

For Switched Access Service, the Telephone Company cannot in all cases determine the jurisdictional nature of customer traffic and its related access minutes. In such cases the customer may be called upon to provide a projected estimate of its traffic, split between the interstate and intrastate jurisdictions. For purposes of determining the jurisdiction of Switched Access Services, the regulations set forth in (1) through (4), below, apply.
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2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.11 Jurisdictional Report and Certification Requirements (Cont'd)

   (C) Jurisdictional Reports - Switched Access (Cont’d)

   (1) Percentage of Interstate Use (PIU)

   (a) For purposes of developing the projected interstate percentage for Feature Group D, the customer shall consider every call that originates from a calling party in one state and terminates to a called party in a different state to be interstate communications. The customer shall consider every call that terminates to a called party within the same state as the state where the calling party is located to be intrastate communications. The manner in which a call is routed through the telecommunications network does not affect the jurisdiction of a call, i.e., a call between two points within the same state is an intrastate call even if it is routed through another state.
2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.11 Jurisdictional Report and Certification Requirements (Cont'd)

(C) Jurisdictional Reports - Switched Access (Cont’d)

(1) Percentage of Interstate Use (PIU) (Cont’d)

(b) When the Telephone Company receives sufficient call detail to permit it to determine the jurisdiction of some or all originating and terminating access minutes of use, the Telephone Company will use that call detail to render bills for those minutes of use and will not use PIU factors(s) described in (2), below, to determine the jurisdiction of those minutes of use.

When the Telephone Company receives insufficient call detail to determine the jurisdiction of some or all originating and terminating access minutes of use, the Telephone Company will apply the PIU factor(s) provided by the customer or developed by the Telephone Company as set forth in (2), below, only to those minutes of use for which the Telephone Company does not have sufficient call detail. Such PIU factor(s) will be used until the customer provides an update to its PIU factor(s) as set forth in (2) (g) or (h), below.

For all flat rated Switched Access Services, the Telephone Company will apply the PIU factor(s) as provided by the customer or developed by the Telephone Company as set forth in (2), below, each month until the customer provides an update to its PIU factor(s) as described in (2)(g)or (h) below.
2. General Regulations (Cont’d)

2.3 Obligations of the Customer (Cont’d)

2.3.11 Jurisdictional Report and Certification Requirements (Cont’d)

(C) Jurisdictional Reports - Switched Access (Cont’d)

(2) Use of PIU Factors

(a) As specified in Section 5.2.1, following, the customer will provide a projected PIU for each Switched Access Service for each end office when placing its order. Such PIU factors are applied to all usage rated elements (including but not limited to Information Surcharge, Local Switching, and Tandem Switched Transport), where the Telephone Company does not receive sufficient call detail to determine the jurisdiction of the usage.

If the customer fails to provide a PIU factor on its order for service, the following provisions apply:

(i) For originating access minutes, when the call detail is adequate to determine the appropriate jurisdiction and when the Feature Group D access minutes of use are measured, the Telephone Company will develop PIU factor(s) on a monthly basis by end office by dividing the customer’s measured interstate originating access minutes (the access minutes where the calling party is in one state and the called party is in another state) by the customer’s total originating access minutes.
2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.11 Jurisdictional Report and Certification Requirements (Cont'd)

(C) Jurisdictional Reports - Switched Access (Cont'd)

(2) Use of PIU Factors (Cont’d)

(a) (Cont’d)

(ii) For terminating access minutes, other than as specified in (iii), below, the same data used by the Telephone Company to develop the PIU factor for originating access minutes will be used to develop the PIU factor for such terminating access minutes.

(iii) For terminating Feature Group D access minutes used in conjunction with Internet Protocol Gateway Access Service (IPG) as described in Section 16.4, following, the Telephone Company will apply a default PIU of 50% to the IPG customer’s terminating access minutes.

The Telephone Company developed PIU factor(s) described in this section will only be used for minutes of use for which the Telephone Company does not have sufficient call detail to determine the jurisdiction until such time as the customer provides updated PIU factor(s) for these services.
2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.11 Jurisdictional Report and Certification Requirements (Cont'd)

(C) Jurisdictional Reports - Switched Access (Cont'd)

(2) Use of PIU Factors (Cont’d)

(b) Separate PIUs are required for flat rated Entrance Facilities, Direct Trunked Transport Facilities, and Switched Access Services Optional Features and Functions. The PIU factor(s) for use with such flat rated elements will reflect the combination of originating and terminating traffic of all services using such facilities.

If the customer fails to provide a PIU factor on its order for service, the Telephone Company will apply the PIU factor it developed pursuant to (2)(a), above, against the customer’s flat rated Switched Access Services to apportion those changes between the jurisdictions.
2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.11 Jurisdictional Report and Certification Requirements (Cont'd)

(C) Jurisdictional Reports - Switched Access (Cont'd)

(2) Use of PIU Factors (Cont’d)

(c) When the customer has both interstate and intrastate Operator Services traffic, the percentage interstate usage determined for the customer’s FGD service will be applied to the customer’s Operator Services charges.
2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.11 Jurisdictional Report and Certification Requirements (Cont'd)

(C) Jurisdictional Reports - Switched Access (Cont'd)

(2) Use of PIU Factors (Cont’d)

(f) For each service, the customer may only provide a PIU factor that is in a whole number format, i.e., a number from 0 to 100. When the customer provides the PIU factor, the Telephone Company will subtract the provided PIU from 100 and the difference is the percent intrastate usage. The sum of the interstate and intrastate percentages will equal 100 percent. The customer provided factors will be used by the Telephone Company as described in (1)(b), above, until the customer provides updated PIU factors as required in (2)(g) or (h), below.

(g) When the customer adds or discontinues Busy Hour Minutes of Capacity (BHMC), lines or trunks to an existing Switched Access Service group, the customer shall furnish a revised projected interstate percentage for the remaining BHMC, lines or trunks in the end office group. The revised report will serve as the basis for future billing, where applicable, and will be effective on the next bill date. No prorating or back billing will be done based on such revised report.
2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.11 Jurisdictional Report and Certification Requirements (Cont'd)

(C) Jurisdictional Reports - Switched Access (Cont'd)

(2) Use of PIU Factors (Cont’d)

(h) Effective on the first of January, April, July and October of each year, the customer shall update its interstate and intrastate jurisdictional report. The customer shall forward to the Telephone Company, to be received no later than fifteen (15) days after the first of each such month, a revised report showing the interstate and intrastate percentage of use for the past three months ending the last day of December, March, June and September, respectively, for each service arranged for interstate use. Such revised report will serve as the basis for the next three month’s billing for determining the jurisdiction for Switched Access Services in cases where the Telephone Company does not have sufficient call detail to do so and will be effective on the bill date for that service. No prorating or back billing will be done based on the revised report.

If the customer does not supply the revised reports, the Telephone Company will assume the percentages to be the same as those provided in the last quarterly report. For those cases in which a quarterly report has never been received from the customer, the Telephone Company will assume the percentages to be the same as those provided in the customer’s order for service or as developed by the Telephone Company as specified in (2)(a), above.
2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.11 Jurisdictional Report and Certification Requirements (Cont'd)

(C) Jurisdictional Reports - Switched Access (Cont'd)

(3) Maintenance of Customer Records

(a) The customer shall retain for a minimum of six (6) months call detail records that substantiate the interstate percent provided to the Telephone Company as set forth in (2), above, for Switched Access Services. Such records shall consist of (i) and (ii), below, if applicable.

(i) All call detail records such as work papers and/or backup documentation including paper, magnetic tapes or any other form of records for billed customer traffic, call information including call terminating address (i.e., called number), the call duration, all originating and terminating trunk groups or access lines over which the call is routed, and the point at which the call enters the customer’s network and;

(ii) If the customer has a mechanized system in place that calculated the PIU, then a description of that system and the methodology used to calculate the PIU must be furnished and any other pertinent information (such as but not limited to flowcharts, source code, etc.) relating to such system must also be made available.
2. **General Regulations (Cont'd)**

2.3 **Obligations of the Customer (Cont'd)**

2.3.11 **Jurisdictional Report and Certification Requirements (Cont'd)**

(C) **Jurisdictional Reports - Switched Access (Cont'd)**

(4) **Disputes Involving Jurisdictional Reports–Switched Access**

(a) If a billing dispute arises or if a regulatory commission questions the projected PIU factor(s) provided by the customer, the Telephone Company may, by written request, require the customer to provide the data the customer used to determine the projected PIU factor(s). This written request will be considered the initiation of the audit. The customer shall supply the data to an independent auditor or the Telephone Company within thirty (30) days of the Telephone Company request. The customer shall keep records of call detail from which the percentage of interstate and intrastate use can be ascertained as set forth in (3), above, and upon request of the Telephone Company make the records available for inspection at an agreed upon location during normal business hours as reasonably necessary for purposes of verification of the percentages. The Telephone Company will audit data from one quarter unless a longer period is requested by the customer and agreed to by the Telephone Company.
2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.11 Jurisdictional Report and Certification Requirements (Cont'd)

(C) Jurisdictional Reports - Switched Access (Cont'd)

(4) Disputes Involving Jurisdictional Reports –Switched Access (Cont’d)

(b) If the customer does not provide the requested data to the Telephone Company or independent auditor within thirty (30) days of the notice of audit, the customer will be in violation of the Tariff and subject to the provisions specified in Section 2.1.8(A), preceding.

(c) Audits may be conducted by: (1) the Telephone Company when the customer agrees; (2) an independent auditor under contract to the Telephone Company; (3) a mutually agreed upon independent auditor paid for equally by the customer and the Telephone Company; or (4) an independent auditor selected and paid for by the customer. If the customer selects option (4), where it pays for its own independent audit, the selected auditor must certify that the audit was performed following Commission procedures for measuring interstate traffic as established by Commission Order, and provide the Telephone Company a report with supporting documentation to verify such procedures.

(d) Verification audits may be conducted no more frequently than once per year except in extreme circumstances. The Telephone Company and customer will attempt to limit the audit to a reasonable time to effectively complete the audit.

The Telephone Company and customer shall respond promptly to requests generated during the audit to ensure timely completion of the audit.
2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.11 Jurisdictional Report and Certification Requirements (Cont'd)

(C) Jurisdictional Reports - Switched Access (Cont'd)

(4) Disputes Involving Jurisdictional Reports –Switched Access (Cont’d)

(e) When a PIU audit is conducted by the Telephone Company or an independent auditor under contract to the Telephone Company, the audit results will be furnished to the customer by Certified U.S. Mail. When a PIU audit is conducted by an independent auditor selected by the customer, the audit results will be furnished to the Telephone Company by Certified U.S. Mail. The Telephone Company will adjust the customer’s PIU based upon the audit results. The PIU resulting from the audit shall be applied to the customer’s usage for the quarter the audit is completed, the usage for the quarter prior to the completion of the audit, and the usage for the two (2) quarters following the completion of the audit.

After that time, the customer may report revised PIU pursuant to (2)(g) or (h), above. If the revised PIU submitted by the customer represents a deviation of 5 percentages points or more from the audited PIU, and that deviation is not due to identifiable reasons, the provisions in (4)(a), above, may be applied.

(f) Both credit and debit adjustments will be made to the customer’s interstate access charges based on the audit results for the specified periods to accurately reflect the interstate usage for the customer’s account consistent with Section 2.4.1, following.
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2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.11 Jurisdictional Report and Certification Requirements (Cont'd)

(C) Jurisdictional Reports - Switched Access (Cont'd)

(4) Disputes Involving Jurisdictional Reports –Switched Access (Cont’d)

(g) If, as a result of an audit conducted by an independent auditor, a customer is found to have overstated its PIU(s) by 20 percentage points or more, the Telephone Company shall require reimbursement from the customer for the cost of the audit. Such bill(s) shall be due and paid in immediately available funds within 30 days from receipt and shall carry a late payment penalty as set forth in Section 2.4.1, following, if not paid within the 30 days.
2. General Regulations (Cont'd)

2.3 Obligations of the Customer (Cont'd)

2.3.12 Determination of Interstate Charges for Mixed Interstate and Intrastate Switched Access Service

When mixed interstate and intrastate Switched Access Service is provided, all charges (i.e., nonrecurring, monthly and/or usage) including optional features charges, will be prorated between interstate and intrastate. The PIU factor(s) provided by the customer or developed by the Telephone Company as set forth in Section 2.3.11(C)(2), preceding, will serve as the basis for prorating the charges unless the Telephone Company is billing according to sufficient call details as set forth in Section 2.3.11(C)(1)(b), preceding. The percentage of a Switched Access Service to be charged as interstate is applied in the following manner:

(A) Monthly and Nonrecurring Charges

For monthly and nonrecurring chargeable rate elements, multiply the percent interstate use times the quantity of chargeable elements times the stated tariff rate per element.

(B) Usage Sensitive Charges

For usage sensitive (i.e., access minutes and calls) chargeable rate elements, multiply the percent interstate use times actual use (i.e., measured or Telephone Company assumed average use) times the stated tariff rate.
2.  General Regulations (Cont'd)

2.4  Payment Arrangements and Credit Allowances

2.4.1  Payment of Rates, Charges and Deposits

(A)  Deposits

The Telephone Company will only require a customer that has a proven history of late payments to the Telephone Company or that does not have established credit to make a deposit as a guarantee of the payment of rates and charges. Such deposit may be required prior to establishing a service or at any time after the provision of a service to the customer.

For purposes of this section, a proven history of late payments is defined as two (2) or more occasions within the preceding twelve (12) months in which payment for undisputed charges was not received within three (3) business days following the payment due date, provided the outstanding undisputed amount of each such individual unpaid bill represented at least ten (10) percent of the total charges on that individual bill.

The Telephone Company will provide notice via overnight delivery to the person designated by the customer to receive such notice of the requirement to pay a deposit. The customer will be required to make payment of such deposit prior to the provision of service in those cases where the customer has not established credit with the Telephone Company, or otherwise within fifteen (15) business days of such notice. Such notice period will start the day after the notice is sent by overnight delivery.

No such deposit will be required of a customer which is a successor of a company which has established credit and has no history of late payments to the Telephone Company. For new service(s) being established such deposit will not exceed the estimated rates and charges for a two-month period. For existing service(s) such deposit will not exceed the actual rates and charges for a two-month period associated with each individual bill that met the criteria for late payments specified above. The fact that a deposit has been made in no way relieves the customer from complying with the Telephone Company's regulations as to the prompt payment of bills.
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances

2.4.1 Payment of Rates, Charges and Deposits

(A) Deposits (Cont'd)

At such time as the provision of the service to the customer is terminated, the amount of the deposit will be credited to the customer's account and any credit balance which may remain will be refunded.

Such a deposit will be refunded or credited to the account when the customer has established credit or, in any event, after the customer has established a one-year prompt payment record at any time prior to the termination of the provision of the service to the customer. In case of a cash deposit, for the period the deposit is held by the Telephone Company, the customer will receive interest at the same percentage rate as that set forth in (C)(2)(a) or in (C)(2)(b), following whichever is lower.

The rate will be compounded daily for the number of days from the date the customer deposit is received by the Telephone Company to and including the date such deposit is credited to the customer's account or the date the deposit is refunded by the Telephone Company. Should a deposit be credited to the customer's account, as indicated above, no interest will accrue on the deposit from the date such deposit is credited to the customer's account.
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.1 Payment of Rates, Charges and Deposits (Cont'd)

(B) Bill Dates

The Telephone Company shall bill on a current basis all charges incurred by and credits due to the customer under this tariff attributable to services established or discontinued during the preceding billing period. In addition, the Telephone Company shall bill in advance charges for all services to be provided during the ensuing billing period except for charges associated with service usage and for the Federal Government which will be billed in arrears. The bill day (i.e., the billing date of a bill for a customer for service under this tariff), the period of service each bill covers and the payment date will be as follows:
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.1 Payment of Rates, Charges and Deposits (Cont'd)

(B) Bill Dates (Cont’d)


For End User Access Service, Federal Universal Service Charge, ISDN Line Ports, DS1 Line Port, Digital Subscriber Line Access Service, Presubscription Service and Access Recovery Charge, the Telephone Company will establish a bill day each month for each end user account or advise the customer in writing of an alternate billing schedule. Alternate billing schedules shall not be established on less than 60 days’ notice or initiated by the Telephone Company more than twice in any consecutive 12 month period. The bill will cover End User Access Service, Federal Universal Service Charge, ISDN Line Ports, DS1 Line Port, Digital Subscriber Line Access Service and Access Recovery Charge charges for the ensuing billing period except for End User Access Service, Federal Universal Service Charge, ISDN Line Ports, DS1 Line Port, Digital Subscriber Line Access Service and Access Recovery Charge for the Federal Government which will be billed in arrears. Any applicable PIC Change Charges, any known unbilled charges for prior periods and any known unbilled adjustments for prior periods for End User Access Service, Federal Universal Service Charge, ISDN Line Ports, DS1 Line Port, Digital Subscriber Line Access Service, Presubscription Service and Access Recovery Charge will be applied to this bill. Such bills are due when rendered.
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2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.1 Payment of Rates, Charges and Deposits (Cont'd)

(B) Bill Dates (Cont'd)

(2) Services Other Than End User, Federal Universal Service Charge, ISDN Line Ports, DS1 Line Port, Digital Subscriber Line, Presubscription and Access Recovery Charge

For Services other than End User Access Service, Federal Universal Service Charge, ISDN Line Ports, DS1 Line Port, Digital Subscriber Line Access Service, Presubscription Service and Access Recovery Charge, the Telephone Company will establish a bill day each month for each customer account or advise the customer in writing of an alternate billing schedule. Alternate billing schedules shall not be established on less than 60 days’ notice or initiated by the Telephone Company more than twice in any consecutive 12 month period.

The bill will cover nonusage sensitive service charges for the ensuing billing period for which the bill is rendered, any known unbilled nonusage sensitive charges for prior periods and unbilled usage charges for the period after the last bill day through the current bill day. Any known unbilled usage charges for prior periods and any known unbilled adjustments will be applied to this bill. Payment for such bills is due in immediately available funds by the payment date, as set forth in (C) following. If payment is not received by the payment date, a late payment penalty will apply as set forth in (C) following.
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.1 Payment of Rates, Charges and Deposits (Cont'd)

(C) Payment Dates and Late Payment Penalties

(1) All bills dated as set forth in (B)(2) preceding for service, other than End User Service, Federal Universal Service Charge, ISDN Line Ports, DS1 Line Port, Digital Subscriber Line Access Service, Presubscription Service and Access Recovery Charge provided to the customer by the Telephone Company are due 31 days (payment date) after the bill day or by the next bill date (i.e., same date in the following month as the bill date), whichever is the shortest interval, except as provided herein, and are payable in immediately available funds.

If the customer does not receive a bill at least 20 days prior to the 31 day payment due date, the bill shall be considered delayed. When the bill has been delayed, upon request of the customer the due date will be extended by the number of days the bill was delayed. Such request of the customer must be accompanied with proof of late bill receipt.
2. **General Regulations (Cont'd)**

2.4 **Payment Arrangements and Credit Allowances (Cont'd)**

2.4.1 **Payment of Rates, Charges, and Deposits (Cont’d)**

(C) **Payment Dates and Late Payment Penalties (Cont'd)**

(1) **(Cont'd)**

If such payment date would cause payment to be due on a Saturday, Sunday or Legal Holiday, payment for such bills will be due from the customer as follows:

- If the payment date falls on a Sunday or on a Legal Holiday which is observed on a Monday, the payment date shall be the first non-Holiday day following such Sunday or Legal Holiday.

- If the payment date falls on a Saturday or on a Legal Holiday which is observed on Tuesday, Wednesday, Thursday or Friday, the payment date shall be the first non-Holiday day following such Saturday or Tuesday, Wednesday, Thursday or Friday.

(2) Further, if no payment is received by the payment date or if a payment or any portion of a payment is received by the Telephone Company after the payment date as set forth in (1) preceding, or if a payment or any portion of a payment is received by the Telephone Company in funds which are not immediately available to the Telephone Company, then a late payment penalty shall be due to the Telephone Company. The late payment penalty shall be the payment or the portion of the payment not received by the payment date times a late factor.

The late factor shall be the lesser of:

(a) the highest interest rate (in decimal value) which may be levied by law for commercial transactions, compounded daily for the number of days from the payment date to and including the date that the customer actually makes the payment to the Telephone Company, or

(b) 0.000292 per day, compounded daily for the number of days from the payment date to and including the date that the customer actually makes the payment to the Telephone Company.
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.1 Payment of Rates, Charges and Deposits (Cont'd)

(D) Billing Disputes

(1) A good faith dispute requires the customer to provide a written claim to the Telephone Company. Instructions for submitting a dispute can be obtained by calling the billing inquiry number shown on the customer’s bill, or, when available, by accessing such information on the Telephone Company’s website also shown on the customer’s bill. Such claim must identify in detail the basis for the dispute, and if the customer withholds the disputed amounts, it must identify the account number under which the bill has been rendered, the date of the bill, and the specific items on the bill being disputed to permit the Telephone Company to investigate the merits of the dispute.

(2) The date of the dispute shall be the date on which the customer furnishes the Telephone Company the account information required in (D)(1), above.

(3) The date of resolution is the date the Telephone Company completes its investigation, provides written notice to the customer regarding the disposition of the claim, i.e., resolved in favor of the customer or resolved in favor of the Telephone Company, and credits the customer’s account, if applicable.

(4) Adjustment of charges will be made when billing disputes are brought to the attention of and verified by the Telephone Company as set forth in this section. Except as otherwise expressly provided in a written contract between a Customer and the Telephone Company, all requests for refunds or adjustments must be made in writing to the Telephone Company within one (1) year after the date when the bill was rendered that the Customer seeks to dispute. No refunds or adjustments will be made for billing disputes that occurred more than one (1) year before the date a Customer makes a written request to the Company for adjustment. If the request for a refund or adjustment is made by a current Customer of the Telephone Company, the Telephone company reserves the right to provide any adjustment due the Customer as set forth in this section in whole or in part by a bill credit against charges for current or future services.

Except as otherwise provided in a written contract between a customer and the Telephone Company, a customer will be liable for any unbilled or underbilled service for two years from the date a bill for that service was rendered, whichever is later. This limitation does not apply when the service was obtained by the Customer by fraud or deception.
2. **General Regulations (Cont’d)**

2.4 **Payment Arrangements and Credit Allowances (Cont’d)**

2.4.1 **Payment of Rates, Charges and Deposits (Cont’d)**

(D) **Billing Disputes (Cont’d)**

(5) In the event that a billing dispute concerning any charges billed to the customer by the Telephone Company is resolved in favor of the Telephone Company, any payments withheld pending settlement of the dispute shall be subject to the late payment penalty set forth in (C)(2), above.

(6) If the customer pays the bill in full by the payment due date, and later initiates a billing dispute within ninety (90) days of the payment due date, penalty interest may be applicable.

(a) If the billing dispute is resolved in favor of the customer, the customer shall receive a credit from the Telephone Company. This credit will be an amount equal to the disputed amount resolved in the customer’s favor times a penalty factor. This amount will apply from the date of the customer’s payment through the date on which the customer receives the disputed amount credit from the Telephone Company.

The penalty factor shall be the lesser of:

(i) the highest interest rate (in decimal value) which may be levied by law for commercial transactions, compounded daily for the number of days from the first date to and including the last date of the period involved, or

(ii) 0.000292 per day, compounded daily for the number of days from the first date to and including the last date of the period involved.
2. **General Regulations (Cont'd)**

2.4 **Payment Arrangements and Credit Allowances (Cont'd)**

2.4.1 **Payment of Rates, Charges and Deposits (Cont'd)**

(D) **Billing Disputes (Cont’d)**

(b) If the dispute is resolved in favor of the Telephone Company, neither a late payment charge nor a penalty interest charge is applicable.

(7) If the customer pays the bill in full by the payment due date, and later initiates a billing dispute after (90) days of the payment due date, penalty interest may be applicable.

(a) If the billing dispute is resolved in favor of the customer, the customer shall receive a credit from the Telephone Company. This credit will be an amount equal to the disputed amount resolved in the customer’s favor times a penalty factor. This amount will apply from the date of the dispute through the date on which the customer receives the disputed amount credit from the Telephone Company.

The penalty factor shall be the lesser of:

(i) the highest interest rate (in decimal value) which may be levied by law for commercial transactions, compounded daily for the number of days from the first date to and including the last date of the period involved, or

(ii) 0.000292 per day, compounded daily for the number of days from the first date to and including the last date of the period involved.

(b) If the dispute is resolved in favor of the Telephone Company, neither a late payment charge nor a penalty interest charge is applicable.
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.1 Payment of Rates, Charges and Deposits (Cont'd)

(E) Proration of Charges

Adjustments for the quantities of services established or discontinued in any billing period beyond the minimum period set forth for services in other sections of this tariff will be prorated to the number of days based on a 30 day month. The Telephone Company will, upon request, furnish within 30 days of a request and at no charge to the customer such detailed information as may reasonably be required for verification of any bill.
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.1 Payment of Rates, Charges and Deposits (Cont'd)

(F) Rounding of Charges

When a rate as set forth in this tariff is shown to more than two decimal places, the charges will be determined using the rate shown. The resulting amount will then be rounded to the nearest penny (i.e., rounded to two decimal places).

2.4.2 Minimum Periods

The minimum period for which services are provided and for which rates and charges are applicable is one month except for the following, or as otherwise specified:

- Switched Access usage rated services;
- Directory Assistance usage rated services;
- Switched Access High Capacity DS3 Entrance Facility and Direct Trunked Transport;
- Switched Access Synchronous Optical Channel OC3 and OC12 Entrance Facility and Direct Trunked Transport;
- Special Access Part-time Video;
- Special Access Program Audio;
- Special Access High Capacity Service;
- Special Access Synchronous Optical Channel Service;
- Frame Relay Access Service;
- Asynchronous Transfer Mode Cell Relay Access Service Ports;
- Ethernet Transport Service;
- Internet Protocol Gateway Access Service.

The minimum period for which service is provided and for which rates and charges are applicable for a Specialized Service or Arrangement provided on an individual case basis as set forth in Section 12, following, is one month unless a different minimum period is established with the individual case filing.
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.2 Minimum Periods (Cont'd)

When a service is discontinued prior to the expiration of the minimum period, charges are applicable, whether the service is used or not, as follows:

(A) When a service with a one month minimum period is discontinued prior to the expiration of the minimum period, a one month charge will apply at the rate level in effect at the time service is discontinued.

(B) When a service with a minimum period greater than one month is discontinued prior to the expiration of the minimum period, except for Special Access High Capacity Service, Special Access Synchronous Optical Channel Service, and Frame Relay Access Service Optional Rate Plans as set forth in 7.2.8 and 16.1.3 following, the applicable charge will be the lesser of (1) the Telephone Company's total nonrecoverable costs less the net salvage value for the discontinued service or (2) the total monthly charges, at the rate level in effect at the time service is discontinued, for the remainder of the minimum period.
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.3 Cancellation of an Order for Service

Provisions for the cancellation of an order for service are set forth in other applicable sections of this tariff.

2.4.4 Credit Allowance for Service Interruptions

(A) General

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 Telephone Company result in the complete loss of service by the customer as set forth in 6.2.1 following. An interruption period starts when an inoperative service is reported to the Telephone Company, and ends when the service is operative.

(B) When a Credit Allowance Applies

In case of an interruption to any service, allowance for the period of interruption, if not due to the negligence of the customer, shall be provided.

For the following services, any period during which the error performance is below that specified for the service will be considered as an interruption.

- Digital Data (DA1 through DA6)
- High Capacity (DS1)
- Synchronous Optical Channel Service (OB, OD)

Service interruptions for Specialized Service or Arrangements provided under Section 12, following, shall be administered in the same manner as those set forth in this section (2.4.4) unless other regulations are specified with the individual case filing.
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2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.4 Credit Allowance for Service Interruptions (Cont'd)

(B) When a Credit Allowance Applies (Cont'd)

Credit allowances are computed as follows:

(1) Special Access Service other than Program Audio and Video, flat rated Switched Access Service and Digital Subscriber Line Access Service rate elements

For Special Access Services other than Program Audio and Video Services, for flat rated Switched Access Service rate elements (i.e., Entrance Facility, Direct Trunked Transport, Multiplexing, Add/Drop Multiplexing, Customer Node, and Customer Premises Port), and for Digital Subscriber Line Access Service, no credit shall be allowed for an interruption of less than 30 minutes. The customer shall be credited for an interruption of 30 minutes or more at the rate of 1/1440 of the monthly charges for the facility or service for each period of 30 minutes or Major Fraction Thereof that the interruption continues.

The monthly charges used to determine the credit shall be as follows:

(a) Two-point Services

For two-point services, the monthly charge shall be the total of all the monthly rate element charges associated with the service (i.e., two channel terminations, channel mileage and optional features and functions).

(b) Multipoint Services

For multipoint services, the monthly charge shall be only the total of all the monthly rate element charges associated with that portion of the service that is inoperative (i.e., a channel termination per customer designated premises, channel mileage and optional features and functions).
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.4 Credit Allowance for Service Interruptions (Cont'd)

(B) When a Credit Allowance Applies (Cont'd)

(1) Special Access Service other than Program Audio and Video, flat rated Switched Access Service and Digital Subscriber Line Access Service rate elements (Cont'd)

(c) Multiplexed Services

For multiplexed services, the monthly charge shall be the total of all the monthly rate element charges associated with that portion of the service that is inoperative. When the facility which is multiplexed or the multiplexer itself is inoperative, the monthly charge shall be the total of all the monthly rate element charges associated with the service to the hub and any individual services from the hub. For Special Access, those charges include Channel Termination, Channel Mileage, and optional features and functions. For Switched Access, those charges include Entrance Facility, Direct Trunked Transport, Multiplexing and optional features and functions such as Add/Drop Multiplexing, Customer Node and Customer Premises Port.

When the service which rides a channel of the multiplexed facility is inoperative, the monthly charge shall be the total of all the monthly rate element charges associated with that portion of the service from the hub or wire center equipped for Add/Drop Multiplexing to a customer premises, Telephone Company central office, WATS office, or Public Packet Data Network Service.
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.4 Credit Allowance for Service Interruptions (Cont'd)

(B) When a Credit Allowance Applies (Cont'd)

(1) Special Access Service other than Program Audio and Video, flat rated Switched Access Service and Digital Subscriber Line Access Service rate elements (Cont'd)

(d) Flat rated Switched Access Service and Digital Subscriber Line Access Service rate elements

For flat rated Switched Access Service rate elements, the monthly charge shall be the total of all the monthly rate element charges associated with the service (i.e., Entrance Facility, Direct Trunked Transport and Multiplexing).

For flat rated Digital Subscriber Line Access Service, the monthly charge shall be the total of the monthly rate element charge for the Digital Subscriber Line Access Service.

(e) Public Packet Data Network Services

For Public Packet Data Network Services rate elements, the monthly charge shall be the total of all monthly rate element charges associated with the services.
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.4 Credit Allowance for Service Interruptions (Cont'd)

(B) When a Credit Allowance Applies (Cont'd)

(2) Program Audio and Video Special Access Services

For Program Audio and Video Special Access Services, no credit shall be allowed for an interruption of less than 30 seconds. The customer shall be credited for an interruption of 30 seconds or more as follows:

(a) For two-point services, when monthly rates are applicable, the credit shall be at the rate of 1/8640 of the monthly charges for the service for each period of 5 minutes or fraction thereof that the interruption continues.

(b) For two-point services, when daily rates are applicable, the credit shall be at the rate of 1/288 of the daily charges for the service for each period of 5 minutes or fraction thereof that the interruption continues.

(c) For multipoint services, when monthly rates are applicable, the credit shall be at the rate of 1/8640 of the monthly charges for each channel termination, channel mileage and optional features and functions that are inoperative for each period of 5 minutes or fraction thereof that the interruption continues.
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.4 Credit Allowance for Service Interruptions (Cont'd)

(B) When a Credit Allowance Applies (Cont'd)

(2) Program Audio and Video Special Access Services (Cont'd)

(d) For multipoint services, when daily rates are applicable, the credit shall be at the daily rate of 1/288 of the daily charges for channel termination, channel mileage and optional features and functions that are inoperative for each period of 5 minutes or fraction thereof that the interruption continues.

(e) For multipoint services, the credit for the monthly or daily charges includes the charges for the distribution amplifier only when the distribution amplifier is inoperative.

(f) When two or more interruptions occur during a period of 5 consecutive minutes, such multiple interruptions shall be considered as one interruption.

(3) Switched Access and Directory Assistance Service Usage Rated Elements

For Switched Access Service and Directory Assistance Service, usage rated elements, no credit shall be allowed for an interruption of less than 24 hours. The customer shall be credited for an interruption of 24 hours or more at the rate of 1/30 of any applicable monthly rate or assumed minutes of use charge for each period of 24 hours or major fraction thereof that the interruption continues.
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.4 Credit Allowance for Service Interruptions (Cont'd)

(B) When a Credit Allowance Applies (Cont'd)

(4) Credit Allowances Cannot Exceed Monthly Rate

The credit allowance(s) for an interruption or for a series of interruptions shall not exceed any monthly rate for the service interrupted in any one monthly billing period.

(C) When a Credit Allowance Does Not Apply

No credit allowance will be made for:

(1) Intermittences caused by the negligence of the customer.

(2) Interruptions of a service due to the failure of equipment or systems provided by the customer or others.

(3) Interruptions of a service during any period in which the Telephone Company is not afforded access to the premises where the service is terminated.

(4) Interruptions of a service when the customer has released that service to the Telephone Company for maintenance purposes, to make rearrangements, or for the implementation of an order for a change in the service during the time that was negotiated with the customer prior to the release of that service. Thereafter, a credit allowance as set forth in (B) preceding applies.
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.4 Credit Allowance for Service Interruptions (Cont'd)

(C) When a Credit Allowance Does Not Apply (Cont'd)

(5) Interruptions of a service which continue because of the failure of the customer to authorize replacement of any element of special construction, as set forth in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 3 for SPECIAL CONSTRUCTION. The period for which no credit allowance is made begins on the seventh day after the customer receives the Telephone Company's written notification of the need for such replacement and ends on the day after receipt by the Telephone Company of the customer's written authorization for such replacement.

(6) Periods when the customer elects not to release the service for testing and/or repair and continues to use it on an impaired basis.

(7) An interruption or a group of interruptions, resulting from a common cause that would result in credit in an amount less than one dollar.

(D) Use of an Alternative Service Provided by the Telephone Company

Should the customer elect to use an alternative service provided by the Telephone Company during the period that a service is interrupted, the customer must pay the tariffed rates and charges for the alternative service used.
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.4 Credit Allowance for Service Interruptions (Cont'd)

(E) Temporary Surrender of a Service (Cont'd)

In certain instances, the customer may be requested by the Telephone Company to surrender a service for purposes other than maintenance, testing or activity relating to a service order. If the customer consents, a credit allowance will be granted. The credit allowance will be 1/1440 of the monthly rate for each period of 30 minutes or fraction thereof that the service is surrendered. In no case will the credit allowance exceed the monthly rate for the service surrendered in any one monthly billing period.

2.4.5 Re-establishment of Service Following Fire, Flood or Other Occurrence

(A) Nonrecurring Charges Do Not Apply

Charges do not apply for the re-establishment of service following a fire, flood or other occurrence attributed to an Act of God provided that:

(1) The service is of the same type as was provided prior to the fire, flood or other occurrence.

(2) The service is for the same customer.

(3) The service is at the same location on the same premises.

(4) The re-establishment of service begins within 60 days after Telephone Company service is available. (The 60 day period may be extended a reasonable period if the renovation of the original location on the premises affected is not practical within the allotted time period).
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.5 Re-establishment of Service Following Fire, Flood or Other Occurrence (Cont'd)

(B) Nonrecurring Charges Apply

Nonrecurring Charges apply for establishing service at a different location on the same premises or at a different premises pending re-establishment of service at the original location.

2.4.6 Title or Ownership Rights

The payment of rates and charges by customers for the services offered under the provisions of this tariff does not assign, confer or transfer title or ownership rights to proposals or facilities developed or utilized, respectively, by the Telephone Company in the provision of such services.

2.4.7 Access Services Provided By More Than One Telephone Company

When an Access Service is provided by more than one Telephone Company, the Telephone Companies involved will mutually agree upon one of the billing methods as set forth in (B) (1) and (2) following based on the service being provided.

The Telephone Companies will notify the customer in writing of the billing method being used. The customer will place the order for the service as set forth in 5.3 following dependent upon the billing method.
ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company (Cont’d)

(A) Meet Point Billing

Meet Point Billing is required when an access service is provided by multiple Telephone Companies for Feature Group D Switched Access Services and Special Access.

Each Telephone Company jointly providing the access service will receive an order or a copy of the order from the customer as specified in 5.3.2 following and arrange to provide the service.

For usage rated access services the access minutes of use will be determined by each company. A company without recording capability may obtain detailed access usage records from the recording company to develop its access minutes.
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)

(B) Meet Point Billing (Cont'd)

The Bill Rendering Company in a single bill arrangement for Feature Group D Switched Access Services is normally the end user's end office, for WATS usage the Bill Rendering Company is normally the WATS Serving Office, for Directory Assistance, the Bill Rendering Company is normally the Directory Assistance location. The name of the Bill Rendering Company will be included in the meet point billing notification provided to the customer by all the telephone companies on all meet point billed services.

The non-Bill Rendering Company(s) is any Telephone Company(s) in whose territory a segment of the Local Transport or Channel Mileage is provided and/or where the customer's Point of Termination is located.

There are two Meet Point Billing Options, Single Bill and Multiple Bill. These billing options are explained in (1) and (2) following. The Single Bill option is the preferred method. However, when a single bill option cannot be agreed to by all telephone companies providing service, the multiple bill option is the default.

Each telephone company must provide meet point billing notification to the customer, in writing, when new service is ordered or thirty days prior to changing an existing meet point arrangement. The notification should include the following:

- The Meet Point Billing Option that will be used;
- The Telephone Company(s) that will render the bill(s);
- The Telephone Company(s) to whom payment(s) should be remitted; and
- The Telephone Company(s) that will provide the bill inquiry function.
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)

(B) Meet Point Billing (Cont'd)

A Telephone Company that renders a meet point bill, the Bill Rendering Company, will render the bill in accordance with the industry standards as described in the Multiple Exchange Carrier Access Billing (MECAB) Guidelines and the Multiple Exchange Carrier Ordering and Design (MECOD) Guidelines. The bill will identify the other Telephone Company(s) providing service (when applicable) and include cross reference(s) to common circuit identifiers. Should a billing dispute arise, the terms and conditions of the Bill Rendering Company will apply.

(1) Single Bill Option

The single bill option allows the customer to receive one bill for access services that are provided by more than one company. The single bill option provides the following two billing alternatives:

- Single Bill/Multiple Tariff, and
- Single Bill/Single Tariff

These options are described following in (a) and (b) respectively.
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)

(B) Meet Point Billing (Cont'd)

(1) Single Bill Option (Cont’d)

(a) Single Bill/Multiple Tariff

The single bill/multiple tariff bill is prepared by the Bill Rendering Company but reflects all rates and charges for each connecting company's part of the service based on each company's access tariff.

The Bill Rendering Company will:

- determine and include all recurring and nonrecurring rates and charges for each involved Telephone Company;
- identify each involved Telephone Company's rates and charges separately on the bill;
- forward the bill to the customer and provide a copy of the bill or other substantiation of the charges to the connecting Telephone Companies; and
- advise the customer how to remit the payment, either directly to each Telephone Company involved in the provision of this meet point billed service, or, as a single payment made to the Bill Rendering Company. If payments are to be sent directly to the Bill Rendering Company, the non-Bill Rendering Company(s) will provide the customer with written authorization for the payment arrangement.
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)

(B) Meet Point Billing (Cont'd)

(1) Single Bill Option (Cont’d)

(b) Single Bill/Single Tariff

The single bill/single tariff bill provides a meet point bill that is billed completely at the Billing Rendering Company's tariff rates and regulations.

The Bill Rendering Company will:

- determine and include on the access bill all usage data and all other recurring and nonrecurring rates and charges per its access tariff; and
- forward the bill to the customer. The customer will remit the payment to the Bill Rendering Company.

(2) Multiple Bill Option

Under the Multiple Bill Option each company providing the access service will render an access bill to the customer for its portion of the service based on its access tariff rates and regulations.
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)

(B) Meet Point Billing (Cont'd)

(2) Multiple Bill Option (Cont'd)

Each company will:

- prepare its own bill;
- determine its charge(s) for Local Transport, Directory Transport, and/or Channel Mileage as set forth in (3) following;
- determine and include all recurring and nonrecurring rates and charges of its access tariff;
- forward its bill to the customer.

The customer will remit payment directly to each Bill Rendering Company.

(3) Determination of Meet Point Billed Local Transport, Directory Transport and Channel Mileage Charges

Each Telephone Company's portion of the Local Transport, Directory Transport and Channel Mileage will be developed as follows:

(a) Determine the appropriate Local Transport or Channel Mileage by computing the number of airline miles between the Telephone Company premises (end office, access tandem or serving wire centers for Switched Access or serving wire centers for Special Access) using the V&H method set forth respectively in 6.4.6 and 7.2.5, following.
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)

(B) Meet Point Billing (Cont'd)

(3) Determination of Meet Point Billed Local Transport, Directory Transport and Channel Mileage Charges (Cont'd)

(b) Determine the billing percentage (BP), as set forth in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, which represents the portion of the service provided by each Telephone Company.

(c) For Feature Group D Tandem Switched Transport

• multiply the number of originating and terminating access minutes of use routed over the facility times the number of airline miles, as set forth in (a) preceding, times the BP for each Telephone Company, as set forth in (b) preceding, times the Tandem Switched Facility rate;

• multiply the Tandem Switched Termination rate times the number of originating and terminating access minutes routed over the facility.

• When a tandem office is located within the operating territory of a Telephone Company participating in NECA's Traffic Sensitive Pool, multiply the Tandem Switching rate times the number of originating and terminating access minutes that are switched at the tandem.
2. **General Regulations (Cont'd)**

2.4 **Payment Arrangements and Credit Allowances (Cont'd)**

2.4.7 **Access Services Provided by More Than One Telephone Company (Cont'd)**

   (B) **Meet Point Billing (Cont'd)**

   (3) **Determination of Meet Point Billed Local Transport, Directory Transport and Channel Mileage Charges (Cont'd)**

   (c) **(Cont'd)**

   • The Tandem Switched Termination rate is applied as set forth in 6.1.3(A) following. The Switched Access Nonrecurring Charges are applied as set forth in 6.4.1(B) following. (Note: The BP is not applied to the Switched Access Tandem Switched Termination rate or any Nonrecurring Charge.)

   (d) **For Feature Group D Direct Trunked Transport:**

   • multiply the number of airline miles, as set forth in (a) preceding, times the BP for each Telephone Company, as set forth in (b) preceding, times the Direct Trunked Facility rate.

   • The Direct Trunked Termination rate is applied as set forth in 6.1.3(A) following. The Switched Access Nonrecurring Charges are applied as set forth in 6.4.1(B) following. (Note: The BP is not applied to either the Switched Access Direct Trunked Termination rate or any Nonrecurring Charge.)
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)

(B) Meet Point Billing (Cont'd)

(3) Determination of Meet Point Billed Local Transport, Directory Transport and Channel Mileage Charges (Cont'd)

(e) For Feature Group D:

- When the Entrance Facility and/or Multiplexing equipment is located within the operating territory of a Telephone Company participating in NECA's Traffic Sensitive Pool, the Entrance Facility and/or Multiplexing charge will apply.

- The Billing Percentage (BP) is not applicable to the Entrance Facility and Multiplexer charges.

(f) For Special Access, multiply the number of airline miles, as set forth in (a) preceding, times the BP for each Telephone Company, as set forth in (b) preceding, times the Channel Mileage Facility rate and add the Channel Mileage Termination rate.

The Special Access Channel Mileage Termination rate and nonrecurring charges are applied as set forth in 7.2.1(B)(2) and 7.2.2(C) following. (Note: The BP is not applied to either the Channel Mileage Termination Recurring Rate or any Nonrecurring Charge.)
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)

(B) Meet Point Billing (Cont'd)

(3) Determination of Meet Point Billed Local Transport, Directory Transport and Channel Mileage Charges (Cont'd)

(g) For Directory Assistance Service, multiply the Directory Transport rate times the number of directory assistance calls times the BP for each Telephone Company, as set forth in (b) preceding.

The Directory Assistance Nonrecurring charge is applied as set forth in 9.4.1(B) following. (Note: The BP is not applied to any Nonrecurring Charge.)

(h) When three or more Telephone Companies are involved in providing an Access Service, the intermediate Telephone Company(s) will determine the charges as set forth in (c) through (g) preceding. Additionally, when a segment of the Tandem Switched Facility, Direct Trunked Facility or Channel Mileage Facility is measured to the intermediate office(s), the Tandem Switched Termination, Direct Trunked Termination or Channel Mileage Termination rates are also applied at the intermediate Telephone Company(s) office(s).
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)

(B) Meet Point Billing (Cont'd)

(3) Determination of Meet Point Billed Local Transport, Directory Transport and Channel Mileage Charges (Cont'd)

(i) Example 1 - Switched Access

Layout

- Feature Group D Switched Access is ordered to End Office.

- End Office and Access Tandem are in the operating territory of a Telephone Company (TC-A) participating in NECA's Traffic Sensitive Pool.
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)

(B) Meet Point Billing (Cont'd)

(3) Determination of Meet Point Billed Local Transport, Directory Transport and Channel Mileage Charges (Cont'd)

(i) Example 1 - Switched Access (Cont'd)

The following example reflects the rate calculations for TC-A, a Telephone Company participating in NECA's Traffic Sensitive Pool. Rates for a Non-Traffic Sensitive Pool member company would appear in that company's access tariff.

- Assume:

End Office to Access Tandem:

Airline miles from TC-A End Office to TC-A Access Tandem = 22.1
Rounded = 23

Access Tandem to Serving Wire Center:

Airline miles from TC-A Access Tandem to TC-B Serving Wire Center= 25.6
Rounded = 26

Billing Percentage (BP) TC-A = 40%; TC B = 60%

Access Minutes = 9000

End Office Charges = EO
Tandem Switched Facility Rate = TSF
Tandem Switched Termination Rate = TST

Tandem Switching Rate = TS
Direct Trunked Facility Rate = DTF
Direct Trunked Termination Rate = DTT
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)

(B) Meet Point Billing (Cont'd)

(3) Determination of Meet Point Billed Local Transport, Directory Transport and Channel Mileage Charges (Cont'd)

(i) Example 1 - Switched Access (Cont'd)

- Telephone Company A charges are:
  - End Office charges = 9,000 min. x EO rate
  - Tandem Switched Facility charge = 9,000 min. x 23 mi. x TSF rate
  - Tandem Switched Termination charge = 2 terminations x 9,000 min. x TST rate
  - Tandem Switching charge = 9,000 min. x TS rate
  - Direct Trunked Facility charge = 26 miles x DTF rate x 40%
  - Direct Trunked Termination charge = 1 termination x DTT rate

- Feature Group D Switched Access is ordered to End Office.

- End Office is in the operating territory of a Telephone Company (TC-A) participating in NECA's Traffic Sensitive Pool.

- Access Tandem and Customer Designated Premises are in the operating territory of a Telephone Company (TC-B) not participating in NECA's Traffic Sensitive Pool.
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)

(B) Meet Point Billing (Cont'd)

(3) Determination of Meet Point Billed Local Transport, Directory Transport and Channel Mileage Charges (Cont'd)

(i) Example 2 - Switched Access (Cont'd)

The following example reflects the rate calculations for TC-A, a Telephone Company participating in NECA's Traffic Sensitive Pool.

- Assume:

End Office to Access Tandem:

Airline miles from TC-A End Office to TC-B Access Tandem = 22.1
Rounded = 23

Billing Percentage (BP) TC A = 80%; TC B = 20%

Access Tandem to Serving Wire Center:

Airline miles from TC-B Access Tandem to TC-B Serving Wire Center= 25.6
Rounded = 26

Access Minutes = 9000

End Office Charges = EO
Tandem Switched Facility Rate = TSF
Tandem Switched Termination Rate = TST

Tandem Switching Rate = TS
Direct Trunked Facility Rate = DTF
Direct Trunked Termination Rate = DTT
2. General Regulations (Cont'd)

2.4 Payment Arrangements and Credit Allowances (Cont'd)

2.4.7 Access Services Provided by More Than One Telephone Company (Cont'd)

(B) Meet Point Billing (Cont'd)

(3) Determination of Meet Point Billed Local Transport, Directory Transport and Channel Mileage Charges (Cont'd)

(i) Example 2 - Switched Access (Cont'd)

- Telephone Company A charges are:

  • End Office charges= 9,000 min. x EO rate
  
  • Tandem Switched Facility charge= 9,000 min. x 23 mi. x TSF rate x 80%
  
  • Tandem Switched Termination charge= 1 termination x 9,000 min. x TST rate

2.5 Connections

Equipment and systems (i.e., terminal equipment, multiline terminating systems and communications systems) may be connected with Switched, Digital Subscriber Line, Special, and Public Packet Data Network Access Services furnished by the Telephone Company where such connection is made in accordance with the provisions specified in Technical Reference Publication AS No. 1 and in 2.1 preceding.

2.6 Special Construction

(A) Subject to the arrangement of the Company and to all of the regulations contained in this tariff, special construction of facilities may be undertaken on a reasonable efforts basis at the request of the Customer. Special construction is that construction undertaken and characterized by one or more of the following:

(1) Where facilities are not presently available and there is no other requirement for the facilities so constructed;

(2) Of a type other than that which the Company would normally utilize in the furnishing of its services;
2. **General Regulations (Cont'd)**

2.6 **Special Construction (Cont’d)**

(3) Where facilities are to be installed over a route other than that which the Company would normally utilize in the furnishing of its services;

(4) Where facilities are requested in a quantity greater than that which the Company would normally construct;

(5) Where installation is on an expedited basis;

(6) On a temporary basis until permanent facilities are available;

(7) Installation involving abnormal costs; or

(8) In advance of its normal construction schedules.

**(B)** Prior to construction, the Company and the Customer will enter into a contract for construction of these facilities. This contract will, among other things, indicate the amounts the Customer will owe the Company (recurring and nonrecurring) for installation of this construction and cancellation charges.

**(C)** The Company will retain ownership of all such facilities constructed under this Section.
ACCESS SERVICE

2. General Regulations (Cont'd)

2.7 Definitions

Certain terms used herein are defined as follows:

800 Data Base Access Service

The term "800 Data Base Access Service" denotes a service which uses a data base system to identify 800 access customers on a 10-digit basis.

For purposes of administering the rules and regulations set forth in this tariff regarding the provision of 800 Database Access, except where otherwise specified, 800 Database Access Service shall include the following service access codes 800, 888, 877, 866, 855, 844, 833, and 822.

800 Series

The term 800 series denotes the service access codes of 800, 888, 877, 866, 855, 844, 833, and 822.

Access Code

The term "Access Code", denotes a uniform access code assigned by the Telephone Company to an individual customer in the form 101XXXX and 950-XXXX.

Access Minutes

For the purpose of calculating chargeable usage, the term "Access Minutes" denotes customer usage of exchange facilities in the provision of interstate or foreign service. On the originating end of an interstate or foreign call, usage is measured from the time the originating end user's call is delivered by the Telephone Company to and acknowledged as received by the customer's facilities connected with the originating exchange. On the terminating end of an interstate or foreign call, usage is measured from the time the call is received by the end user in the terminating exchange. Timing of usage at both originating and terminating ends of an interstate or foreign call shall terminate when the calling or called party disconnects, whichever event is recognized first in the originating and terminating exchanges, as applicable.

Access Tandem

The term "Access Tandem" denotes a Telephone Company or centralized equal access provider switching system that provides a concentration and distribution function for originating or terminating traffic between end offices and a customer designated premises.
2. General Regulations (Cont'd)

2.7 Definitions (Cont’d)

Add/Drop Multiplexing

The term "Add/Drop Multiplexing" denotes a multiplexing function offered in connection with SONET that allows lower level signals to be added or dropped from a high speed optical carrier channel in a wire center. The connection to the add/drop multiplexer is via a channel to a Central Office Port at a specific digital speed (i.e., DS3, DS1, etc.).

Advanced Intelligent Network (AIN)

The term "Advanced Intelligent Network (AIN)" denotes a telecommunications network architecture that uses databases to facilitate call processing, call routing, and network management, allowing carriers to change the routing of both inbound and outbound calls from moment to moment.

Aggregator

The term “Aggregator” denotes any entity that, in the ordinary course of its operations, makes telephones available to the public or to transient users of its premises, for interstate telephone calls using a provider of operator services.

Answer/Disconnect Supervision

The term "Answer/Disconnect Supervision" denotes the transmission of the switch trunk equipment supervisory signal (off-hook or on-hook) to the customer's point of termination as an indication that the called party has answered or disconnected.

Asymmetric Digital Subscriber Line (ADSL)

The term "Asymmetric Digital Subscriber Line (ADSL)" denotes an access technology that allows voice and high speed data to be sent simultaneously over local exchange service facilities. ADSL supports the transmission of data signals at a different speed when receiving data (downstream rate) than when sending data (upstream rate).

Asynchronous Transfer Mode (ATM)

The term "Asynchronous Transfer Mode (ATM)" denotes a high speed networking technology that utilizes fixed-length cells. ATM is connection-oriented and provides traffic routing prioritization parameters which enable different types of traffic such as voice, data and video to be carried over the same network.
2. **General Regulations (Cont'd)**

2.7 **Definitions (Cont’d)**

**Attenuation Distortion**

The term "Attenuation Distortion" denotes the difference in loss at specified frequencies relative to the loss at 1004 Hz, unless otherwise specified.

**Automatic Number Identification (ANI)**

The term "Automatic Number Identification" denotes the Multi-Frequency (MF) signaling parameter that identifies the billing number of the calling party.

**Balance (100 Type) Test Line**

The term "Balance (100 Type) Test Line" denotes an arrangement in an end office which provides for balance and noise testing.

**Bearer Channel**

The term “Bearer Channel” denotes a basic communications channel with no enhanced or value-added service included other than the bandwidth transmission capability provided with the channel.

**Bit**

The term "Bit" denotes the smallest unit of information in the binary system of notation.

**Business Day**

The term "Business Day" denotes the times of day that a company is open for business. Generally, in the business community, these are 8:00 or 9:00 a.m. to 5:00 or 6:00 p.m., respectively, with an hour for lunch, Monday through Friday, resulting in a standard forty (40) hour work week. However, Business Day hours for the Telephone Company may vary based on company policy, union contract, and location. To determine such hours for an individual company, or company location, that company should be contacted at the address shown under the Issuing Carrier's name listed on Title Pages 2 through 68 preceding.
2. General Regulations (Cont'd)
   2.7 Definitions (Cont’d)

Busy Hour Minutes of Capacity (BHMC)

The term "Busy Hour Minutes of Capacity (BHMC)" denotes the customer specified maximum amount of Switched Access Service and/or Directory Assistance Service access minutes the customer expects to be handled in an end office switch during any hour in an 8:00 a.m. to 11:00 p.m. period for the Feature Group Service ordered. This customer specified BHMC quantity is the input data the Telephone Company uses to determine the number of transmission paths for the Feature Group Service ordered.

Call

The term "Call" denotes a customer attempt for which complete address information (e.g., 0-, 911, or 10 digits) is provided to the serving dial tone office.

Calling Party Number (CPN)

The term "Calling Party Number" denotes the SS7 signaling parameter that identifies the subscriber line number or directory number of the calling party.

Carrier Identification Code (CIC)

The term "Carrier Identification Code (CIC)" denotes a numeric code assigned by the North American Numbering Plan (NANP) Administrator for the provisioning of Feature Group D Switched Access Services. The numeric code is unique to each carrier and is used by the Telephone Company to route switched access traffic to the Customer Designated Premises.

Carrier or Common Carrier

See Interexchange Carrier.
2. **General Regulations (Cont'd)**

2.7 **Definitions (Cont’d)**

**CCS**

The term "CCS" denotes a hundred call seconds, which is a standard unit of traffic load that is equal to 100 seconds of usage or capacity of a group of servers (e.g., trunks).

**Cell**

The term "Cell" denotes the fixed-length packet used to carry data across an Asynchronous Transfer Mode (ATM) network. A "Cell" consists of 53 bytes, five of which carry header information.

**Central Office**

See End Office.

**Central Office Maintenance Technician**

The term "Central Office Maintenance Technician" denotes a Telephone Company employee who performs installation and/or repair work, including testing and trouble isolation, within the Telephone Company Central Office.

**Central Office Prefix**

The term "Central Office Prefix" denotes the first three digits (NXX) of the seven digit telephone number assigned to a customer's Telephone Exchange Service when dialed on a local basis.

**Channel(s)**

The term "Channel(s)" denotes an electrical or photonic, in the case of fiber optic-based transmission systems, communications path between two or more points of termination.

**Channel Service Unit**

The term "Channel Service Unit" denotes equipment which performs one or more of the following functions: termination of a digital facility, regeneration of digital signals, detection and/or correction of signal format error, and remote loop back.
2. General Regulations (Cont'd)

2.7 Definitions (Cont’d)

Channelize

The term "Channelize" denotes the process of multiplexing-demultiplexing wider bandwidth or higher speed channels into narrower bandwidth or lower speed channels.

Charge Number (CN)

The term "Charge Number" denotes the SS7 signaling parameter that identifies the billing telephone number of the calling party.

Clear Channel Capability

The term "Clear Channel Capability" denotes the ability to transport twenty-four 64 Kbps over a DS1 Mbps High Capacity service via a B8ZS line code format.

C-Message Noise

The term "C-Message Noise" denotes the frequency weighted average noise within an idle voice channel. The frequency weighting, called C-message, is used to simulate the frequency characteristic of the 500-type telephone set and the hearing of the average subscriber.

C-Notched Noise

The term "C-Notched Noise" denotes the C-message frequency weighted noise on a voice channel with a holding tone, which is removed at the measuring end through a notch (very narrow band) filter.

Committed Information Rate

The term "Committed Information Rate" denotes the transmission speed specified by the customer at which the Frame Relay Access Service network commits to transfer data between two ports.
2. General Regulations (Cont'd)

2.7 Definitions (Cont’d)

Common Channel Signaling

The term "Common Channel Signaling" (CCS) denotes a high speed packet switched communications network which is separate (out of band) from the public packet switched and message networks. Its purpose is to carry addressed signaling messages for individual trunk circuits and/or database related services between Signaling Points in the CCS network.

Common Line

The term "Common Line" denotes a line, trunk, pay telephone line or other facility provided under the general and/or local exchange service tariffs of the Telephone Company, terminated on a central office switch. A common line-residence is a line or trunk provided under the residence regulations of the general and/or local exchange service tariffs. A common line-business is a line provided under the business regulations of the general and/or local exchange service tariffs.

Communications System

The term "Communications System" denotes channels and other facilities which are capable of communications between terminal equipment provided by other than the Telephone Company.

Customer(s)

The term "Customer(s)" denotes any individual, partnership, association, joint-stock company, trust, corporation, or governmental entity or other entity which subscribes to the services offered under this tariff, including but not limited to End Users, Interexchange Carriers (ICs) and other telecommunications carriers or providers originating or terminating Toll VoIP-PSTN Traffic.

Customer Node

The term "Customer Node" denotes Telephone Company provided equipment located at a customer designated premises that terminates a high speed optical channel.
2. General Regulations (Cont'd)

2.7 Definitions (Cont’d)

Customer Designated Premises

The term "Customer Designated Premises" denotes the premises specified by the customer for the provision of Access Service.

Data Transmission (107 Type) Test Line

The term "Data Transmission (107 Type) Test Line" denotes an arrangement which provides for a connection to a signal source which provides test signals for one-way testing of data and voice transmission parameters.

Decibel

The term "Decibel" denotes a unit used to express relative difference in power, usually between acoustic or electric signals, equal to ten (10) times the common logarithm of the ratio of two signal powers.

Decibel Reference Noise C-Message Weighting

The term "Decibel Reference Noise C-Message Weighting" denotes noise power measurements with C-Message Weighting in decibels relative to a reference 1000 Hz tone of 90 dB below 1 milliwatt.

Decibel Reference Noise C-Message Referenced to 0

The term "Decibel Reference Noise C-Message Referenced to 0" denotes noise power in "Decibel Reference Noise C-Message Weighting" referred to or measured at a zero transmission level point.

Detail Billing

The term "Detail Billing" denotes the listing of each message and/or rate element for which charges to a customer are due on a bill prepared by the Telephone Company.

Digital Subscriber Line (DSL)

The term "Digital Subscriber Line (DSL)" denotes an access technology that allows simultaneous voice and high speed data to be sent over local exchange service facilities.

Digital Switched 56 Service

A switched access optional feature available with Feature Group D Access, which provides for data transmission at up to 56 Kilobits per second.
2. General Regulations (Cont'd)

2.7 Definitions (Cont’d)

Direct-Trunked Transport
The term "Direct-Trunked Transport" denotes transport from the serving wire center to the end office or from the serving wire center to the access tandem on circuits dedicated to the use of a single customer.

Directory Assistance (Interstate)

The term "Directory Assistance" denotes the provision of telephone numbers by a Telephone Company operator when the operator location is accessed by a customer by dialing NPA + 555-1212 or 555-1212.

Directory Assistance Location (Interstate)

The term "Directory Assistance Location" denotes a Telephone Company office where telephone company equipment first receives the Directory Assistance call from the customer's end user and selects the first operator position to respond to the Directory Assistance call.

Echo Control

The term "Echo Control" denotes the control of reflected signals in a telephone transmission path.

Echo Path Loss

The term "Echo Path Loss" denotes the measure of reflected signal at a 4-wire point of interface without regard to the send and receive Transmission Level Point.

Echo Return Loss

The term "Echo Return Loss" denotes a frequency weighted measure of return loss over the middle of the voiceband (approximately 500 to 2500 Hz), where talker echo is most annoying.
2. **General Regulations (Cont'd)**

2.7 **Definitions (Cont’d)**

**Effective 2-Wire**

The term "Effective 2-Wire" denotes a condition which permits the simultaneous transmission in both directions over a channel, but it is not possible to insure independent information transmission in both directions. Effective 2-wire channels may be terminated with 2-wire or 4-wire interfaces.

**Effective 4-Wire**

The term "Effective 4-Wire" denotes a condition which permits the simultaneous independent transmission of information in both directions over a channel. The method of implementing effective 4-wire transmission is at the discretion of the Telephone Company (physical, time domain, frequency-domain separation or echo cancellation techniques). Effective 4-wire channels may be terminated with a 2-wire interface at the customer's premises. However, when terminated 2-wire, simultaneous independent transmission cannot be supported because the two wire interface combines the transmission paths into a single path.

**End Office**

The term "End Office" denotes a local Telephone Company switching system where Telephone Exchange Service customer station loops are terminated for purposes of interconnection to each other and to trunks. This term includes Remote Switching Modules/Systems served by a Host Central Office in a different wire center.

**End User**

The term "End User" means any customer of an interstate or foreign telecommunications service that is not a carrier, except that a carrier other than a telephone company shall be deemed to be an "end user" when such carrier uses a telecommunications service for administrative purposes, and a person or entity that offers telecommunications service exclusively as a reseller shall be deemed to be an "end user" if all resale transmissions offered by such reseller originate on the premises of such reseller.
2. General Regulations (Cont’d)

2.7 Definitions (Cont’d)

Enhanced Service

The term "Enhanced Service", as defined in Part 64 of the F.C.C.'s Rules and Regulations, are services "offered over common carrier transmission facilities used in interstate communications, which employ computer processing applications that act on the format, content, code, protocol or similar aspects of the subscriber's transmitted information; provide the subscriber additional, different, or restructured information; or involve subscriber interaction with stored information."

Entrance Facility

The term "Entrance Facility" denotes a Switched Access Service dedicated Local Transport facility between the customer's serving wire center and the customer designated premises.

Entry Switch

See First Point of Switching.

Envelope Delay Distortion

The term "Envelope Delay Distortion" denotes a measure of the linearity of the phase versus frequency of a channel.

Equal Level Echo Path Loss

The term "Equal Level Echo Path Loss" (ELEPL) denotes the measure of Echo Path Loss (EPL) at a 4-wire interface which is corrected by the difference between the send and receive Transmission Level Point (TLP). \[ELEPL = EPL - TLP \text{ (send)} + TLP \text{ (receive)}\].

Ethernet

The term “Ethernet” denotes a high speed networking technology utilizing a packet-based Ethernet protocol. Ethernet enables broadband multimedia traffic (i.e., voice, data and video) to be carried over the same network.
2. General Regulations (Cont'd)

2.7 Definitions (Cont’d)

Exchange

The term "Exchange" denotes a unit generally smaller than a local access and transport area, established by the Telephone Company for the administration of communications service in a specified area which usually embraces a city, town or village and its environs. It consists of one or more central offices together with the associated facilities used in furnishing communications service within that area. The exchange includes any Extended Area Service area that is an enlargement of a Telephone Company's exchange area to include nearby exchanges. One or more designated exchanges comprise a given local access and transport area.

Exit Message

The term "Exit Message" denotes an SS7 message sent to an end office by the Telephone Company's tandem switch to mark the Carrier Connect Time when the Telephone Company's tandem switch sends an Initial Address Message to an interexchange customer.

Expected Measured Loss

The term "Expected Measured Loss" denotes a calculated loss which specifies the end-to-1004-Hz loss on a terminated test connection between two readily accessible manual or remote test points. It is the sum of the inserted connection loss and test access loss including any test pads.
2. General Regulations (Cont’d)

2.7 Definitions (Cont’d)

Extended Area Service

See Exchange.

Extended PVC

The term "Extended PVC" denotes the interconnection of a port on a Telephone Company’s frame relay network with a port on another interconnected Telephone Company’s frame relay network.

First Point of Switching

The term "First Point of Switching" denotes the first Telephone Company or centralized equal access provider location at which switching occurs on the terminating path of a call proceeding from the customer designated premises to the terminating end office and, at the same time, the last Telephone Company or centralized equal access provider location at which switching occurs on the originating path of a call proceeding from the originating end office to the customer designated premises.

Frame

The term "Frame" denotes a group of data bits in a specific format, which enables network equipment to recognize the meaning and purpose of the specific bits.

Frame Relay Access Connection

The Term "Frame Relay Access Connection" denotes the physical facility, including the associated port, between the end user's data terminal equipment and the Telephone Company's frame relay switch.
2. General Regulations (Cont'd)

2.7 Definitions (Cont’d)

Frame Relay Access Service

The term "Frame Relay Access Service" denotes a medium-speed, connection-oriented packet-switched data service that allows for the interconnection of Local Area Networks or other compatible customer premises equipment for the purpose of connecting to an interstate frame relay network.

Frame Relay End User Port

The term "Frame Relay End User Port" denotes the physical location in the Telephone Company switching office where the Special Access facility of the customer connects to the Frame Relay Access Service network. It specifies how a frame relay switch sends and receives data from a frame relay end user customer’s LAN or other compatible CPE devices.

Frame Relay Inter-network Connection

The term "Frame Relay Inter-network Connection" denotes the physical facility, including the associated port, between the access customer's frame relay network and the Telephone Company's frame relay switch.

Frame Relay Inter-network Customer Port

The term "Frame Relay Inter-network Customer Port" denotes the physical location in the Telephone Company switching office where the access customer’s Special Access facility connects to the Telephone Company's Frame Relay Access Service network. It specifies how a frame relay switch sends and receives data from a frame relay access customer’s network.

Frequency Shift

The term "Frequency Shift" denotes the change in the frequency of a tone as it is transmitted over a channel.
2. General Regulations (Cont'd)

2.7 Definitions (Cont’d)

Grandfathered

The term "Grandfathered" denotes Terminal Equipment, Multiline Terminating Systems and Protective Circuitry directly connected to the facilities utilized to provide services under the provisions of this tariff, and which are considered grandfathered under Part 68 of the F.C.C.'s Rules and Regulations.

Host Central Office

The term "Host Central Office" denotes an electronic local Telephone Company End Office where Telephone Exchange Service customer station loops are terminated for purposes of interconnection to each other and to trunks. Additionally, this type of End Office contains the central call processing functions which service itself and its Remote Switching Modules/Systems.

Hub

The term "Hub" denotes a wire center at which bridging or multiplexing functions are performed for customers served out of any wire center.
2. General Regulations (Cont'd)

2.7 Definitions (Cont'd)

Immediately Available Funds

The term "Immediately Available Funds" denotes a corporate or personal check drawn on a bank account and funds which are available for use by the receiving party on the same day on which they are received and include U.S. Federal Reserve bank wire transfers, U.S. Federal Reserve notes (paper cash), U.S. coins, U.S. Postal Money Orders and New York Certificates of Deposit.

Impedance Balance

The term "Impedance Balance" denotes the method of expressing Echo Return Loss and Singing Return Loss at a 4-wire interface whereby the gains and/or loss of the 4-wire portion of the transmission path, including the hybrid, are not included in the specification.

Impulse Noise

The term "Impulse Noise" denotes any momentary occurrence of the noise on a channel over a specified level threshold. It is evaluated by counting the number of occurrences which exceed the threshold.

Individual Case Basis

The term "Individual Case Basis" denotes a condition in which the regulations, if applicable, rates and charges for an offering under the provisions of this tariff are developed based on the circumstances in each case.

Initial Address Message

The term "Initial Address Message" denotes an SS7 message sent in the forward direction to initiate trunk set up, reserve an outgoing trunk and process the information about that trunk along with other data relating to the routing and handling of the call to the next switch.

Inserted Connection Loss

The term "Inserted Connection Loss" denotes the 1004 Hz power difference (in dB) between the maximum power available at the originating end and the actual power reaching the terminating end through the inserted connection.
2. General Regulations (Cont'd)

2.7 Definitions (Cont’d)

Installation and Repair Technician

The term "Installation and Repair Technician" denotes a Telephone Company employee who performs installation and/or repair work, including testing and trouble isolation, outside of the Telephone Company Central Office and generally at the customer designated premises.

Interexchange Carrier (IC) or Interexchange Common Carrier

The terms "Interexchange Carrier" (IC) or "Interexchange Common Carrier" denotes any individual, partnership, association, joint-stock company, trust, governmental entity or corporation engaged for hire in interstate or foreign communication by wire or radio, between two or more exchanges.

Intermediate Hub

The term "Intermediate Hub" denotes a wire center at which bridging or multiplexing functions are performed only for customers served by that wire center and wire centers that subtend the hub, as specified in National Exchange Carrier Association, Inc. Tariff F.C.C. No. 4.

Intermodulation Distortion

The term "Intermodulation Distortion" denotes a measure of the nonlinearity of a channel. It is measured using four tones, and evaluating the ratios (in dB) of the transmitted composite four-tone signal power to the second-order products of the tones (R2), and the third-order products of the tones (R3).
2. General Regulations (Cont'd)

2.7 Definitions (Cont’d)

Internet Protocol (IP) Signaling

The term "Internet Protocol (IP) Signaling" denotes a packet data-oriented protocol used for communicating call signaling information.

Interstate Communications

The term "Interstate Communications" denotes both interstate and foreign communications.

Intrastate Communications

The term "Intrastate Communications" denotes any communications within a state subject to oversight by a state regulatory commission as provided by the laws of the state involved.
2. General Regulations (Cont'd)

2.7 Definitions (Cont’d)

Legal Holiday

The term "Legal Holiday" denotes days other than Saturday or Sunday for which the Telephone Company is normally closed. These include New Year's Day, Independence Day, Thanksgiving Day, Christmas Day and a day when Washington's Birthday, Memorial Day or Columbus Day is legally observed and other locally observed holidays when the Telephone Company is closed.

Line Side Connection

The term "Line Side Connection" denotes a connection of a transmission path to the line side of a local exchange switching system.

Local Access and Transport Area (LATA)

The term "Local Access and Transport Area" denotes a geographic area established for the provision and administration of communications service. It encompasses one or more designated exchanges, which are grouped to serve common social, economic and other purposes.

Local Number Portability (LNP)

The term "Local Number Portability (LNP)" denotes the ability of an end user of local exchange telecommunications service to retain an existing telephone number without impairment of quality, reliability, or convenience when switching from one local exchange telecommunications carrier to another.

Location Routing Number (LRN)

The term "Location Routing Number (LRN)" denotes a unique NPA-NXX-XXXX that serves as a routing number associated with a central office switch that has subscribers that have transferred their telephone numbers from one local exchange telecommunications carrier to another.
2. General Regulations (Cont’d)

2.7 Definitions (Cont’d)

Local Area Network

The term "Local Area Network" denotes a network permitting the interconnection and intercommunication of a group of computers.

Loss Deviation

The term "Loss Deviation" denotes the variation of the actual loss from the designed value.

Major Fraction Thereof

The term "Major Fraction Thereof" denotes any period of time in excess of 1/2 of the stated amount of time. As an example, in considering a period of 24 hours, a major fraction thereof would be any period of time in excess of 12 hours exactly. Therefore, if a given service is interrupted for a period of thirty-six hours and fifteen minutes, the customer would be given a credit allowance for two twenty-four hour periods for a total of forty-eight hours.

Message

The term "Message" denotes a "call" as defined preceding.

Milliwatt (102 Type) Test Line

The term "Milliwatt (102 Type) Test Line" denotes an arrangement in an end office which provides a 1004 Hz tone at 0 dBm0 for one-way transmission measurements towards the customer's premises from the Telephone Company end office.

Multi-Frequency (MF) Signaling

The term “Multi-Frequency (MF) Signaling” denotes an in-band signaling method in which call signaling information is transmitted between network switches using the same voiceband channel used for voice.
2. General Regulations (Cont'd)

2.7 Definitions (Cont’d)

N-1 Carrier

The term "N-1 Carrier" denotes the telecommunications carrier, prior to the terminating carrier, responsible for querying an LNP database to determine the routing of a call for a number portable NXX code.

Network Control Signaling

The term "Network Control Signaling" denotes the transmission of signals used in the telecommunications system which perform functions such as supervision (control, status, and charge signals), address signaling (e.g., dialing), calling and called number identifications, rate of flow, service selection error control and audible tone signals (call progress signals indicating re-order or busy conditions, alerting, coin denominations, coin collect and coin return tones) to control the operation of the telecommunications system.

Nonsynchronous Test Line

The term "Nonsynchronous Test Line" denotes an arrangement in step-by-step end offices which provides operational tests which are not as complete as those provided by the synchronous test lines, but can be made more rapidly.

North American Numbering Plan

The term "North American Numbering Plan" denotes a three-digit area code (Numbering Plan Area - NPA) and a seven-digit telephone number made up of a three-digit Central Office prefix plus a four-digit station number.

Off-hook

The term "Off-hook" denotes the active condition of Switched Access or a Telephone Exchange Service line.
2. **General Regulations (Cont'd)**

2.7 **Definitions (Cont’d)**

**On-hook**

The term "On-hook" denotes the idle condition of Switched Access or a Telephone Exchange Service line.

**Open Circuit Test Line**

The term "Open Circuit Test Line" denotes an arrangement in an end office which provides an ac open circuit termination of a trunk or line by means of an inductor of several Henries.

**Optical Carrier Channel**

The term "Optical Carrier Channel" denotes the high speed optical communications path for transporting information utilizing a Synchronous Optical Channel platform. The channel is provided at transmission rates of 155.52 Mbps (OC3) and 622.08 Mbps (OC12).

**Optical Carrier Rate (OC-N)**

The term "Optical Carrier Rate" denotes the line rate being transmitted on an optical carrier channel. A SONET transmission rate is equivalent to "N" times the OC1 line rate of 51.84 Mbps.

**Optical Carrier Rate Concatenated**

The term "Optical Carrier Rate Concatenated" denotes the transmission of a combined signal formed by linking together multiple individual signals.

**Optical Line Termination**

The term "Optical Line Termination" denotes the network interface on the customer designated premises equipment that provides for an optical handoff.

**Originating Direction**

The term "Originating Direction" denotes the use of Access Service for the origination of calls from an End User Premises to a Customer’s Premises.
2. General Regulations (Cont'd)

2.7 Definitions (Cont’d)

Pay Telephone

The term "Pay Telephone" denotes a coin or coinless instrument provided in a public or semipublic place where Payphone Service Provider customers can originate telephonic communications and pay the applicable charges by (1) inserting coins into the equipment, or (2) using a credit card, or (3) third party billing the call or (4) calling collect.
2. General Regulations (Cont'd)

2.7 Definitions (Cont’d)

Payphone Service Provider
The term "Payphone Service Provider" denotes an entity that provides pay telephone service, which is the provision of public, semi-public or inmate pay telephone service.

Permanent Virtual Connection (PVC)
The term "PVC" denotes a software defined communications path between two port connections within the Frame Relay Access Service network.

Phase Jitter
The term "Phase Jitter" denotes the unwanted phase variations of a signal.

Point of Termination
The term "Point of Termination" denotes the point of demarcation within a customer-designated premises at which the Telephone Company's responsibility for the provision of Access Service ends.

Premises
The term "Premises" denotes a building or buildings on continuous property (except Railroad Right-of-Way, etc.) not separated by a public highway.

Release Message
The term "Release Message" denotes an SS7 message sent in either direction to indicate that a specific circuit is being released.

Remote Switching Modules/Systems
The term "Remote Switching Modules/Systems" denotes small, remotely controlled electronic end office switches which obtain their call processing capability from an electronic Host Central Office. The Remote Switching Modules/Systems cannot accommodate direct trunks.

Return Loss
The term "Return Loss" denotes a measure of the similarity between the two impedances at the junction of two transmission paths. The higher the return loss, the higher the similarity.
2. General Regulations (Cont'd)

2.7 Definitions (Cont’d)

Registered Equipment

The term "Registered Equipment" denotes the customer's premises equipment which complies with and has been approved within the Registration Provisions of Part 68 of the F.C.C.'s Rules and Regulations.

Service Access Code

The term "Service Access Code" denotes a 3 digit code in the NPA format which is used as the first three digits of a 10 digit address and which is assigned for special network uses. Whereas NPA codes are normally used for identifying specific geographical areas, certain Service Access Codes have been allocated in the North American Numbering Plan to identify generic services or to provide access capability. Examples of Service Access Codes include the 800 and 900 codes.

Service Switching Point (SSP)

The term "Service Switching Point" denotes an end office or tandem which, in addition to having SS7 and SP capabilities, is also equipped to query centralized data bases.

Serving Wire Center

The term "Serving Wire Center" denotes the wire center from which the customer designated premises would normally obtain dial tone from the Telephone Company.

Seven Digit Manual Test Line

The term "Seven Digit Manual Test Line" denotes an arrangement which allows the Customer to select balance, milliwatt and synchronous test lines by manually dialing a seven digit number over the associated access connection.

Shortage of Facilities or Equipment

The term "Shortage of Facilities or Equipment" denotes a condition which occurs when the Telephone Company does not have appropriate cable, switching capacity, bridging or, multiplexing equipment, etc., necessary to provide the Access Service requested by the customer.

Short Circuit Test Line

The term "Short Circuit Test Line" denotes an arrangement in an end office which provides for an ac short circuit termination of a trunk or line by means of a capacitor of at least four microfarads.
2. General Regulations (Cont'd)

2.7 Definitions (Cont’d)

Signal-to-C-Notched Noise Ratio

The term "Signal-to-C-Notched Noise Ratio" denotes the ratio in dB of a test signal to the corresponding C-Notched Noise.

Signaling Point (SP)

The term "Signaling Point (SP)" denotes an SS7 network interface element capable of originating and terminating SS7 trunk signaling messages.

Signaling Point of Interface (SPOI)

The term "Signaling Point of Interface (SPOI)" denotes the customer designated location where the SS7 signaling information is exchanged between the Telephone Company and the customer.

Signaling Return Loss

The term "Signaling Return Loss" denotes the frequency weighted measure of return loss at the edges of the voiceband (200 to 500 Hz and 2500 to 3200 Hz), where signing (instability) problems are most likely to occur.

Signaling System 7 (SS7)

The term "Signaling System 7 (SS7)" denotes the layered protocol used for standardized common channel signaling in the United States and Puerto Rico.

Signal Transfer Point (STP)

The term "Signal Transfer Point (STP)" denotes a packet switch which provides access to the Telephone Company's SS7 network and performs SS7 message signal routing and screening.

Signal Transfer Point (STP) Port

The term "Signal Transfer Point (STP) Port" denotes the point of termination and interconnection to the STP.
2. General Regulations (Cont'd)

2.7 Definitions (Cont’d)

Special Order

The term "Special Order" denotes an order for a Directory Assistance Service.

Standard PVC

The term "Standard PVC" denotes the connection of ports within the same Telephone Company frame relay network.

Study Area

The term "Study Area" denotes a geographic area within a state in which a Telephone Company operates. This geographic area normally does not cross state lines.

Subtending End Office of an Access Tandem

The term "Subtending End Office of an Access Tandem" denotes an end office that has final trunk group routing through that tandem.

Super Intermediate Hub

The term "Super Intermediate Hub" denotes a wire center at which bridging or multiplexing functions are performed for Customers served by all wire centers in the LATA. A Super Intermediate Hub can be restricted to one or more designated NPAs within a LATA and/or to wire centers that are owned by the same telephone company as the hub. Super Intermediate Hubs and the wire centers they serve are identified in National Exchange Carrier Association, Inc. Tariff F.C.C. No. 4.

Symmetric Digital Subscriber Line (SDSL)

The term "Symmetric Digital Subscriber Line (SDSL)" denotes an access technology that allows high speed data to be sent over local exchange service facilities. SDSL supports the transmission of data signals at the same speed when receiving data (downstream rate) and transmitting data (upstream rate).

Synchronous Optical Network (SONET)

The term "SONET" denotes a North American Standard for high speed synchronous optical channels having minimum transmission rates of 51.84 Mbps. The standard SONET optical carrier rate of 51.84 Mbps is called OC1; the equivalent electrical signal rate is called STS-1. SONET standardizes higher transmission bit rates, "OCN", as exact multiples of OC1 (N X 51.84 Mbps.). For example, OC3 equals 3 X 51.84 Mbps.
2. General Regulations (Cont'd)

2.7 Definitions (Cont'd)

Synchronous Test Line

The term "Synchronous Test Line" denotes an arrangement in an end office which performs marginal operational tests of supervisory and ring-tripping functions.

Synchronous Transport Signal (STS)

The term "Synchronous Transport Signal" denotes a 51.84 Mbps. electrical signal used within the SONET optical carrier network. The signal consists of the information content and the overhead used by SONET. The overhead is used for controlling, framing and maintaining the STS signal so it can be directly connected to other SONET carrier channels. STS signals are in exact multiples of 51.84 Mbps. (STS-1 is 51.84 Mbps., STS-3 is 155.52 Mbps., etc.).

Tandem Switched Transport

The term "Tandem Switched Transport" denotes transport from the tandem to the end office that is switched at a tandem.

Terminating Direction

The term "Terminating Direction" denotes the use of Access Service for the completion of calls from a Customer’s premises to an End User Premises.

Terminus Hub

The term "Terminus Hub" denotes a wire center at which bridging or multiplexing functions are performed only for Customers served directly by the same wire center.
2. General Regulations (Cont'd)

2.7 Definitions (Cont'd)

Throughput

The term "Throughput" denotes the number of data bits successfully transferred in one direction per unit of time.

Toll VoIP-PSTN Traffic

The term “Toll VoIP-PSTN Traffic” denotes a customer’s interexchange voice traffic exchanged with the Telephone Company in Time Division Multiplexing format over PSTN facilities, which originates and/or terminates in Internet Protocol (IP) format. “Toll VoIP-PSTN Traffic” originates and/or terminates in IP format when it originates from and/or terminates to an end user customer of a service that requires IP-compatible customer premises equipment.

Transmission Measuring (105 Type) Test Line/Responder

The term "Transmission Measuring (105 Type) Test Line/ Responder" denotes an arrangement in an end office which provides far-end access to a responder and permits two-way loss and noise measurements to be made on trunks from a near end office.

Transmission Path

The term "Transmission Path" denotes an electrical path capable of transmitting signals within the range of the service offering, e.g., a voice grade transmission path is capable of transmitting voice frequencies within the approximate range of 300 to 3000 Hz. A transmission path is comprised of physical or derived facilities consisting of any form or configuration of plant typically used in the telecommunications industry.
2. General Regulations (Cont'd)

2.7 Definitions (Cont'd)

Trunk

The term "Trunk" denotes a communications path connecting two switching systems in a network, used in the establishment of an end-to-end connection.

Trunk Group

The term "Trunk Group" denotes a set of trunks which are traffic engineered as a unit for the establishment of connections between switching systems in which all of the communications paths are interchangeable.

Trunk Side Connection

The term "Trunk Side Connection" denotes the connection of a transmission path to the trunk side of a local exchange switching system.

Two-Wire to Four-Wire Conversion

The term "Two-Wire to Four-Wire Conversion" denotes an arrangement which converts a four-wire transmission path to a two-wire transmission path to allow a four-wire facility to terminate in a two-wire entity (e.g., a central office switch).
2. General Regulations (Cont'd)

2.7 Definitions (Cont'd)

V and H Coordinates Method

The term "V and H Coordinates Method" denotes a method of computing airline miles between two points by utilizing an established formula which is based on the vertical and horizontal coordinates of the two points.

WATS Serving Office

The term "WATS Serving Office" denotes a Telephone Company designated serving wire center where switching, screening and/or recording functions are performed in connection with the closed-end of WATS or WATS-type services.

Wireless Switching Center

The term "Wireless Switching Center" (WSC) denotes a Wireless Service Provider (WSP) switching system that is used to terminate wireless stations for purposes of interconnection to each other and to trunks interfacing with the public switched network.

Wire Center

The term "Wire Center" denotes a building in which one or more central offices, used for the provision of Telephone Exchange Services, are located.
3. Federal Universal Service Charge, ISDN Line Ports and DS1 Line Port
3. Federal Universal Service Charge, ISDN Line Ports and DS1 Line Port (Cont’d)

3.1 Federal Universal Service Charge

The Federal Universal Service Charge (FUSC) recovers the Telephone Company’s contribution to various federal universal service funds. The Telephone Company will apply a surcharge factor each month to the billed charges for interstate access services provided to end users from this Tariff.

An FUSC will not apply to any billed charges for an end user when the interstate access service provided to the end user qualifies under the federal universal service guidelines for Lifeline Assistance. A FUSC will not apply to interstate access services purchased by customers that resell these services to end users as part of an interstate telecommunications service and are required to contribute to the various federal universal service funds. In case of a dispute regarding whether the customer is reselling services and contributing to the various federal universal service funds, the Telephone Company may request a signed certification to that effect from the customer.

3.1.1 Rate Regulations

The Telephone Company will bill a FUSC each month as described below. The FUSC Surcharge Factor and the Multiline Business End User Common Line (MLB EUCL) FUSC Surcharge Factor are set forth in Sections 17.1.2(A) and 17.1.2(B) of this Tariff.

(A) FUSC Surcharge Factor

Except as specified in (B) below, the Telephone Company will multiply the FUSC Surcharge Factor set forth in Section 17.1.2(A), following, against the end user’s billed interstate access service charges.
3. Federal Universal Service Charge, ISDN Line Ports and DS1 Line Port (Cont’d)

3.1 Federal Universal Service Charge (Cont’d)

3.1.1 Rate Regulations (Cont’d)

(B) MLB EUCL FUSC Surcharge Factor

In lieu of applying the FUSC Surcharge Factor specified in (A), above, against MLB EUCL charges, the Telephone Company will apply the MLB EUCL FUSC Surcharge Factor set forth in Section 17.1.2(B), following, as described below:

(1) For non-Centrex MLB EUCL customers, including Payphone Service Providers (PSPs) who purchase local exchange service lines for their own administrative purposes, the Telephone Company will multiply the MLB EUCL FUSC Surcharge Factor against the end user’s billed MLB EUCL charges, except as provided in (a) below.

   (a) For local exchange service lines purchased by a PSP that are used in the provisioning of payphone service to the PSP’s customers, the Telephone Company will multiply the FUSC Surcharge Factor, described in (A) above, against the PSP’s billed MLB EUCL charges.

(2) For Centrex MLB EUCL customers, the Telephone Company will multiply the MLB EUCL FUSC Surcharge Factor against one ninth of the end user’s billed MLB EUCL charges.

The Telephone Company will also apply the FUSC Surcharge Factor as described in (A) above to all other interstate access services provided to MLB EUCL customers.

The Telephone Company’s rate band assignment for the MLB EUCL FUSC Surcharge Factor is specified in Section 17.1.2(B), following.
3. Federal Universal Service Charge, ISDN Line Ports and DS1 Line Port (Cont’d)

3.2 ISDN Line Ports

When an end user is provided Integrated Services Digital Network (ISDN) Basic Rate Interface (BRI) and/or ISDN Primary Rate Interface (PRI) local exchange service by the Telephone Company under the general or local exchange tariff, ISDN Line Port rates apply. ISDN Line Port rates recover the costs of ISDN line ports to the extent these costs exceed the cost of a line port used for basic, analog service.

When an end user temporarily suspends its local exchange service that is associated with ISDN BRI and/or ISDN PRI, one-half of the ISDN Line Port rate per month will be temporarily suspended for the time period the local exchange service is suspended.

3.2.1 Rate Application

Rates for ISDN Line Ports are set forth in Section 17.1.3(A) and 17.1.3(B), following.

The monthly rate applies to each ISDN service arrangement ordered from the Telephone Company’s general or local exchange tariff, as described below.

- The ISDN BRI Line Port rate applies to each ISDN BRI arrangement.
- The ISDN PRI Line Port rate applies to each ISDN PRI arrangement.

3.3 DS1 Line Port

When an end user is provided a DS1 (1.544 Mbps) local exchange service by the Telephone Company under the general and/or local exchange tariff(s), and where the end user provides the terminating channelization equipment, a DS1 Line Port rate will apply. The DS1 Line Port rate recovers the line port costs of the DS1 channel service to the extent these costs exceed the cost of a line port used for basic, analog service.

When an end user temporarily suspends its local exchange service that is associated with DS1 channel service, one-half of the DS1 Line Port rate per month will be temporarily suspended for the time period the local exchange service is suspended.

3.3.1 Rate Application

The DS1 Line Port rate is set forth in Section 17.1.4, following. This monthly rate applies to each DS1 (1.544 Mbps) channel service ordered from the Telephone Company’s general and/or local exchange tariff, where the end user provides the terminating channelization equipment.
ACCESS SERVICE

4. End User Access Service

The Telephone Company will provide End User Access Service (End User Access) to end users who obtain local exchange service from the Telephone Company under its general and/or local exchange tariffs.

4.1 General Description

End User Access Service provides for the use of an End User Common Line (EUCL).

4.2 Limitations

4.2.1 Exclusions

Telephone number detail billing, directory listings and intercept arrangements are not included with End User Access.

4.2.2 Lifeline Service

The Federal Lifeline Service program is designed to provide a credit to monthly end user access charges for qualifying low income residential subscribers. When a carrier is designated as an eligible telecommunications carrier for Lifeline Service and when an eligible residential end user qualifies for Lifeline Service in association with local residential exchange service of that carrier, the EUCL Residence rate as set forth in 17.1.1(A) following is waived.

4.3 Undertaking of the Telephone Company

The Telephone Company will provide End User Access at rates and charges as set forth in 17.1.1 as follows:

- Use of a EUCL for interstate Access Services provided under this Tariff. Such use will be provided when the end user obtains local exchange service.

- The Telephone Company will be responsible for contacts and arrangements with customers for the billing of End User Access charges.
4. End User Access Service (Cont'd)

4.4 Obligations of Radio Common Carriers

When the end user is a Radio Common Carrier (RCC) or provider of paging service, such end users shall designate whether the local exchange service they are provided by the Telephone Company is used as an access line for RCC or paging services, or used as an administrative line.

4.5 Payment Arrangements and Credit Allowances

4.5.1 Minimum Period

The minimum period for which EUCL End User Access is provided to an end user and for which charges are applicable is the same as that in the general and/or local exchange tariffs for the associated local exchange service.

4.5.2 Cancellation of Orders

End User Access is cancelled when the order for the associated local telephone exchange service is cancelled. No cancellation charges apply.

4.5.3 Changes to Orders

When changes are made to orders for the local exchange service associated with End User Access, any necessary changes will be made for End User Access. No charges will apply.

4.5.4 Allowance for Interruptions

When there is an interruption to a EUCL, requested End User Access credit allowances for interruptions will be provided as set forth for credit allowance for interruptions in Section 2.4.4 preceding.

4.5.5 Temporary Suspension of Service

When an end user temporarily suspends its local exchange service that is associated with a EUCL, one-half of the monthly EUCL charge will be temporarily suspended for the time period the associated local exchange service is suspended.
ACCESS SERVICE

4. End User Access Service (Cont'd)

4.6 Rate Regulations

4.6.1 Who Is Billed

EUCL monthly charges will be billed to the end user of the associated Local Exchange Service.

4.6.2 Multiparty Service

The EUCL charge for each multiparty subscriber shall be assessed as if the subscriber had subscribed to single-party service.

4.6.3 Pay Telephone Service

The EUCL-Multiline Business rate will be assessed when a Payphone Service Provider obtains an exchange service line for the purposes of offering pay telephone service.

4.6.4 Business Services

(A) Single Line Service

When an end user is provided a single local business exchange service in a state, multiparty and Centrex services included, and when the local business exchange service is provided under the general and/or local exchange or Centrex service tariffs, the EUCL Single Line Business - Individual line or trunk rate as set forth in 17.1.1(B) following, applies to each such business individual line or trunk. In the case of multiparty service, each party is deemed to be a user of a EUCL.
4. End User Access Service (Cont'd)

4.6 Rate Regulations (Cont'd)

4.6.4 Business Services (Cont'd)

(B) Multiline Service

When an end user is provided more than one local business exchange service in a state by the same Telephone Company, pay telephone, multiparty and Centrex services included, and when the local exchange service is provided under the general and/or local exchange or Centrex service tariffs, the EUCL-Multiline Business-Individual line or trunk rate as set forth in Section 17.1.1(C), following, applies to each such Multiline Business individual line or trunk. In the case of multiparty service, each party is deemed to be a user of a EUCL.
4. End User Access Service (Cont'd)

4.6 Rate Regulations (Cont'd)

4.6.4 Business Services (Cont'd)

(C) Centrex CO and Centrex CO-like Services

Business or residence single line or multiline usage for Centrex CO and Centrex CO-like services is determined as set forth in 4.6.4 (A) and (B), preceding.

Centrex CO or CO-like service provided to a college, university or school may serve both the college, university or school offices and the student or faculty dormitory (residential) quarters. When provided to residential quarters, the residential portion of the service is commonly known as dormitory service. Residential charges will apply to lines to the student or faculty dormitory (residential) quarters as set forth in 17.1.1(A) following. Business charges for lines to the university, college or school offices will apply as set forth in 17.1.1(C) following. Charges shall be based on the number of residence and business lines reported to the Telephone Company by the end user.
4. End User Access Service (Cont'd)

4.6 Rate Regulations (Cont'd)

4.6.5 Radio Common Carriers

For each local exchange service used only as a path for the transmission of Radio Common Carrier (RCC) traffic between the Telephone Company serving wire center and the RCC's radio equipment, End User Access Charges do not apply. End User Access Charges will apply to the Radio Common Carrier's local exchange service used for administrative purposes. This shall also include those Radio Common Carriers providing maritime service under Part 80 of the FCC Rules and Regulations.

A Radio Common Carrier is described as a common carrier engaged in the provision of Public Mobile Service, as defined in Part 22 of the FCC Rules and Regulations which is not also in the business of providing landline local exchange telephone service.

4.6.6 Remote Call Forwarding

For each local exchange service provided as Remote Call Forwarding (RCF) residential or business service, under the general and/or local exchange service tariffs, End User Access Charges do not apply.
4. End User Access Service (Cont'd)

4.6 Rate Regulations (Cont'd)

4.6.7 Residence Services

(A) Single Line and Multiline Service

When an end user is provided local residence exchange service(s) in a state, multiparty and centrex services included, and when the local residence exchange or centrex service is provided under the general and/or local exchange or centrex service tariffs, the EUCL Residence - Individual line or trunk rate as set forth in Section 17.1.1(A) following, applies to each such local residence exchange trunk. In the case of multiparty service each party is deemed to be a user of a EUCL.

4.6.8 Integrated Services Digital Network (ISDN) Services Basic Rate Interface (BRI)

(A) When an end user is provided residence or business local exchange service under any general and/or local exchange service tariff(s) using an Integrated Services Digital Network (ISDN) Basic Rate Interface (BRI) arrangement, one (1) EUCL Residence - Individual line or trunk charge as set forth in Section 17.1.1(A), following, or, one (1) EUCL Single Line Business - Individual line or trunk charge as set forth in Section 17.1.1(B), following, applies to each ISDN BRI arrangement.

(B) ISDN Primary Rate Interface (PRI)

When an end user is provided residence or business local exchange service under any general and/or local exchange service Tariff(s) using an Integrated Services Digital Network (ISDN) Primary Rate Interface (PRI) arrangement, five (5) EUCL - Multiline Business Individual line or trunk charges as set forth in Section 17.1.1(C), following, apply to each ISDN PRI arrangement.
4. End User Access Service (Cont'd)

4.6 Rate Regulations (Cont'd)

4.6.9 DS1 Channel Service

When an end user is provided local exchange service under any general and/or local exchange tariff(s) using a DS1 (1.544 Mbps) channel service where the customer provides the terminating channelization equipment, five (5) EUCL-Multiline Business Individual line or trunk charges as set forth in Section 17.1.1 (C), following, apply to each DS1 channel service.
5. Access Ordering

5.1 General

This section sets forth the regulations and order related charges for services set forth in other sections of this tariff. Order related charges are in addition to other applicable charges for the services provided.

An Access Order is an order to provide the customer with Switched Access, Special Access, and Public Packet Data Network or Access Related Service or to provide changes to existing services.

The regulations, rates and charges for special construction are set forth in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 3 and are in addition to the regulations, rates and charges specified in this section.

A customer may order any number of services of the same type and between the same premises on a single Access Order. All details for services for a particular order must be identical except for those for multipoint service.

The customer shall provide to the Telephone Company the order information required in 5.2 following, and in addition the customer must also provide:

- Customer name and premises address(es).
- Billing name and address (when different from customer name and address).
- Customer contact name(s) and telephone number(s) for the following provisioning activities: order negotiation, order confirmation, interactive design, installation and billing.
5. **Access Ordering** (Cont'd)

5.1 **General** (Cont'd)

5.1.1 **Service Installation**

The Telephone Company will provide the Access Service in accordance with the customer's requested service date, subject to the constraints established by the Telephone Company schedule of applicable service dates.

The Telephone Company shall make available to all customers, upon request, a schedule of applicable service intervals for Switched Access, Special Access and Public Packet Data Network Services. The schedule shall specify the applicable service interval for services and the quantities of services that can be provided by a requested service date. Any associated material will be provided upon request and within a reasonable period of time.

The Telephone Company will not accept orders for service dates which exceed the applicable service date by more than six months.

Access Services will be installed during Telephone Company business days. If a customer requests that installation be done outside of scheduled work hours, and the Telephone Company agrees to this request, the customer will be subject to applicable Additional Labor Charges as set forth in 17.4.3(A) following.
ACCESS SERVICE

5. Access Ordering (Cont'd)

5.1 General (Cont'd)

5.1.2 Expedited Orders

When placing an Access Order, a customer may request a service date that is prior to the applicable service date. Additionally, a customer may also request an earlier service date on a pending Access Order. In this case, an Access Order modification as set forth in 5.4 following would be required. If the Telephone Company determines that the service can be provided on the requested date and that additional labor cost or extraordinary costs are required to meet the requested service date, the customer will be notified and will be provided with an estimate of the additional charges involved. Charges will be billed at actual cost, not to exceed 10 percent over estimated charges. Such additional charges will be determined and billed to the customer as explained following.

To calculate the additional labor charges, the Telephone Company will, upon authorization from the customer to incur the additional labor charges, keep track of the additional labor hours used to meet the request of the customer and will bill the customer at the applicable Additional Labor charges as set forth in 17.4.3(A) following.

To develop, determine and bill the customer the extraordinary costs which may be involved, the Special Construction terms and conditions as set forth in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 3 will be used by the Telephone Company. Authorization to incur the costs and to bill the customer will be in accordance with the terms and conditions of NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 3.

When the request for expediting occurs subsequent to the issuance of the Access Order, a Service Date Change Charge as set forth in 17.4.1(B) following also applies.
5. **Access Ordering (Cont'd)**

5.1 **General (Cont'd)**

5.1.3 **Selection of Facilities for Access Orders**

The option to request a specific transmission path or channel is only provided for High Capacity Facilities Special Access, or as provided for under Special Facilities Routing as set forth in Section 11 following.

When there are High Capacity facilities to a hub on order or in service for the customer's use, the customer may request a specific channel or transmission path be used to provide the Switched or Special Access Service requested in an Access Order. The Telephone Company will make a reasonable effort to accommodate the customer request.
5. **Access Ordering (Cont'd)**

5.2 **Ordering Requirements**

5.2.1 **Switched Access Service**

Except as provided for in Section 5.2.1(F), following, (C) when ordering Switched Access service, the customer must specify the directionality of the service and whether the service is to be provided as (1) Direct Trunked Transport from the serving wire center to the end office or (2) Direct Trunked Transport from the serving wire center to a tandem which connects with Tandem Switched Transport from the tandem to the end office. When all or a portion of service is ordered as Direct Trunked Transport, the customer must specify the type and quantity of Direct Trunked Transport facility (e.g., Voice Grade, High Capacity DS1 or DS3, or Synchronous Optical Channel OC3 or OC12) and the hubs or ADM equipped wire centers involved.

Except as provided for in Sections 5.2.1(F) and 6.1.3(A)(1), following, the Customer must also specify the type of Entrance Facility to be used for Switched Access (e.g., Voice Grade, High Capacity or Synchronous Optical Channel). For High Capacity or Synchronous Optical Channel Entrance Facilities, the customer must specify the facility assignment and the channel assignment for each trunk.

Direct Trunked Transport is available at all tandems and at all end offices except those end offices identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, as not having the capability to provide Direct Trunked Transport. Direct Trunked Transport is not available: (1) from end offices that provide equal access through a Centralized Equal Access arrangement, or (2) from end offices that lack recording or measurement capability.
5. Access Ordering (Cont'd)

5.2 Ordering Requirements (Cont'd)

5.2.1 Switched Access Service (Cont'd)

Normally, Direct Trunked Transport of originating 800 series calls from an end office is available only from Service Switching Point (SSP) equipped end offices. However, certain SSP equipped end offices cannot accommodate the direct trunking of the 800 series (other than the 800 service access code) service access code. These end offices are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC., TARIFF F.C.C. NO. 4. Additionally, certain non-SSP equipped end offices can accommodate direct trunking of originating 800 series calls. These end offices are also identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC., TARIFF F.C.C. NO. 4.

When the customer has both Tandem Switched Transport and Direct Trunked Transport at the same end office, the customer will be provided Alternate Traffic Routing as set forth in Section 6.4.6, following.

A customer's Local Transport may be connected to the Entrance Facility of another customer, providing the other customer submits a Letter of Authorization for this connection and assumes full responsibility for the cost of the Entrance Facility.
5. **Access Ordering** (Cont'd)

5.2 **Ordering Requirements** (Cont'd)

5.2.1 **Switched Access Service** (Cont'd)

   (A) *Feature Group D, Interim NXX Translation, Operator Transfer Service and SS7 Signaling*

   The ordering requirements for Feature Group D Switched Access Service used in conjunction with Internet Protocol Gateway Access Service are specified in Section 5.2.1(F), following.

   When placing an order for Feature Group D Switched Access Service, the customer shall provide:

   - The number of BHMC from the customer designated premises to the end office or Operator Transfer Service location by Feature Group and by type of BHMC, or
   - The number of trunks desired between customer designated premises and an entry switch or Operator Transfer Service location.
   - The number of BHMC or trunks required for or to be converted to an SS7 Signaling capability.
   - Optional Features
     - Interim NXX Translation options.
     - Operator Transfer Service option
   - A projected Percentage of Interstate Use (PIU) as set forth in Section 2.3.11, preceding.
   - For Feature Group D switched access service to a Wireless Switching Center (WSC) directly interconnected to a Telephone Company access tandem office, the customer shall provide information to the Telephone Company indicating the NXX code(s) to be accessed.

   When BHMC information is provided it is used to determine the number of transmission paths as set forth in Section 6.2.5, following.
5. Access Ordering (Cont'd)

5.2 Ordering Requirements (Cont'd)

5.2.1 Switched Access Service (Cont'd)

(A) Feature Group D, Interim NXX Translation, Operator Transfer Service and SS7 Signaling (Cont’d)

The BHMC may be determined by the customer in the following manner. For each day (8 am to 11 pm, Monday through Friday, excluding national holidays), the customer shall determine the highest number of minutes of use for a single hour (e.g., 55 minutes in the 10-11 a.m. hour). The customer shall, for the same hour period (i.e., busy hour) for each of twenty consecutive business days, pick the twenty consecutive business days in a calendar year which add up to the largest number of minutes of use.

Both originating and terminating minutes shall be included. The customer shall then determine the average busy hour minutes of capacity (i.e., BHMC) by dividing the largest number of minutes of use figure for the same hour period for the consecutive twenty business day period by 20. This computation shall be performed for each end office the customer wishes to serve. These determinations thus establish the forecasted BHMC for each end office.
5. Access Ordering (Cont'd)

5.2 Ordering Requirements (Cont'd)

5.2.1 Switched Access Service (Cont'd)

(A) Feature Group D, Interim NXX Translation, Operator Transfer Service and SS7 Signaling (Cont'd)

Customers may, at their option, order FGD by specifying the number of trunks desired between customer designated premises and an end office, access tandem or operator services location. When ordering by trunk quantities rather than BHMC quantities to an access tandem, the customer must also provide the Telephone Company an estimate of the amount of traffic it will generate to and/or from each end office subtending the access tandem to assist the Telephone Company in its own efforts to project further facility requirements.

When Feature Group D is ordered with the Interim NXX Translation optional feature, the customer shall specify the Service Access Code(s) (e.g., 900) and their associated NXX code(s) to be translated within the entire LATA or Market Area. The initial and subsequent orders to add, change, or delete Interim NXX Translation codes shall be placed separately or in combination with orders to change Feature Group D Switched Access BHMC or trunks. Customer assigned NXX codes which have not been ordered will be blocked.

Orders for the Interim NXX Translation optional feature shall not be required until such time as a customer other than an MTS/WATS provider requests Interim NXX Translation of Service Access Codes. Upon receipt of such order, the Telephone Company shall notify the MTS/WATS provider of the activation of the Interim NXX Translation Service for the Service Access Code. Following such initial activation, all customers are required to place orders for Interim NXX Translation of the Service Access Code and the Interim NXX Translation charge for the Service Access Code shall apply as set forth in 17.2.1(C) following.
5. **Access Ordering (Cont'd)**

5.2 **Ordering Requirements (Cont'd)**

5.2.1 **Switched Access Service (Cont'd)**

(A) **Feature Group D, Interim NXX Translation, Operator Transfer Service and SS7 Signaling (Cont'd)**

For the Operator Transfer Service Option ordered in conjunction with Feature Group D Switched Access Service as set forth in 6.7.1 and 6.8.1 following, the customer must specify the number of trunks or BHMCs desired between its premises and the Telephone Company operator services location.

Operator Transfer Service is provided at operator services locations as set forth in National Exchange Carrier Association, Inc. Tariff F.C.C. No. 4.
5. **Access Ordering (Cont'd)**

5.2 **Ordering Requirements (Cont'd)**

5.2.1 **Switched Access Service (Cont'd)**

**(B) SS7 Optional Feature**

When Feature Group D is ordered with the SS7 optional feature, in addition to information listed in Section 5.2.1(C), preceding, the customer shall specify a reference to existing signaling connections or reference a related SS7 signaling connection order. When ordering SS7 signaling, the customer shall provide the Signaling Transfer Point codes, location identifier codes and circuit identifier codes. In addition, the customer shall work cooperatively with the Telephone Company to determine the number of SS7 signaling connections required to handle its signaling traffic.

For 800 Data Base Access Service, as described in Sections 6.1.3(A) and (C), following, the customer must order FGD to those access tandems or end offices designated as Service Switching Points (SSP) for 800 data base service or to those non-SSP equipped end offices that can accommodate direct trunking of originating 800 calls. SSP equipped end offices and access tandems and non-SSP equipped end offices that can accommodate direct trunking of originating 800 calls are designated in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4 WIRE CENTER INFORMATION. Certain SSP equipped end offices that cannot accommodate direct trunking of originating 800 series (other than the 800 service access code) calls are designated in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, WIRE CENTER INFORMATION. All traffic originating from end offices not equipped to provide SS7 signaling and routing, not able to accommodate direct trunking of originating 800 series calls or equipped with SS7 signaling but not able to accommodate direct trunking of originating 800 series (other than the 800 service access code) calls, require routing via an access tandem where SSP functionality is available.
5. Access Ordering (Cont'd)

5.2 Ordering Requirements (Cont'd)

5.2.1 Switched Access Service (Cont'd)

(C) Internet Protocol Gateway Access Service

When placing an order for Feature Group D Switched Access Service for use in conjunction with Internet Protocol Gateway Access Service (IPG) as described in Section 16.4, following, the customer shall provide:

- the number of BHMC between the IPG gateway (C) SWC and each end office to which the IPG (C) customer wants to terminate interexchange voice traffic originated on its IP based network and/or receive interexchange voice traffic originated on the Telephone Company’s network and;

- a projected Percentage of Interstate Use (PIU) as set forth in Section 2.3.11, preceding.

BHMC information is used to determine the number of transmission paths as set forth in Section 6.2.5, following.
5. Access Ordering (Cont'd)

5.2 Ordering Requirements (Cont'd)

5.2.2 Special Access Service

When placing an order for Special Access Service the customer must specify:

- the customer designated premises or hubs or ADM equipped wire centers involved
- type of service (e.g., Voice Grade, High Capacity, etc.)
- the channel interface(s)
- technical specification package
- options desired
- for multipoint services, the channel interface at each customer designated premises may, at the request of the customer, be different but all such interfaces shall be compatible.
- that the traffic consists of more than ten percent interstate traffic.

All part-time Video and Program Audio services are subject to a service inquiry. A service inquiry is a request to the Telephone Company to determine if facilities exist to provide the service ordered and to determine the service date on which service can be provided to the customer.

Where the Special Access Service is exempt from the Special Access Surcharge, as set forth in 7.3 following the customer shall furnish written certification to that effect as set forth in 7.3.3 following.

When ordering bridging and/or multiplexing, the Customer must specify the telephone company hub(s) from which they desire service. The Customer must specify only those hubs that provide the type of service ordered and interconnect with the wire center(s) from which the customer requires service. The Wire Center section of National Exchange Carrier Association, Inc. Tariff F.C.C. No. 4 identifies hub types and multiplexing functions (e.g., Digital Data, High Capacity Multiplexing, Add/Drop Multiplexing) as well as hub levels (i.e., Hub, Terminus Hub, Intermediate Hub and Super-Intermediate Hub). Additionally, the Subtending section of Tariff F.C.C. No. 4 identifies wire centers and the Intermediate and/or Super-Intermediate Hubs with which they interconnect.
5. Access Ordering (Cont'd)

5.2 Ordering Requirements (Cont'd)

5.2.2 Special Access Service (Cont'd)

There are two Special Access Optional Rate Plans that offer term discounts: a High Capacity Optional Rate Plan and a Synchronous Optical Channel Service (SOCS)(T) Optional Rate Plan, as described in Sections 7.2.8(A) and (B), following.

When ordering the High Capacity Term Discount Optional Rate Plan, an upgrade to the plan, or a High Capacity Service Optional Rate Plan Replacement, discontinuance charges, as specified in Section 7.2.8(A)(1), following, will not apply if the conditions set forth in Section 7.2.8(A)(1), following, are met and the customer provides the following ordering information:

Term Discounts - Upgrades in Capacity (DS1 to DS3)

- The customer's order for the disconnect of the existing DS1 Service and the installation of the new DS3 Service are received at the same time and specifically reference the application of upgrade in capacity.

- The customer's disconnect order for the existing DS1 Service must reference the DS3 Service installation order.

Customer orders to install and disconnect DS1 or DS3 services provided under a Term Discount plan where the number of DS1s or DS3s remains constant and the customer wishes to maintain the existing Term Discount period and minimum service period must:

- Be received at the same time.

- Reference continuation of the existing Term Discount period and the minimum service period on both the installation and disconnect orders.
5. Access Ordering (Cont'd)

5.2 Ordering Requirements (Cont'd)

5.2.2 Special Access Service (Cont'd)

Term Discounts - Optional Rate Plan Replacements

Discontinuance charges as specified in Section 7.2.8(A)(1)(d), following, will not apply when an existing High Capacity Optional Rate Plan customer:

- Orders the disconnect of its existing committed High Capacity channel(s) and installation of one or more newly committed SOCS channel(s), ATM-CRS Port(s) or ETS Port(s) as described in Section 7.2.8(A)(1)(c), following, and complies with the following requirements:

- The customer’s orders for the disconnection of its existing committed High Capacity channel(s) and installation of its replacement newly committed SOCS channel(s), ATM-CRS Port(s) or ETS Port(s) are submitted to the Telephone Company at the same time.

- All orders specifically reference the replacement of the existing committed High Capacity channel(s) with one or more newly committed SOCS channel(s), ATM-CRS Port(s) or ETS Port(s) in the customer’s new SOCS Optional Rate Plan, in the customer’s new or existing ATM-CRS Term Discount Plan, or in the customer’s new or existing ETS Term Discount Plan.

The High Capacity Term Discount Optional Rate Plan is only available from those Telephone Companies listed in Section 17.3.10(A)(1), following.)
ACCESS SERVICE

5. **Access Ordering (Cont'd)**

5.2 **Ordering Requirements (Cont'd)**

5.2.2 **Special Access Service (Cont'd)**

The Synchronous Optical Channel Service Optional Rate Plan is a Term Discount plan. When ordering a Synchronous Optical Channel Service Term Discount Optional Rate Plan, upgrade to the plan, or a SOCS Optional Rate Plan Replacement, discontinuance charges, as specified in Section 7.2.8(B), following, will not apply if the conditions set forth in Section 7.2.8(B), following, are met and the customer provides the following ordering information:

**Term Discounts - Upgrades in Capacity (OC3/OC3c to OC12)**

- The customer's order for the disconnect of the existing OC3/OC3c Service and the installation of the new OC12 Service are received at the same time and specifically reference the application of upgrade in capacity.

- The customer's disconnect order for the existing OC3/OC3c Service must reference the OC12 Service installation order.

Customer orders to install and disconnect OC3/OC3c or OC12 services provided under a Term Discount plan where the number of OC3s, OC3cs, or OC12s remains constant and the customer wishes to maintain the existing Term Discount period and minimum service period must:

- Be received at the same time.

- Reference continuation of the existing Term Discount period and the minimum service period on both the installation and disconnect orders.
5. **Access Ordering (Cont'd)**

5.2 **Ordering Requirements (Cont'd)**

5.2.2 **Special Access Service (Cont'd)**

**Term Discounts - Optional Rate Plan Replacements**

Discontinuance charges as specified in Section 7.2.8(B)(4), following, will not apply when an existing SOCS Optional Rate Plan customer:

- Orders the disconnect of its existing committed SOCS channel(s) and installation of one or more newly committed ATM-CRS Port(s) or ETS Port(s) as described in Section 7.2.8(B)(3), following, and complies with the following requirements:

  - The customer’s orders for the disconnection of its existing committed SOCS channel(s) and installation of its replacement newly committed ATM-CRS Port(s) or ETS Port(s) are submitted to the Telephone Company at the same time.

  - All orders specifically reference the replacement of the existing committed SOCS channel(s) with one or more newly committed ATM-CRS Port(s) or ETS Port(s) in the customer’s new or existing ATM-CRS Term Discount Plan or in the customer’s new or existing ETS Term Discount Plan.

The Synchronous Optical Channel Service Term Discount Optional Rate Plan is only available from those Telephone Companies listed in Section 17.3.10(A), following.
5. Access Ordering (Cont'd)

5.2 Ordering Requirements (Cont'd)

5.2.3 WATS or WATS-Type Services

Special Access Service may be ordered for connection with FGD Switched Access Service at Telephone Company designated WATS Serving Offices (WSOs) for the provision of WATS or WATS-type Services and may be ordered separately by a customer other than the customer which orders the FGD Switched Access Service. For the Special Access Service the customer shall specify:

- the customer designated premises at which the Special Access service terminates
- the type of line (i.e., two-wire or four-wire)
- the type of calling (i.e., originating, terminating or two-way)
- type of Supervisory Signaling.

When the optional screening, switching and/or recording functions are not provided at the customer serving wire center, Channel Mileage, as set forth in 7.2.1 following, must be ordered between that wire center and the nearest WSO where the screening, switching and/or recording functions can be provided.

5.2.4 Mixed Use Facilities - Switched and Special Access

Mixed use is the provision of both Switched and Special Access Services over the same High Capacity or Synchronous Optical Channel facilities. Mixed use facilities to a hub or ADM equipped wire center will be ordered and provided as Special Access Service. Where mixed use is employed, individual services utilizing these facilities must be ordered either as Switched Access Service or Special Access Service as further elaborated and set forth in 6.4.7 and 7.2.7 following. When placing the order for the individual service(s), the customer must specify a channel assignment for each service ordered.
5. **Access Ordering (Cont'd)**

5.2 **Ordering Requirements (Cont'd)**

5.2.5 **Miscellaneous Services**

Testing Service, Additional Labor, Telecommunications Service Priority and Special Facilities Routing shall be ordered with an Access Order or may subsequently be added to a pending order at any time up to and including the service date for the access service. When miscellaneous services are added to a pending order a service date change may be required. When a service date change is required, the service date change charge as set forth in 17.4.1(A) following will apply. When miscellaneous services are added to a pending order, charges for a design change as set forth in 17.4.1(C) following will apply when an engineering review is required. If both a service date change and an engineering review are required, both the Service Date Change Charge and the Design Change Charge will apply as set forth in 5.4.3(B) following.

The rates and charges for these services, as set forth in Section 17 of this tariff, will apply in addition to the ordering charges set forth in Section 17 and the rates and charges for the Access Service with which they are associated.

Additional Engineering is not an ordering option, but will be applied to an Access Order when the Telephone Company determines that Additional Engineering is necessary to accommodate a customer request. Additional Engineering will only be required as set forth in 13.1 following. When it is required, the customer will be so notified and will be furnished with a written statement setting forth the justification for the Additional Engineering as well as an estimate of the charges. If the customer agrees to the Additional Engineering, a firm order will be established. If the customer does not want the service or facilities after being notified that Additional Engineering of Telephone Company facilities is required, the order will be withdrawn and no charges will apply. Once a firm order has been established, the total charge to the customer for the Additional Engineering may not exceed the estimated amount by more than 10%.
5. Access Ordering (Cont'd)

5.2 Ordering Requirements (Cont'd)

5.2.6 Frame Relay Access Service

When ordering Frame Relay Access Service, a minimum of two port connections are required for data to be transported between customer designated premises.

When placing an order for Frame Relay Access Service the customer must specify:

- the customer designated premises;
- the type of channel;
- the channel interface(s);
- the technical specification package and options desired;
- whether a Frame Relay Access Connection (i.e., user-to-network interface) or a Frame Relay Inter-network Connection (i.e., network-to-network interface) is required;
- the port speed;
- the number of Permanent Virtual Connections (PVCs) required;
- the location of the ports for each PVC or for connection to DSL Access Services, the location of the port and the DSL Access Service Connection Point;
- the Committed Information Rates (CIRs) that will be associated with each PVC;
- that the traffic consists of more than ten percent interstate traffic.

The port connecting the Special Access facility to the Telephone Company frame relay switch must be ordered and provided at the same speed as the Special Access facility.

When connecting to the port of another customer, the ordering customer must obtain authorization from the other customer.

When an extended PVC is ordered, the customer is responsible for placing the order with all telephone companies involved.
5. **Access Ordering (Cont'd)**

5.2 **Ordering Requirements (Cont'd)**

5.2.6 **Frame Relay Access Service (Cont'd)**

When ordering a Frame Relay Access Service Term Discount Optional Rate Plan or an upgrade to the plan, discontinuance charges, as specified in 16.1.3(A)(3) following, will not apply if the conditions set forth in 16.1.3(A)(3) are met and the customer provides the following ordering information:

**Term Discounts - Upgrades in Capacity**

- The customer's order for the disconnect of the existing service and the installation of the new service are received at the same time and specifically reference the application of upgrade in capacity.

- The customer's disconnect order for the existing service must reference the service installation order.

Customer orders to install and disconnect Frame Relay Access Service connections provided under a Term Discount plan where the facility capacity remains constant and the customer wishes to maintain the existing Term Discount period and minimum service period must:

- Be received at the same time.

- Reference continuation of the existing Term Discount period and the minimum service period on both the installation and disconnect orders.
5. Access Ordering (Cont'd)

5.2 Ordering Requirements (Cont'd)

5.2.7 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS)

When placing an order for ATM-CRS, the customer must specify:

- the customer designated premises;
- the type(s) of ATM-CRS Port interface(s);
- the speed for each ATM-CRS Port;
- the number, bandwidth capacity and traffic routing prioritization parameter for each ATM-CRS Virtual Path associated with an ATM-CRS Port;
- the ATM-CRS Ports and Virtual Paths associated with ATM-CRS Virtual Circuit Channels being established by the Telephone Company, if applicable;
- options desired, if applicable;
- that the traffic consists of more than 10 percent interstate traffic.

When connecting to the ATM-CRS Port of another customer, the ordering customer must obtain authorization from the other customer.
5. Access Ordering (Cont'd)

5.2 Ordering Requirements (Cont'd)

5.2.7 Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS) (Cont’d)

Discontinuance charges as specified in Section 16.2.5(D), following, will not apply when an existing ATM-CRS Term Discount Plan customer: 1) orders the disconnect of an existing committed ATM-CRS Port and its replacement by one or more newly installed committed ATM-CRS Port(s) as described in Section 16.2.5(B)(1), following, and 2) complies with the following requirements:

- The customer’s orders for the disconnection of the existing committed ATM-CRS Port and the installation of the replacement committed ATM-CRS Port(s) are submitted to the Telephone Company at the same time.

- Both orders specifically reference the replacement of the existing committed ATM-CRS Port with the newly installed committed ATM-CRS Port in the customer’s existing ATM-CRS Term Discount Plan.

Discontinuance charges as specified in Section 16.2.5(D), following, will not apply when an existing ATM-CRS Term Discount Plan customer: 1) orders the disconnect of an existing committed ATM-CRS Port and its replacement by one or more newly installed committed ETS Port(s) as described in Section 16.2.5(B)(4), following, and 2) complies with the following requirements:

- The customer’s orders for the disconnection of the existing committed ATM-CRS Port and the installation of the replacement committed ETS Port(s) are submitted to the Telephone Company at the same time.

- Both orders specifically reference the replacement of the existing committed ATM-CRS Port with the newly installed committed ETS Port in the customer’s existing ETS Term Discount Plan.

The ATM-CRS Term Discount Plan is only available from those Telephone Companies listed in Section 17.3.10(A)(1), following.
5. Access Ordering (Cont'd)

5.2 Ordering Requirements (Cont'd)

5.2.8 Ethernet Transport Service (ETS)

When placing an order for ETS, the customer must specify:

- the customer designated premises;
- the type(s) of ETS Port interface(s);
- the speed for each ETS Port;
- the bandwidth capacity for each ETS Channel Termination (ETS CT), and the number and bandwidth capacity for each ETS Ethernet Virtual Connection (ETS EVC), ETS Extended Ethernet Virtual Connection (ETS E-EVC) and ETS Interconnected Ethernet Virtual Connections (ETS I-EVCs) associated with an ETS Port;
- options desired, if applicable;
- that the traffic consists of more than 10 percent interstate traffic.

When connecting to the ETS Port of another customer, the ordering customer must obtain authorization from the other customer.
5. **Access Ordering (Cont'd)**

5.2 **Ordering Requirements (Cont'd)**

5.2.8 **Ethernet Transport Service (ETS) (Cont’d)**

Discontinuance charges as specified in Section 16.3.5(D), following, will not apply when an existing ETS Term Discount Plan customer: 1) orders the disconnect of an existing committed ETS Port and its replacement by one or more newly installed committed ETS Port(s) as described in Section 16.3.5(B)(1), following, and 2) complies with the following requirements:

- The customer’s orders for the disconnection of the existing committed ETS Port and the installation of the replacement committed ETS Port(s) are submitted to the Telephone Company at the same time.

- Both orders specifically reference the replacement of the existing committed ETS Port with the newly installed committed ETS Port in the customer’s existing ETS Term Discount Plan.

The ETS Term Discount Plan is only available from those Telephone Companies listed in Section 17.3.10(A)(1), following.
5. **Access Ordering (Cont'd)**

5.2 **Ordering Requirements (Cont'd)**

5.2.9 **Internet Protocol Gateway Access Service (IPG)**

When placing an order for IPG, the customer must specify:

- the customer designated premises;
- the number of IPG Port interface(s);
- the speed for each IPG Port;
- the number and bandwidth capacity for each IPG Transport Termination (IPG TT) and, where required, the number and bandwidth capacity for each IPG Transport Mileage Facility (IPG TMF) and IPG Transport Mileage Termination (IPG TMT);
- the type of signaling interface and bearer channel format requested that are compatible with the Technical Reference transmission standards listed in Section 16.4.3(B), following;
- that an order for Feature Group D Switched Access Service has been placed pursuant to the requirements specified in Section 5.2.1(F), preceding; and
- that the traffic consists of more than 10 percent interstate traffic.
5. **Access Ordering (Cont'd)**

5.3 **Access Orders For Services Provided By More Than One Telephone Company**

Access Services provided by more than one Telephone Company are services where one end of the Local Transport, Directory Transport or Channel Mileage element is in the operating territory of one Telephone Company and the other end of the element is in the operating territory of a different Telephone Company or where the Interim NXX Translation service and the end office are not provided by the same Telephone Company.

The ordering procedure for this service is dependent upon the billing arrangement, as set forth in 2.4.7 preceding, to be used by the Telephone Companies involved in providing the Access Service. The Telephone Company will notify the customer which of the ordering procedures will apply.

5.3.1 **Meet Point Billing Ordering**

Each Telephone Company will provide its portion of the Access Service within its operating territory to an interconnection point(s) with the other Telephone Company(s). Billing Percentages will be determined by the Telephone Companies involved in providing the Access Service and listed in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4. Each Telephone Company will bill the customer for its portion of the service as set forth in 2.4.7. All other appropriate charges in each Telephone Company tariff are applicable.

For the service(s) ordered as set forth following, the customer must also supply a copy of the order to the Telephone Company in whose operating territory a customer designated premises is located and any other Telephone Company(s) involved in providing the service. Additionally, when service is provided through a centralized equal access provider, the customer must supply a copy of the order to that provider.

**(A)** For Feature Group D Switched Access Services, the customer must place an order with the Telephone Company in whose territory the end office is located. Customers may, at their option, order FGD to the access tandem. When ordered to the access tandem, and the access tandem and the end office are not in the same Telephone Company operating territory, the customer must also supply a copy of the order to each additional Telephone Company subtending the access tandem.
5. **Access Ordering (Cont'd)**

5.3 **Access Orders For Services Provided By More Than One Telephone Company (Cont'd)**

5.3.1 **Meet Point Billing Ordering (Cont’d)**

(B) Customers ordering Special Access Service to be interconnected with Switched Access Services at Telephone Company designated WATS Serving Offices for the provision of WATS or WATS-type Services must place an order with each Telephone Company in whose territory the end office and the WATS Serving Office are located, if they are not collocated.

(C) Except for Special Access Service as set forth in (C) above or as set forth in (E) below, the customer may place the order for a Special Access Service with either Exchange Telephone Company.

(D) For Special Access Service involving a hub(s) the customer must place the order with the Telephone Company(s) in whose territory the hub(s) is located.

(E) For Directory Assistance Service, the customer must place an order with the Telephone Company in whose territory the Directory Assistance Location is located.

(F) For initiation, additions, changes or deletions to the Interim NXX Translation code(s), the customer must place an order with the Telephone Company who provides the Interim NXX Translation. The customer must also provide a copy of the order to the Telephone Companies subtending the Interim NXX Translation office.

(G) For a Special Access Service connection to a frame relay network, the customer must place the order with the Telephone Company that provides the frame relay switch. Special Access Service in this situation must be ordered to the wire center equipped with a frame relay switch.

(H) For Special Access Service used in conjunction with Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS), the customer must place the order with each Telephone Company that provides an ATM-CRS Port connection.

(I) For Special Access Service used in conjunction with Ethernet Transport Service (ETS), the customer must place the order with each Telephone Company that provides an ETS Port connection.
5. **Access Ordering (Cont'd)**

5.4 **Charges Associated with Access Ordering**

5.4.1 **Access Order Charge**

The Access Order Charge is applied to all customer requests for new Special Access, Public Packet Data Network, Switched Access, Directory Assistance, Asymmetric Digital Subscriber Line Access and Symmetric Digital Subscriber Line Access Services. In addition, the Access Order Charge is applicable to customer requests for additions, changes or rearrangements to existing Special Access, Public Packet Data Network, Switched Access, Directory Assistance and Digital Subscriber Line Access Services with the following exceptions:

The Access Order Charge does not apply:

- When a Service Date Change Charge is applicable.
- When a Design Change Charge is applicable.
- To administrative changes as set forth in Sections 6.4.1(B)(3), 7.2.2(C)(3), 8.1.5(E), 8.2.5(E), 16.1.2(B)(2)(b), 16.2.4(B)(2)(b), 16.3.4(B)(2)(b), and 16.4.4(B)(2)(b), following.
- When a change to a pending order does not result in the cancellation of the pending order and the issuance of a new order.
- When the Interim NXX Translation charge is applicable.
- When a Miscellaneous Service Order Charge is applicable.
- When a PIC Change Charge is applicable.
- When a Telephone Company initiated network reconfiguration requires a customer's existing access service to be reconfigured.
- When a service with an ICB rate is converted to a similar service with a non-ICB tariff rate prior to the expiration of the ICB.
- When a Billing Name and Address Order charge is applicable.
- When a 900 Blocking Service charge is applicable.
- When an IPG Access Service Customer as of May 1, 2011 places an order by August 1, 2011 to convert its existing terminating Feature Group D Switched Access Service to a two-way Feature Group D Switched Access Service.
5. **Access Ordering (Cont'd)**

5.4 **Charges Associated with Access Ordering (Cont'd)**

5.4.1 **Access Order Charge (Cont'd)**

The Access Order Charge does not apply (Cont'd):

- When Payphone Service Providers (PSPs) obtain Coin Supervision Additive Service in conjunction with local exchange service lines for the provision of pay telephone service.

- To the ADSL Access Service Voice-Data option as set forth in Section 8.1, following and to the SDSL Access Service Voice-Data option as set forth in Section 8.2, following.

- When an ADSL Access Service Line customer orders an ADSL service conversion as set forth in Section 8.1.5(E), following.

- To Local Number Portability (LNP) Services as set forth in Section 13.14, following.

- To Government Emergency Telecommunications Service (GETS) as set forth in Section 10.5.1(C), following.

- When a High Capacity Optional Rate Plan customer makes changes to its existing High Capacity Optional Rate Plan as specified in Section 7.2.8(A)(1)(c), following, for High Capacity Service Optional Rate Plan Replacements.

- When a SOCS Optional Rate Plan customer makes changes to its existing SOCS Optional Rate Plan as specified in Section 7.2.8(B)(4), following, for SOCS Optional Rate Plan Replacements.

- When an ATM-CRS MM-VCC Design Change Charge is applicable.

- When an ETS Design Change Charge is applicable.
5. **Access Ordering (Cont'd)**

5.4 **Charges Associated with Access Ordering (Cont'd)**

5.4.1 **Access Order Charge (Cont'd)**

The Access Order Charge does not apply (Cont’d):

- When an ATM-CRS customer establishes a new ATM-CRS Term Discount Plan or makes changes to an existing ATM-CRS Term Discount Plan.

- When an ETS customer establishes a new ETS Term Discount Plan or makes changes to an existing ETS Term Discount Plan.

- When establishing a new or changing an existing DSL Wholesale Pricing Plan, i.e., DSL WPP Monthly Plan, DSL WPP Term Plan and DSL Volume Pricing Plan (DSL VPP), or converting a DSL WPP Monthly Plan to a DSL WPP Term Plan or vice versa.

- When an ETS Term Discount Plan customer establishes a new or discontinues an existing ETS Volume Discount Plan.

- When an ETS Term Discount Plan customer establishes a new or discontinues an existing ETS Fixed Rate Option.

- When the ETS Port Protection optional feature is ordered in conjunction with the ordering of the Primary ETS Basic Port as set forth in Section 16.3.4(A)(6)(b), following.

The Access Order Charge will be applied on a per order basis to each order received by the Telephone Company or copy of an order received by the Telephone Company pursuant to 5.3.1 preceding and 5.3.2 preceding, except by the Telephone Company applying the Interim NXX Translation charge, and is in addition to other applicable charges as set forth in this and other sections of this tariff.

The Access Order Charge will be applied on a per order basis for any change, rearrangement or addition to the delivery of signaling to an existing STP Port.

The Access Order Charge will be applied on a per order basis for any change, rearrangement or addition of CICs to an existing Feature Group D trunk group.
5. Access Ordering (Cont'd)

5.4 Charges Associated with Access Ordering (Cont'd)

5.4.2 Miscellaneous Service Order Charge

A Miscellaneous Service Order Charge, as set forth in 17.4.1(D) following, applies to any service or combination of services ordered simultaneously from Section 13 of the tariff for which a service order is not already pending [with the exception of Presubscription (13.4), 900 Blocking Service (13.8), Billing Name and Address Service (13.9), Local Number Portability Services (13.14), and Access Recovery Charge (13.15) which do not have the charge applied]. The Miscellaneous Service Order Charge is an administrative charge designed to compensate for the expenses associated with service order issuance.

The charge always applies to the following services since a pending service order would not exist:

- Overtime Repair (13.2.2),
- Standby Repair (13.2.3),
- Testing and Maintenance with Other Telephone Companies other than when in conjunction with Acceptance Testing (13.2.4),
- Other Labor (13.2.5),
- Maintenance of Service (13.3.2).

The Miscellaneous Service Order Charge will also apply to the following services if they are ordered subsequent to the initial installation of the associated access service, thereby necessitating the issuance of another service order:

- Telecommunications Service Priority (13.3.3),
- Controller Arrangement [13.3.4(A)],
- International Blocking Service (13.8),
- Originating Line Screening (OLS) Service (13.10).
5. **Access Ordering (Cont'd)**

5.4 **Charges Associated with Access Ordering (Cont'd)**

5.4.2 **Miscellaneous Service Order Charge (Cont'd)**

The charge does not apply to the following services since there would exist a pending service order:

- Additional Engineering (13.1),
- Overtime Installation (13.2.1),
- Standby Acceptance Testing (13.2.3),
- Testing and Maintenance with Other Telephone Companies when in conjunction with Acceptance Testing (13.2.4),
- Additional Cooperative Acceptance Testing [13.3.1(A)(1) and 13.3.1(B)(1)],
- Coin Supervision Additive Service (13.12).

5.4.3 **Access Order Change Charges**

Access Order changes involve service date changes and design changes. The customer may request a change of its Access Order prior to the service date. The Telephone Company will make every effort to accommodate a requested change when it is able to do so with the normal work force assigned to complete such an order within normal business hours. If the change cannot be made with the normal work force during normal business hours, the Telephone Company will notify the customer. If the customer still desires the Access Order change, the Telephone Company will schedule a new service date as set forth in Section 5.1.2, preceding. All charges for Access Order change as set forth in Sections 17.4.1(B) and (C), following, will apply on a per occurrence basis.
5. Access Ordering (Cont'd)

5.4 Charges Associated with Access Ordering (Cont'd)

5.4.3 Access Order Change Charges (Cont’d)

Any increase in the number of ordered: (1) Special Access Service channels, (2) Switched Access Service lines, trunks, or busy hour minutes of capacity, (3) Frame Relay Connections and/or PVCs, (4) CCS/SS7 Port Terminations, (5) ATM-CRS Ports, Virtual Paths or Virtual Circuit Channels, (6) ETS Ports, ETS Channel Terminations, ETS Ethernet Virtual Connections, ETS Extended Ethernet Virtual Connections, or ETS Interconnected Ethernet Virtual Connections, or (7) IPG Ports, IPG Transport Terminations, IPG Transport Mileage Facilities or IPG Transport Mileage Terminations will be treated as a new Access Order (for the increased amount only).

If order changes are necessary to satisfy the transmission performance for a Special Access Service ordered by a customer, these changes will be made without order change charges being incurred by the customer.
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5. **Access Ordering (Cont'd)**

5.4 **Charges Associated with Access Ordering (Cont'd)**

5.4.3 **Access Order Change Charges (Cont'd)**

(A) **Service Date Change**

The customer may request a change of service date on a pending Access Order prior to the service date. A change of service date is a change of the scheduled service date by the customer to either an earlier date or a later date which does not exceed 30 calendar days from the original service date.

If the Telephone Company determines that the customer's request can be accommodated without delaying the service dates for orders of other customers, the service date will be changed and the Service Date Change Charge, as set forth in 17.4.1(B) following, will be applied to the order.

If the service date is changed to an earlier date, and the Telephone Company determines additional labor or extraordinary costs are necessary to meet the earlier service date requested by the customer, the customer will be notified by the Telephone Company that Expedited Order Charges as set forth in 5.1.2 preceding apply. Such charges will apply in addition to the Service Date Change Charge.

If the requested service date exceeds 30 calendar days following the original service date, and the Telephone Company determines that the customer's request can be accommodated, the Telephone Company will cancel the original order and apply the Cancellation Charges as set forth in 5.5.3 following. A new Access Order with a new service date will be issued. The Service Date Change Charge will not apply, however, the Access Order Charge will apply to the new order.

If the service date is changed due to a design change as set forth in (B) following, the Service Date Change Charge will apply.
5. Access Ordering (Cont’d)

5.4 Charges Associated with Access Ordering (Cont’d)

5.4.3 Access Order Change Charges (Cont’d)

(B) Design Change

The customer may request a design change to the service ordered prior to the requested service date. A design change is any change to an Access Order which requires engineering review. An engineering review is a review by Telephone Company personnel, of the service ordered and the requested changes to determine what changes in the design, if any, are necessary to meet the changes requested by the customer. Design changes include such things as the addition or deletion of optional features or functions or a change in the type of Transport Termination (Switched Access only), type of channel interface, type of Interface Group or technical specification package, or a change in the destination or speed of:

1) a Frame Relay Access Service Permanent Virtual Connection, 2) an Asynchronous Transfer Mode Cell Relay Access Service Virtual Path, 3) an Ethernet Transport Service (ETS) Ethernet Virtual Connection, 4) an ETS Extended Ethernet Virtual Connection or 5) an ETS Interconnected Ethernet Virtual Connection. Design changes do not include a change of customer designated premises, first point of switching, Feature Group type or channel type. Changes of this nature will require the issuance of a new order and the cancellation of the original order with appropriate cancellation charges applied.

The Telephone Company will review the requested change, notify the customer whether the change is a design change, if the change can be accommodated, and if a new service date is required. If the customer authorizes the Telephone Company to proceed with the design change, a Design Change Charge as set forth in 17.4.1(C) following will apply in addition to the charge for Additional Engineering as set forth in 17.4.2 following. If a change of service date is required, the Service Date Change Charge as set forth in 17.4.1(B) following will also apply. The Access Order Charge as specified in 17.4.1 following does not apply.
5. **Access Ordering (Cont'd)**

5.5 **Minimum Periods and Cancellations**

5.5.1 **Minimum Periods**

The minimum period for part-time Video and Program Audio Special Access Services is one day as set forth in Section 7.2.4, following, even though the service will be provided only for the duration of the event specified on the order (e.g., one-half hour, two hours, five hours, etc.).

The minimum period for Switched Access High Capacity DS3 and Synchronous Optical Channel Entrance Facilities and Direct Trunked Transport is as set forth in Section 6.1.3(A), following. The minimum period for Special Access High Capacity Service and Synchronous Optical Channel Service is as set forth in Sections 7.2.4 and 7.2.8, following. The minimum period for Frame Relay Access Service is as set forth in Sections 16.1.2(C) and 16.1.3, following. The minimum period for Asynchronous Transfer Mode Cell Relay Access Service is as set forth in Section 16.2.4(C), following. The minimum period for Ethernet Transport Service is as set forth in Section 16.3.4(C), following. The minimum period for Internet Protocol Gateway Access Service is as set forth in Section 16.4.4(C), following.

The minimum period for which Directory Assistance Service and the Directory Access Service is provided and for which charges apply is six months. A minimum period of six months applies for each additional period of service ordered or extended.

Switched Access usage rated services (i.e., End Office, and Tandem Switched Transport) have no minimum period.

The minimum period for which all other Access Service is provided and for which charges are applicable is one month.
5. **Access Ordering (Cont'd)**

5.5 **Minimum Periods and Cancellations (Cont’d)**

5.5.2 **Development of Minimum Period Charges**

When Access Service is disconnected after commencement of service, but prior to the expiration of the minimum period, charges are applicable for the balance of the minimum period. A disconnect constitutes facilities being returned to available inventory.

The Minimum Period Charge for monthly billed services will be determined as follows:

(A) For flat-rated Switched Access Service, the charge for a month or fraction thereof is equal to the applicable recurring charges plus any nonrecurring and/or Special Construction charge(s) that may be due.
5. Access Ordering (Cont'd)

5.5 Minimum Period and Cancellations (Cont'd)

5.5.2 Development of Minimum Period Charges (Cont'd)

(B) For Special Access Service and Public Packet Data Network Service the charge for a month or fraction thereof is the applicable monthly rates for the appropriate channel or service type plus any optional features, nonrecurring and/or special construction charge(s) that may apply.

(C) The Minimum Period Charge for part-time Video and Program Audio Services is the applicable daily rate for the appropriate channel type as set forth in Section 9.4.4, following.

(D) The Minimum Period Charge for Digital Subscriber Line Access Service is the applicable monthly rate or fraction thereof plus any nonrecurring charge(s) that may apply.

(E) The Minimum Period Charge for Directory Access Service is developed as set forth in Section 9.4.4, following.

5.5.3 Cancellation of an Access Order

(A) A customer may cancel an Access Order for the installation of service on any date prior to the service date. The cancellation date is the date the Telephone Company receives written or verbal notice from the customer that the order is to be cancelled. The verbal notice must be followed by written confirmation within 10 days. If a customer or a customer's end user is unable to accept Access Service within 30 calendar days after the original service date, the customer has the choice of the following options:

- The Access Order shall be cancelled and charges set forth in (B) following will apply or,
- Billing for the service will commence.

In such instances, the cancellation date or the billing date, depending on which option is selected by the customer, shall be the 31st day beyond the original service date of the Access Order.
5. **Access Ordering (Cont'd)**

5.5 **Minimum Period and Cancellations (Cont'd)**

5.5.3 **Cancellation of an Access Order (Cont'd)**

(B) When a customer cancels an Access Order for the installation of service, a Cancellation Charge will apply as follows:

1. Installation of Switched Access, Special Access or Public Packet Data Network Service facilities is considered to have started when the Telephone Company incurs any cost in connection therewith or in preparation thereof which would not otherwise have been incurred.

2. Where the customer cancels an Access Order prior to the start of installation of access facilities, no charges shall apply.

3. Where installation of access facilities has been started prior to the cancellation, the charges specified in (a) or (b) following, whichever is lower, shall apply.

   (a) A charge equal to the costs incurred in such installation, less estimated net salvage. Such costs include the nonrecoverable cost of equipment and material ordered, provided or used, plus the nonrecoverable cost of installation and removal including the costs of engineering, labor, supervision, transportation, rights-of-way and other associated costs;

   (b) The minimum period charges for Switched Access, Special Access, or Public Packet Data Network Service ordered by the customer, as set forth in 5.5.2 preceding.

(C) When a customer cancels an order for the discontinuance of service, no charges apply for the cancellation.

(D) When a customer cancels an order for the installation of ADSL Access Service or SDSL Access Service Voice-Data option, no charges apply for the cancellation.
5. Access Ordering (Cont'd)

5.5 Minimum Period and Cancellations (Cont'd)

5.5.3 Cancellation of an Access Order (Cont'd)

(E) If the Telephone Company misses a service date by more than 30 days and such delay is not requested or caused by the customer (excluding those circumstances where the date is missed due to acts of God, governmental requirements, work stoppages and civil commotions), the customer may cancel the Access Order without incurring cancellation charges.

5.5.4 Partial Cancellation Charge

Any decrease in the number of ordered: (1) Special Access Service channels, (2) Switched Access Service lines, trunks, or busy hour minutes of capacity, (3) Frame Relay Connections and/or PVCs, (4) CCS/SS7 Port Terminations, (5) Asynchronous Transfer Mode Cell Relay Access Service Ports, Virtual Paths or Virtual Circuit Channels, (6) ETS Ports, ETS Channel Terminations, ETS Ethernet Virtual Connections, ETS Extended Ethernet Virtual Connections, or ETS Interconnected Ethernet Virtual Connections, or (7) IPG Ports, IPG Transport Terminations, IPG Transport Mileage Facilities or IPG Transport Mileage Terminations will be treated as a partial cancellation and charges will be determined as set forth in Section 5.5.3(B), preceding.
6. **Switched Access Service**

6.1 **General**

Switched Access Service, which is available to customers for their use in furnishing their services to end users, provides a two-point communications path between a customer-designated premises and an end user's premises, or when used in conjunction with Internet Protocol Gateway Access Service (IPG) as described in Section 16.4, following, between an IPG SWC and an end user's premises. It provides for the use of common terminating, switching, and trunking facilities, and for the use of common subscriber plant of the Telephone Company.

Except as specified in Section 6.8.1(M), following, for Feature Group D Switched Access Service used in conjunction with IPG, Switched Access Service provides for the ability to originate calls from an end user's premises to a customer-designated premise, and to terminate calls from a customer-designated premise to an end user's premises. Specific references to material describing the elements of Switched Access Service are provided in Sections 6.1.3 and 6.5 through 6.9, following.

Rates and charges for Switched Access Service depend generally on the specific Feature Group ordered by the customer, (e.g., for MTS or WATS services or MTS/WATS equivalent services), and whether it is provided in a Telephone Company end office that is equipped to provide equal or non-equal access. Rates and charges for Switched Access Service are set forth in Section 17.2, following. The application of rates for Switched Access Service is described in Section 6.4, following. Rates and charges for services other than Switched Access Service, (e.g., a customer's interLATA toll message service), may also be applicable when Switched Access Service is used in conjunction with these other services. Descriptions of such applicability are provided in Sections 6.4.5, 6.4.9, 6.5.1(H), 6.5.3, 6.6.1(G), 6.6.2(D), 6.7.1(F) and 6.8.1(E), following. Finally, a credit is applied against line side Switched Access Service charges as described in Section 6.4.8, following.
6. Switched Access Service

6.1 General (Cont’d)

The following provision applies to the treatment of Toll VoIP-PSTN Traffic pursuant to the Federal Communications Commission’s Part 51 Interconnection Rules and in compliance with the Federal Communications Commission’s Report and Order and Further Notice of Proposed Rulemaking in CC Docket Nos. 96-45 and 01-92; GN Docket No. 09-51; WC Docket Nos. 03-109, 05-337, 07-135 and 10-90; and WT Docket No. 10-208, adopted October 27, 2011 and released November 18, 2011 (FCC 11-161). In the absence of an interconnection agreement between the Telephone Company and the customer specifying the treatment of Toll VoIP-PSTN Traffic, the Telephone Company will bill the customer the applicable switched access rates and charges specified in Section 17.2, following, on all jurisdictionally interstate voice traffic identified as Toll VoIP-PSTN Traffic.

Switched Access Service purchased from the provisions of this Tariff may be commingled with unbundled network elements or unbundled network element combinations purchased pursuant to the Commission’s Part 51 Interconnection Rules and in compliance with the Federal Communications Commission’s Report and Order and Order on Remand and Further Notice of Proposed Rulemaking in CC Docket Nos. 01-338, 96-98 and 98-147, adopted February 20, 2003 and released August 21, 2003 (FCC 03-36).
6. **Switched Access Service** (Cont'd)

6.1 **General** (Cont'd)

6.1.1 **Description and Provision of Switched Access Service Arrangements**

(A) **Description**

In general, Switched Access Service is provided in four different Feature Group arrangements which are service categories of standard and optional features. These are differentiated by their technical characteristics, e.g., line side vs. trunk side connection at the Telephone Company first point of switching. They are also differentiated by optional feature availability and the manner in which the end user accesses them in originating calling, e.g., with or without access codes of various lengths and digits.

Except as provided for in Sections 6.1.3(A)(1) and 6.8.1(M), following, the provision of the offered Feature Group requires Local Transport facilities, including an Entrance Facility, and the appropriate End Office functions. In addition, Special Access Service may, at the option of the customer, be connected with the offered Feature Group (D) at Telephone Company designated WATS Serving Offices. In addition, IPG may, at the option of the customer, be connected with Feature Group D at Telephone Company designated IPG SWCs.
6. **Switched Access Service (Cont'd)**

6.1 **General (Cont'd)**

6.1.1 **Description and Provision of Switched Access Service Arrangements (Cont’d)**

(A) **Description (Cont’d)**

There are three specific transmission specifications (i.e., Types A, B and C) that have been identified for the provision of Feature Group D. The technical specifications for the Entrance Facility and Direct Trunked Transport are the same as those set forth in Section 7, following for Voice Grade, High Capacity and Synchronous Optical Channel Services. The specifications provided are dependent on the Interface Group and the routing of the service, i.e., whether the service is routed directly to the end office or via an access tandem. The parameters for the transmission specifications are set forth in Section 15.1.2, following.

Feature Group D is arranged for originating, terminating, or two-way calling, based on the customer end office switching capacity ordered. Originating calling permits the delivery of calls from Telephone Exchange Service locations to the customer designated premises or when used in conjunction with IPG as described in Section 6.8.1(M), following, from Telephone Exchange Service locations to the IPG SWC. Terminating calling permits the delivery of calls from the customer designated premises to Telephone Exchange Service locations or when used in conjunction with IPG as described in Section 6.8.1(M), following, from the IPG SWC to Telephone Exchange Service locations. Two-way calling permits the delivery of calls in both directions, but not simultaneously. The Telephone Company will determine the type of calling to be provided unless the customer requests that a different type of directional calling is to be provided. In such cases, the Telephone Company will work cooperatively with the customer to determine the directionality.
6. **Switched Access Service** (Cont'd)

6.1 **General** (Cont'd)

6.1.1 **Description and Provision of Switched Access Service Arrangements** (Cont'd)

(A) **Description** (Cont'd)

There are various optional features associated with Local Transport, Common Switching and Transport Termination available with Feature Group D. In addition, the Interim NXX Translation and Operator Transfer Service optional features are available with Feature Group D.

Operator Transfer Services will be provided over FGD switched access service trunks from the operator service location to the customer's premises. Where required by technical limitations, a separate FGD trunk group will be established for Operator Transfer Service. The operator service location will provide trunk answer and disconnect supervisory signaling to the customer.

Detailed descriptions of the Feature Group(s) offered under this tariff are set forth in Sections 6.5 through 6.9, following. Each available Feature Group is described in terms of its specific physical characteristics and calling capabilities, the optional features available for use with it and the standard testing capabilities.

The Common Switching and Transport Termination optional features, which are described in Section 6.10, following, unless specifically stated otherwise, are available at all Telephone Company end office switches.
6. **Switched Access Service** (Cont'd)

6.1 **General** (Cont'd)

6.1.1 **Description and Provision of Switched Access Service Arrangements** (Cont'd)

**(B) Manner of Provision**

Switched Access is furnished in either quantities of lines or trunks, or in busy hour minutes of capacity (BHMCs). FGD Access is furnished on a BHMC and on a per trunk basis as set forth in Section 5.2, preceding. BHMCs are differentiated by type and directionality of traffic carried over a Switched Access Service arrangement. Differentiation of traffic among BHMC types is necessary for the Telephone Company to properly design Switched Access Service to meet the traffic carrying capacity requirement of the customer.

There are three major BHMC categories identified as: Originating, Terminating and Directory Assistance.

Originating BHMCs represent access capacity for carrying traffic from the end user to the customer or when used in conjunction with Internet Protocol Gateway Access Service, Originating BHMCs represent capacity within the operating territory of the Telephone Company for carrying traffic between the end user and an IPG SWC;

Terminating BHMCs represent access capacity for carrying traffic from the customer to the end user or when used in conjunction with Internet Protocol Gateway Access Service, Terminating BHMCs represent capacity within the operating territory of the Telephone Company for carrying traffic between the end user and an IPG SWC;

Directory Assistance BHMCs represent access capacity for carrying Directory Assistance traffic from the customer to a Directory Assistance location. When ordering capacity for FGD Access in BHMCs, the customer must at a minimum specify such access capacity in terms of Originating BHMCs and/or Terminating BHMCs.
6. **Switched Access Service (Cont'd)**

6.1 **General (Cont'd)**

6.1.1 **Description and Provision of Switched Access Service Arrangements (Cont'd)**

(B) **Manner of Provision (Cont'd)**

Because some customers will wish to further segregate their originating traffic into separate trunk groups, or because segregation may be required by network considerations originating BHMCs are further categorized into Domestic, 700, 800 series, 900, Operator, IDDD and Operator Transfer Services. Domestic BHMCs represent access capacity for carrying only domestic traffic other than 700, 800 series, 900, Operator and Operator Transfer Services traffic; IDDD BHMCs represent access capacity for carrying only international traffic; and, 700, 800 series, 900, Operator and Operator Transfer Services BHMCs represent access capacity for carrying, respectively, only 700, 800 series, 900, Operator or Operator Transfer Services traffic. When ordering such types of access capacity, the customer must specify Domestic, 700, 800 series, 900, Operator, IDDD or Operator Transfer Services BHMCs.

6.1.2 **Ordering Options and Conditions**

Switched Access Service is ordered under the Access Order provisions set forth in 5.2 preceding. Also, included in that section are regulations concerning miscellaneous service order charges which may be associated with Switched Access Service ordering (e.g., Service Date Changes, Cancellations, etc.).

6.1.3 **Rate Categories**

There are three rate categories which apply to Switched Access Service:

(1) Local Transport (described in 6.1.3(A) following)
(2) End Office (described in 6.1.3(B) following)
(3) Chargeable Optional Features (described in 6.1.3(C) following)
6. **Switched Access Service (Cont'd)**

6.1 **General (Cont'd)**

6.1.3 **Rate Categories (Cont'd)**

The following diagram depicts a generic view of the components of Switched Access Service and the manner in which the components are combined to provide a complete Access Service.

![Switched Access Service Diagram](image-url)
6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(A) Local Transport

The Local Transport rate category establishes the charges related to the transmission and tandem switching facilities between the customer designated premises and the end office switch(es), which may be a Remote Switching Module(s) or WATS Serving Office, where the customer's traffic is switched to originate or terminate the customer's communications. When used in conjunction with IPG as specified in Section 16.4, following, the Local Transport rate category establishes the charges related to the transmission and tandem switching facilities between the IPG SWC and the end office switch(es) to terminate the customer's communications. Mileage measurement rules are set forth in Section 6.4.6, following and in this section.

Local Transport is a two-way voice frequency transmission path composed of facilities determined by the Telephone Company. The two-way voice frequency transmission path permits the transport of calls in the originating direction (from the end user end office switch to the customer designated premises) and in the terminating direction (from the customer designated premises to the end office switch), but not simultaneously. The voice frequency transmission path may be comprised of any form or configuration of plant capable of and typically used in the telecommunications industry for the transmission of voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz. The customer must specify the choice of facilities (i.e., Voice Grade 2 or 4 wire, High Capacity DS1 or DS3 or Synchronous Optical Channel OC3 or OC12) to be used in the provision of the Direct Trunked Transport or Entrance Facility. High Capacity DS3 and Synchronous Optical Channel facilities are only available at wire centers identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, WIRE CENTER INFORMATION.

Except when ordering Local Transport associated with IPG, the customer must specify when ordering (1) whether the service is to be directly routed to an end office switch or through an access tandem switch, (2) the type of Direct Trunked Transport and whether it will overflow to Tandem Switched Transport when service is directly routed to an end office, (3) the type of Entrance Facility, where applicable, (4) the directionality of the service, and (5) when multiplexing is required, the hub(s) at which the multiplexing will be provided. When ordering Local Transport associated with IPG, the customer must specify when ordering (1) the IPG SWC and (2) the end office switch(es) to which the IPG customer wants to terminate interexchange voice traffic originated on its IP based network and/or receive interexchange voice traffic originated on the Telephone Company’s network.
6. **Switched Access Service** (Cont'd)

6.1 **General** (Cont'd)

6.1.3 **Rate Categories** (Cont'd)

(A) **Local Transport** (Cont’d)

When the customer has both Tandem Switched Transport and Direct Trunked Transport at the same end office, the customer will be provided Alternate Traffic Routing as set forth in Section 6.4.6, following.

Direct Trunked Transport is available at all tandems and at all end offices except those end offices identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, as not having the capability to provide Direct Trunked Transport. Direct Trunked Transport is not available: (1) from end offices that provide equal access through a Centralized Equal Access arrangement, or (2) from end offices that lack recording or measurement capability.
6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(A) Local Transport (Cont'd)

Normally, Direct Trunked Transport of originating 800 series calls from an end office is available only from Service Switching Point (SSP) equipped end offices. However, certain SSP equipped end offices cannot accommodate the direct trunking of the 800 series (other than the 800 service access code) service access code. These end offices are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC., TARIFF F.C.C. NO. 4. Additionally, certain non-SSP equipped end offices can accommodate direct trunking of originating 800 series calls. These end offices are also identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC., TARIFF F.C.C. NO. 4.
6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(A) Local Transport (Cont'd)

Unless otherwise ordered by the F.C.C., where the Telephone Company elects to provide equal access through a Centralized Equal Access arrangement, the Telephone Company will designate the serving wire center. The designated SWC will normally be that wire center which provides dial tone to the telephone company Centralized Equal Access tandem office identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.

When service is provided in cooperation with a non telephone company provider of Centralized Equal Access, the SWC will be that wire center which would normally provide dial tone to the telephone company point of interconnection with the non telephone company provider of Centralized Equal Access specified in the tariff of the Centralized Equal Access provider. Those Telephone Company offices providing equal access through centralized arrangements are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.
6. **Switched Access Service** (Cont'd)

6.1 **General** (Cont'd)

6.1.3 **Rate Categories** (Cont'd)

(A) **Local Transport** (Cont'd)

Local Transport is provided at the rates and charges set forth in 17.2.2 and 17.5.1 following. The application of these rates with respect to individual available Feature Groups is as set forth in 6.4.1(C) following. When more than one Telephone Company is involved in providing the Switched Access Service, the Local Transport rates are applied as set forth in 2.4.7 preceding.

The Local Transport Rate Category includes four classifications of rate elements: (1) Entrance Facility, (2) Direct Trunked Transport, (3) Tandem Switched Transport, and (4) Multiplexing.

(1) **Entrance Facility**

The Entrance Facility recovers a portion of the costs associated with a communications path between a customer designated premises and the serving wire center of that premises. Included as part of the Entrance Facility is a standard channel interface arrangement which defines the technical characteristics associated with the type of facilities to which the access service is to be connected at the customer designated premises and the type of signaling capability, if any.
6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(A) Local Transport (Cont'd)

(1) Entrance Facility (Cont'd)

Five types of Entrance Facility are available:

- Voice Grade 2 or 4 wire – an analog channel with an approximate bandwidth of 300 to 3000 Hz;
- High Capacity DS1 – an isochronous serial digital channel with a rate of 1.544 Mbps;
- High Capacity DS3 – an isochronous serial digital channel with a rate of 44.736 Mbps;
- Synchronous Optical Channel OC3 – a synchronous optical channel with a rate of 155.52 Mbps;
- Synchronous Optical Channel OC12 – a synchronous optical channel with a rate of 622.08 Mbps.

The minimum period for which a High Capacity DS3 or Synchronous Optical Channel Entrance Facility is provided is twelve months.

One charge applies for each Entrance Facility that is terminated at a customer designated premises. This charge specified in Section 17.2.2, following, will apply even if the customer designated premises and the serving wire center are collocated in a Telephone Company building, except as provided for below.
6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(A) Local Transport (Cont'd)

(1) Entrance Facility (Cont'd)

The Entrance Facility charge specified in Section 17.2.2, following, will not apply when: 1) the customer designated premises and serving wire center are physically (including caged, cageless, shared and adjacent arrangements) or virtually collocated as those terms are used in 47 C.F.R. § 51.323 and (2) the customer obtains such collocation for the purpose of interconnection with the Telephone Company’s network for the transmission and routing of telephone exchange service, exchange access or both, and for the purpose of providing local exchange or exchange access services to its customers.

The Telephone Company specific rate band assignment for the Entrance Facility rate element is specified in the Local Transport (LT) column in Section 17.5.1, following.

A customer's Local Transport may be connected to the Entrance Facility of another customer, providing the other customer submits a Letter of Authorization for this connection and assumes full responsibility for the cost of the Entrance Facility.
6. **Switched Access Service (Cont'd)**

6.1 **General (Cont'd)**

6.1.3 **Rate Categories (Cont'd)**

(A) **Local Transport (Cont'd)**

(2) **Direct Trunked Transport**

The Direct Trunked Transport rate elements recover a portion of the cost associated with a communications path or circuits dedicated to the use of a single customer between:

- the serving wire center and an end office,
- the serving wire center and a tandem,
- the serving wire center and a hub,
- a hub and an end office,
- the serving wire center and an ADM equipped wire center where add/drop multiplexing functions are performed,
- an ADM equipped wire center and an end office.

Direct Trunked Transport is available at all tandems and to all end offices except those end offices identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4-WIRE CENTER INFORMATION, as not having the capability to provide Direct Trunked Transport.

Direct Trunked Transport is not available: (1) from end offices that provide equal access through a Centralized Equal Access arrangement, or (2) from end offices that lack recording or measurement capability.
6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(A) Local Transport (Cont'd)

(2) Direct Trunked Transport (Cont'd)

Normally, Direct Trunked Transport of originating 800 series calls from an end office is available only from Service Switching Point (SSP) equipped end offices. However, certain SSP equipped end offices cannot accommodate the direct trunking of the 800 series (other than the 800 service access code) service access code. These end offices are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC., TARIFF F.C.C. NO. 4.

Additionally, certain non-SSP equipped end offices can accommodate direct trunking of originating 800 series calls. These end offices are also identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC., TARIFF F.C.C. NO. 4.

Five types of Direct Trunked Transport are available:

a) Voice Grade 2 or 4 wire – an analog channel with an approximate bandwidth of 300 to 3000 Hz;

b) High Capacity DS1 – an isochronous serial digital channel with a rate of 1.544 Mbps;

c) High Capacity DS3 – an isochronous serial digital channel with a rate of 44.736 Mbps;

d) Synchronous Optical Channel OC3 – a synchronous optical channel with a rate of 155.52 Mbps;

e) Synchronous Optical Channel OC12 – a synchronous optical channel with a rate of 622.08 Mbps.
6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(A) Local Transport (Cont'd)

(2) Direct Trunked Transport (Cont'd)

High Capacity DS3 Direct Trunked Transport cannot be terminated at end offices that are not identified as hub offices that provide DS3 to DS1 multiplexing.

Synchronous Optical Channel Service OC3 or OC12 Direct Trunked Transport cannot be terminated at end offices that are not identified as ADM equipped wire centers that provide OC3 to DS1 or OC12 to OC3 Add/Drop Multiplexing.

Additionally, DS1 Direct Trunked Transport cannot be terminated at end offices that are not identified as hub offices that provide DS1 to Voice Grade multiplexing or are not electronic end offices.

Offices that provide multiplexing and add/drop multiplexing functions are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4-WIRE CENTER INFORMATION.
6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(A) Local Transport (Cont'd)

(2) Direct Trunked Transport (Cont'd)

Direct Trunked Transport rates consist of a Direct Trunked Facility rate specified in Section 17.2.2, following, which is applied on a per mile basis and a Direct Trunked Termination rate which is applied at each end of each measured segment of the Direct Trunked Facility (e.g., at the end office, tandem, hub, ADM equipped wire center, and serving wire center). When the Direct Trunked Facility mileage is zero, neither the Direct Trunked Facility rate nor the Direct Trunked Termination rate will apply.

The Direct Trunked Facility rate recovers a portion of the costs of transmission facilities, including intermediate transmission circuit equipment, between the end points of the interoffice circuits.

The Direct Trunked Termination rate specified in Section 17.2.2, following, recovers a portion of the costs of the circuit equipment that is necessary for the termination of each end of the Direct Trunked Facility.

The Telephone Company specific rate band assignment for the Direct Trunked transport rate elements is specified in the Local Transport (LT) column in Section 17.5.1, following.

The minimum period for which High Capacity DS3 or Synchronous Optical Channel Direct Trunked Transport is provided is twelve months.
6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(A) Local Transport (Cont'd)

(3) Tandem Switched Transport

The Tandem Switched Transport rate elements recover a portion of the costs associated with a communications path between a tandem and an end office on circuits that are switched at a tandem switch.

Tandem Switched Transport rates consist of a Tandem Switching rate, a Tandem Switched Facility rate, and a Tandem Switched Termination rate.

In those instances where an SSP equipped end office is capable of handling 800 traffic on a direct trunked basis but incapable of handling 800 series (other than the 800 service access code) traffic on a direct trunked basis, a full credit will be provided for tandem switched transport charges associated with FGD service for 888 traffic delivered at the tandem. This results in all 800 series traffic being rated as direct trunked transport regardless of whether the SSP equipped end office is capable of handling 800 series (other than the 800 service access code) traffic on a direct trunked basis. Those SSP equipped end offices that cannot accommodate direct trunking of originating 800 series (other than the 800 service access code) traffic are identified in NECA TARIFF F.C.C. NO. 4, WIRE CENTER INFORMATION.

(a) The Tandem Switching rate recovers a portion of the costs of switching traffic through an access tandem. The Tandem Switching rate specified in 17.2.2 following is applied on a per access minute per tandem basis for all originating and all terminating minutes of use switched at the tandem. Tandem locations are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, WIRE CENTER INFORMATION.
6. **Switched Access Service (Cont'd)**

6.1 **General (Cont'd)**

6.1.3 **Rate Categories (Cont'd)**

(A) **Local Transport (Cont'd)**

(3) **Tandem Switched Transport (Cont'd)**

(b) The Tandem Switched Facility rate recovers a portion of the costs of transmission facilities, including intermediate transmission circuit equipment, between the end points of interoffice circuits. The Tandem Switched Facility rate specified in 17.2.2 following is applied on a per access minute per mile basis for all originating and terminating minutes of use routed over the facility.

(c) The Tandem Switched Termination rate recovers a portion of the costs of circuit equipment necessary for the termination of each end of each measured segment of the Tandem Switched Facility. The Tandem Switched Termination rate specified in 17.2.2 following is applied on a per access minute basis (for all originating and terminating minutes of use routed over the facility) at each end of each measured segment of Tandem Switched Facility (e.g., at the end office, host office and the access tandem). When the Tandem Switched Facility mileage is zero, neither the Tandem Switched Facility rate nor the Tandem Switched Termination rate will apply.

The Telephone Company specific rate band assignment for the Tandem Switched Transport rate elements is specified in Section 17.5.1, following.

(4) **Reserved for Future Use**
6. **Switched Access Service** (Cont'd)

6.1 **General** (Cont'd)

6.1.3 **Rate Categories** (Cont'd)

(A) **Local Transport** (Cont'd)

(5) **Multiplexing**

Multiplexing provides an arrangement for converting a single, higher capacity or bandwidth circuit to several lower capacity or bandwidth circuits.

When a derived channel is itself multiplexed to derive additional channels with a lesser capacity, this is referred to as cascade multiplexing. When cascade multiplexing occurs, a charge for the additional multiplexing function applies. When cascade multiplexing is performed at different hubbing locations, Direct Trunked Transport charges also apply between the hubs.

Multiplexing is only available at wire centers identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF NO. 4, WIRE CENTER INFORMATION.

The following multiplexing arrangements are offered for use with Switched Access Service.

(a) DS3 to DS1 Multiplexing charges specified in Section 17.2.2, following, apply when a High Capacity DS3 Entrance Facility or High Capacity DS3 Direct Trunked Transport is connected with High Capacity DS1 Direct Trunked Transport. The Telephone Company specific rate band assignment for the DS3 to DS1 Multiplexing rate element is specified in the Local Transport (LT) column in Section 17.5.1, following. The DS3 to DS1 multiplexer will convert a 44.736 Mbps channel to 28 DS1 channels using digital time division multiplexing.
6. **Switched Access Service (Cont'd)**

6.1 **General (Cont'd)**

6.1.3 **Rate Categories (Cont'd)**

(A) **Local Transport (Cont'd)**

(5) **Multiplexing (Cont’d)**

(b) DS1 to Voice Grade Multiplexing charges specified in Section 17.2.2, following, apply when a High Capacity DS1 Entrance Facility or High Capacity DS1 Direct Trunked Transport is connected with Voice Grade Direct Trunked Transport. However, a DS1 to Voice Grade Multiplexing Charge does not apply when a High Capacity DS1 Entrance Facility or High Capacity DS1 Direct Trunked Transport is terminated at an electronic end office and only Switched Access Service is provided over the DS1 facility (i.e., Voice Grade Special Access channels are not derived). The Telephone Company specific rate band assignment for the DS1 to Voice Grade Multiplexing rate element is specified in the Local Transport (LT) column in Section 17.5.1, following. The DS1 to Voice Grade multiplexer will convert a 1.544 Mbps channel to 24 Voice Grade channels.
6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(A) Local Transport (Cont'd)

(6) Add/Drop Multiplexing

Add/Drop Multiplexing provides a type of multiplexing function in connection with Synchronous Optical Channel Service that allows lower level signals to be added or dropped from a high speed optical carrier channel within a Telephone Company wire center.

The Add/Drop Multiplexing Central Office Port charge specified in Section 17.2.2, following, applies to the interface provided at a Telephone Company wire center for the purpose of adding or dropping lower capacity services from Synchronous Optical Channel Entrance Facilities or Direct Trunked Transport. Central Office Ports are available at the following speeds:

<table>
<thead>
<tr>
<th>Central Office Port</th>
<th>Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>OC3</td>
<td>155.52 Mbps</td>
</tr>
<tr>
<td>DS3</td>
<td>44.736 Mbps</td>
</tr>
<tr>
<td>DS1</td>
<td>1.544 Mbps</td>
</tr>
</tbody>
</table>

The Telephone Company specific rate band assignment for the Add/Drop Multiplexing rate element is specified in the Local Transport (LT) column in Section 17.5.1, following.
6. **Switched Access Service (Cont'd)**

6.1 **General (Cont'd)**

6.1.3 **Rate Categories (Cont'd)**

(A) **Local Transport (Cont'd)**

(6) **Add/Drop Multiplexing (Cont’d)**

OC12 service may only be multiplexed to OC3 channels.

When an OC3 channel is derived from an OC12 service and is further multiplexed to obtain DS3 service, a DS3 port charge will apply in addition to the OC3 port charge.

When a DS3 channel is derived from an OC3 service and is further multiplexed to obtain DS1 service, a DS3 to DS1 Multiplexing charge will apply in addition to the DS3 port charge.

When a DS1 channel is directly derived from an OC3 service, a DS1 port charge will apply.

When a DS1 channel is further multiplexed to a lower level signal, a DS1 to Voice Grade Multiplexing charge will also apply.

Add/Drop Multiplexing is only available at wire centers identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4 WIRE CENTER INFORMATION.
6. **Switched Access Service (Cont'd)**

6.1  **General (Cont'd)**

6.1.3  **Rate Categories (Cont'd)**

(A)  **Local Transport (Cont'd)**

(7)  **Customer Node**

A Customer Node charge specified in Section 17.2.2, following, applies when the Telephone Company provides terminal equipment at the customer designated premises for termination of a Synchronous Optical Channel Entrance Facility. Such equipment may be used to convert the signal from an optical to electrical format. The Customer Node charge is determined by the level of optical service (i.e., OC3 or OC12) delivered to the premises. Each Customer Node must be configured with one or more Customer Premises Ports.

Customer Premises Port charges specified in Section 17.2.2, following, apply in conjunction with the Customer Node charge. Each Customer Premises Port provides the interface to derive a lower capacity service at the customer premises. The type and quantity of ports is determined by the customer and is based on the type of Customer Node selected and the number of DS1, DS3, STS-1 and/or OC3 channels ordered. Customer Premises Ports are available at the following speeds:

<table>
<thead>
<tr>
<th>Customer Premises Port</th>
<th>Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>OC3</td>
<td>155.52 Mbps</td>
</tr>
<tr>
<td>STS-1</td>
<td>51.84 Mbps</td>
</tr>
<tr>
<td>DS3</td>
<td>44.736 Mbps</td>
</tr>
<tr>
<td>DS1</td>
<td>1.544 Mbps</td>
</tr>
</tbody>
</table>

The Telephone Company specific rate band assignment for the Customer Node and Customer Premises Port rate elements is specified in the Local Transport (LT) column in Section 17.5.1, following.
6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(A) Local Transport (Cont'd)

(8) Interface Groups

Ten Interface Groups are provided for terminating the Entrance Facility at the customer’s designated premises. Technical specifications concerning the available interface groups are set forth in Section 15.1, following.

(9) Non-chargeable Optional Features

Where transmission facilities permit, the individual transmission path between the customer's designated premises and the first point of switching, may at the option of the customer, be provided with the following optional features as set forth and described in Section 15.1.1(E), following.

- Supervisory Signaling
- Customer Specified Entry Switch Receive Level
- Customer Specification of Local Transport Termination
- 64 Clear Channel Capability

In addition to the above, Shared SONET Interoffice Ring Transport (SSRIT) is available as a non-chargeable optional feature with High Capacity DS3 or Synchronous Optical Channel Local Transport service from wire centers identified in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, WIRE CENTER INFORMATION. The SSRIT feature is set forth and described in Sections 7.10.3(E) and 7.11.3(C), following.

When a customer subscribes to Common Channel Signaling (SS7) Network Connection Service (CCSNC Service), the following optional features are made available and are described in Section 6.10.1, following.

- Signaling System 7 (SS7) Signaling
- Calling Party Number
- Carrier Selection Parameter
- Charge Number Parameter
- Carrier Identification Parameter
6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(A) Local Transport (Cont'd)

(10) Chargeable Optional Features

Common Channel Signaling, Signaling System 7 (CCS/SS7) Network Connection (CCSNC) Service provides a signaling path between a customer's designated Signaling Point of Interface (SPOI) and a Telephone Company's Signaling Transfer Point (STP). CCSNC is provided as set forth in Section 6.10.3, following.

800 Data Base Access Service is provided to all customers in conjunction with FGD switched access service. A Basic or Vertical Feature Query charge, as set forth in Section 17.2.2 (B), following, is assessed for each completed query returned from the 800 data base whether or not the actual call is delivered to the customer. The query is considered completed when the appropriate call routing information is returned to the Service Switching Point (SSP) that launched the query. The Basic Query provides the identification of the customer to whom the call will be delivered and includes area of service routing which allows routing of 800 series calls by telephone companies to different interexchange carriers based on the Local Access Transport Area (LATA) in which the call originates. The Vertical Feature Query provides this same customer identification function in addition to vertical features which may include:

(1) call validation (ensuring that calls originate from subscribed service areas);

(2) POTS translation of 800 series numbers (which is generally necessary for the routing of 800 series calls);

(3) alternate POTS translation (which allows subscribers to vary the routing of 800 series calls based on factors such as time of day, place of origination of the call, etc.); and

(4) multiple carrier routing (which allows subscribers to route to different carriers based on factors similar to those in (3)).
6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(B) End Office

The End Office rate category establishes the charges related to the local end office switching and end user termination functions necessary to complete the transmission of Switched Access communications to and from the end users served by the local end office. The End Office rate category includes the Local Switching and Information Surcharge rate elements. Directory Assistance Service is set forth in Section 9, following.

(1) Local Switching

The Local Switching rate element establishes the charges related to the use of end office switching equipment, the terminations in the end office of end user lines, the terminations of calls at Telephone Company Intercept Operators or recordings, the STP costs, and the SS7 signaling function between the end office and the Signaling Transfer Point.
6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(B) End Office (Cont'd)

(1) Local Switching (Cont’d)

Local Switching does not apply to Feature Groups B and D Switched Access Services associated with Wireless Switching Center (WSCs) directly interconnected to a Telephone Company access tandem office.

Where end offices are appropriately equipped, international dialing may be provided as a capability associated with Local Switching which provides local dial switching for Feature Groups C and D. International dialing provides the capability of switching international calls with service prefix and address codes having more digits than are capable of being switched through a standard FGD equipped end office.

Rates for Local Switching are set forth in Section 17.2.3, following. The application of these rates with respect to individual Feature Groups is as set forth in Section 6.4.1(C), following.

The Telephone Company specific rate band assignment for the Local Switching rate element is specified in Section 17.5.1, following.

There are four types of functions included in the Local Switching rate element: Common Switching, Transport Termination, Line Termination and Intercept. These are described in (a) through (d) following.
6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(B) End Office (Cont'd)

(1) Local Switching (Cont'd)

(a) Common Switching

Common Switching provides the local end office switching functions associated with the various access (i.e., Feature Group) switching arrangements. The Common Switching arrangements provided for the various Feature Group arrangements are described in 6.5 through 6.9 following.

Included as part of Common Switching are various non-chargeable optional features which the customer can order to meet the customer's specific communications requirements. These optional features are described in 6.10.1 following.

(b) Transport Termination

Transport Termination functions provide for the line or trunk side arrangements which terminate the Local Transport facilities. Included as part of these functions are various non-chargeable optional termination arrangements. These optional terminating arrangements are described in 6.10.2 following.

The number of Transport Terminations provided will be determined by the Telephone Company as set forth in 6.2.5 following.
6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(B) End Office (Cont'd)

(1) Local Switching (Cont'd)

(c) Line Termination

Line Termination provides for the terminations of end user lines in the local end office. There are two types of Line Terminations, i.e., Common Line Terminations and Special Access Service Terminations utilized in the provision of WATS or WATS-type services at Telephone Company designated WATS Serving Offices.

The above Special Access Service Terminations are differentiated by line side vs. trunk side terminations. In addition, there are various types of originating and terminating line side terminations depending on the type of signaling associated with the Special Access Service. Line side terminations are available with either dial pulse or dual tone multi-frequency address signaling.
6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(B) End Office (Cont'd)

(1) Local Switching (Cont’d)

(d) Intercept

The Intercept function provides for the termination of a call at a Telephone Company Intercept operator or recording. The operator or recording tells a caller why a call, as dialed, could not be completed, and if possible, provides the correct number.

(2) Information Surcharge

Information Surcharge rates are assessed to a customer based on the total number of access minutes. Information Surcharge rates are as set forth in 17.2.3(B) following. The application of these rates with respect to individual Feature Groups is as set forth in 6.4.1(C) following.

The Information Surcharge does not apply to Feature Groups B and D Switched Access Services associated with Wireless Switching Centers (WSCs) directly interconnected to a Telephone Company access tandem office.

The number of end office switching transmission paths will be determined as set forth in 6.2.5 following.
6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(C) Chargeable Optional Features

Where facilities permit, the Telephone Company will, at the option of the customer, provide the following chargeable optional features.

1. Interim NXX Translation

The Interim NXX Translation rate element provides for customer identification of non-data base services when calls are directed by end users in the 1+SAC+NXX-XXXX (e.g., 1+900+NXX-XXXX) format. The NXX codes are assigned to specific customers in conformance with the North American Numbering Plan (NANP). NXX code assignment(s) will be made by the NANP Coordinator. The Telephone Company will use the NXX code to identify the customer to whose point of termination the traffic is to be delivered, (i.e., at appropriately equipped electronic end offices, access tandems or through contracted arrangements with other parties.) It is then the responsibility of the customer to do any further translation the customer deems necessary to route the call. Customer assigned NXX codes which have not been ordered will be blocked.
6. **Switched Access Service (Cont'd)**

6.1 **General (Cont'd)**

6.1.3 **Rate Categories (Cont'd)**

(C) **Chargeable Optional Features (Cont'd)**

(1) **Interim NXX Translation (Cont'd)**

A nonrecurring charge, as set forth in 17.2.1 following, is associated with this optional feature. This nonrecurring charge is assessed by the Telephone Company on a per order, per LATA or Market Area basis and is applied in lieu of the Access Order Charge specified in 17.4.1(A) following. The nonrecurring charge is assessed only by the Telephone Company that provides the final translation function. A Telephone Company is said to have provided the final Interim NXX Translation when its translation identifies the customer's traffic and this traffic is then delivered to the customer's point of termination without any further translation. The description and application of this charge with respect to Feature Group D is as set forth in 6.4.1(B)(2) and 6.4.1(C)(2) following.

(2) **Operator Transfer Services**

Operator Transfer Service may be provided with Feature Group D Switched Access Service at Telephone Company designated Operator Services location. Operator Transfer Service is an originating service. The rate is assessed operator per 0-call transferred to a customer's. A 0-call is considered transferred when the Telephone Company Operator activates the switch transferring the call to the designated customer and the customer acknowledges receipt.

In addition to the Operator Transfer Service charge described above and in 6.10.3(B) following, Feature Group D Switched Access rates and charges as set forth in 6.4.1(B)(1) and 6.4.1(C) following, will apply per minute of use for Operator Transfer Service.
6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

(C) Chargeable Optional Features (Cont'd)

(2) Operator Transfer Services (Cont'd)

Operator Transfer Service charges, provided for in this tariff, are applied only to those calls actually transferred by the Telephone Company to the customer's operator.

(3) 800 Data Base Access Service

800 Data Base Access Service is provided to all customers in conjunction with FGD switched access service. When a 1+800 series+NXX-XXXX call is originated by an end user, the Telephone Company will utilize the Signaling System 7 (SS7) network to query an 800 data base to identify the customer to whom the call will be delivered and provide vertical features based on the dialed ten digits. The call will then be routed to the identified customer over FGD switched access. The 800 series includes the following service access codes: 800, 888, 877, 866, 855, 844, 833 and 822.
6. **Switched Access Service (Cont'd)**

6.1 **General (Cont'd)**

6.1.3 **Rate Categories (Cont'd)**

(C) **Chargeable Optional Features (Cont'd)**

(3) **800 Data Base Access Service (Cont'd)**

A Basic or Vertical Feature Query charge, as set forth in 17.2.2(B) following, is assessed for each completed query returned from the data base identifying the customer to whom the call will be delivered whether or not the actual call is delivered to the customer. The query is considered completed when the appropriate call routing information is returned to the Service Switching Point (SSP) that launched the query. The Basic Query provides the identification of the customer to whom the call will be delivered and includes area of service routing which allows routing of 800 series calls by telephone companies to different interexchange carriers based on the Local Access Transport Area (LATA) in which the call originates. The Vertical Feature Query provides the same customer identification as the basic query and vertical features which may include: (1) call validation, (ensuring that calls originate from subscribed service areas); (2) POTS translation of 800 series numbers; (3) alternate POTS translation (which allows subscribers to vary the routing of 800 series calls based on factors such as time of day, place or origination of the call, etc.); and (4) multiple carrier routing (which allows subscribers to route to different carriers based on factors similar to those in (3)).

The description and application of this charge with respect to Feature Group D is as set forth in 6.4.1(C)(2) and 6.4.1(C)(8) following.
6. **Switched Access Service** (Cont'd)

6.1 **General** (Cont'd)

6.1.4 **Special Facilities Routing**

Any customer may request that the facilities used to provide Switched Access Service be specially routed. The regulations for Special Facilities Routing (i.e., Avoidance, Diversity and Cable-Only) are set forth in Section 11, following.

6.1.5 **Design Layout Report**

At the request of the customer, the Telephone Company will provide to the customer the makeup of the facilities and services provided from the customer's premises to the first point of switching. This information will be provided in the form of a Design Layout Report. The Design Layout Report will be provided to the customer at no charge, and will be reissued or updated whenever these facilities are materially changed.

6.2 **Undertaking of the Telephone Company**

In addition to the obligations of the Telephone Company set forth in Section 2, preceding, the Telephone Company has certain other obligations concerning only the provision of Switched Access Service. These obligations are as follows:

6.2.1 **Network Management**

The Telephone Company will administer its network to insure the provision of acceptable service levels to all telecommunications users of the Telephone Company's network services. Generally, service levels are considered acceptable only when both end users and
6. Switched Access Service (Cont'd)

6.2 Undertaking of the Telephone Company (Cont'd)

6.2.1 Network Management (Cont'd)

Customers are able to establish connections with little or no delay encountered within the Telephone Company network. The Telephone Company maintains the right to apply protective controls, i.e., those actions, such as call gapping, which selectively cancel the completion of traffic, over any traffic carried over its network, including that associated with a customer's Switched Access Service. Generally, such protective measures would only be taken as a result of occurrences such as failure or overload of Telephone Company or customer facilities, natural disasters, mass calling or national security demands. In the event that the protective controls applied by the Telephone Company result in the complete loss of service by the customer, the customer will be granted a Credit Allowance for Service Interruption as set forth in 2.4.4(B)(3) preceding.

6.2.2 Transmission Specifications

Each Switched Access Service transmission path is provided with standard transmission specifications. There are three different standard specifications (Types A, B and C). The standard for a particular transmission path is dependent on the Feature Group, the Interface Group and whether the service is directly routed or via an access tandem. The available transmission specifications are set forth in 15.1.2 following. Data Transmission Parameters are also provided with each Switched Access Service transmission path. The Telephone Company will, upon notification by the customer that the data parameters set forth in 15.1.3 following are not being met, conduct tests independently or in cooperation with the customer, and take any necessary action to insure that the data parameters are met.

The Telephone Company will maintain existing transmission specifications on functioning service configurations installed prior to May 25, 1984, except that service configurations having performance specifications exceeding the standards set forth in 15.1.2 following will be maintained at the performance levels specified.
6. Switched Access Service (Cont'd)

6.2 Undertaking of the Telephone Company (Cont'd)

6.2.2 Transmission Specifications (Cont'd)

The transmission specifications concerning Switched Access Service are limits which, when exceeded, may require the immediate corrective action of the Telephone Company. The transmission specifications are set forth in 15.1.2 following. Acceptance limits are set forth in Technical Reference GR-334-CORE. This Technical Reference also provides the basis for determining Switched Access Service maintenance limits.

Feature Group D trunks equipped for Operator Transfer Service are subject to Feature Group D transmission specifications, respectively, unless otherwise specified.

6.2.3 Provision of Service Performance Data

Subject to availability, end-to-end service performance data available to the Telephone Company through its own service evaluation routines, may also be made available to the customer based on previously arranged intervals and format. These data provide information on overall end-to-end call completion and non-completion performance, e.g., customer equipment blockage, failure results and transmission performance. These data do not include service performance data which are provided under other tariff sections, e.g., testing service results. If data are to be provided in other than paper format, the charges for such exchange will be determined on an individual case basis.

6.2.4 Testing

(A) Acceptance Testing

At no additional charge the Telephone Company will, at the customer's request, cooperatively test at the time of installation, the following parameters: loss, C-notched noise, C-message noise, 3-tone slope, d.c. continuity and operational signaling. When the Local Transport is provided with Interface Groups 2 through 10, and the Transport Termination is two-wire (i.e., there is a four-wire to two-wire conversion in Local Transport), balance parameters (equal level echo path loss) may also be tested.
6. **Switched Access Service (Cont'd)**

6.2 **Undertaking of the Telephone Company (Cont'd)**

6.2.4 **Testing (Cont'd)**

**(B) Routine Testing**

At no additional charge, the Telephone Company will, at the customer's request, test after installation on an automatic or manual basis, 1004 Hz loss, C-message noise and Balance (Improved Return loss).

In the case of automatic testing, the customer shall provide remote office test lines and 105 test lines with associated responders or their functional equivalent.

The frequency of these tests will be that which is mutually agreed upon by the customer and the Telephone Company, but shall consist of not less than quarterly 1004 Hz Loss and C-message noise tests and an annual Balance test. Trunk test failures requiring customer participation for trouble resolution will be provided to the customer on an as-occurs basis.

Additional tests may be ordered as set forth in 13.3.1 following. Charges for these additional tests are set forth in 17.4.4 following.
6. Switched Access Service (Cont'd)

6.2 Undertaking of the Telephone Company (Cont'd)

6.2.5 Determination of Number of Transmission Paths

For Feature Group D when ordered on a per trunk basis the customer specifies the type of transport facilities and the number of channels in the order for service. For Tandem Switched Transport, the Telephone Company will determine the number of Switched Access Service transmission paths to be provided for the Switched Access Feature Group D busy hour minutes of capacity ordered. The number of transmission paths will be developed using the total busy hour minutes of capacity by type (as described in Section 6.1.1(B), preceding) for the end offices for each Feature Group ordered from a customer's designated premises or from an IPG SWC when the customer uses Feature Group D in conjunction with IPG as described in Section 16.4, following. The total busy hour minutes of capacity by type (e.g., originating, terminating, IDDD, Operator) for the end office will be converted to transmission paths using standard Telephone Company traffic engineering methods. The number of transmission paths provided shall be the number required based on (1) the use of access tandem switches and end office switches, (2) the use of the end office switches only, or (3) the use of the tandem switches only.
6. **Switched Access Service** (Cont'd)

6.2 **Undertaking of the Telephone Company** (Cont'd)

6.2.6 **Trunk Group Measurement Reports**

Subject to availability, the Telephone Company will make available trunk group data in the form of usage in CCS, peg count and overflow, to the customer based on previously agreed to intervals.
6. **Switched Access Service (Cont'd)**

6.3 **Obligations of the Customer**

In addition to the obligations of the customer set forth in Section 2 preceding, the customer has certain specific obligations pertaining to the use of Switched Access Service. These obligations are as follows:

6.3.1 **Report Requirements**

Customers are responsible for providing the following reports to the Telephone Company, when applicable.

(A) **Jurisdictional Reports**

When a customer orders Switched Access Service for both interstate and intrastate use, the customer is responsible for providing reports as set forth in 2.3.11 preceding. Charges will be apportioned in accordance with those reports. The method to be used for determining the interstate charges is set forth in 2.3.12 preceding.

(B) **Code Screening Reports**

When a customer orders service class routing, trunk access limitation or call gapping arrangements, it must report the number of trunks and/or the appropriate codes to be instituted in each end office or access tandem switch, for each of the arrangements ordered.
6. Switched Access Service (Cont'd)

6.3 Obligations of the Customer (Cont'd)

6.3.2 Trunk Group Measurement Reports

With the agreement of the customer, trunk group data in the form of usage in CCS, peg count and overflow for its end of all access trunk groups, where technologically feasible, will be made available to the Telephone Company. These data will be used to monitor trunk group utilization and service performance and will be based on previously arranged intervals and format.

6.3.3 Supervisory Signaling

The customer's facilities shall provide the necessary on-hook, off-hook, answer and disconnect supervision.

6.3.4 Short Duration Mass Calling Requirements

When a customer offers service for which a substantial call volume is expected during a short period of time (e.g., 900 service media stimulated events), the customer must notify the Company at least 48 hours in advance of each peak period. Notification should include the nature, time, duration, and frequency of the event, an estimated call volume, and the telephone number(s) to be used.

On the basis of the information provided, the Company may invoke network management controls, (e.g., call gapping and code blocking) to reduce the probability of excessive network congestion. The Company will work cooperatively with the Customer to determine the appropriate level of such control.
6. Switched Access Service (Cont'd)

6.3 Obligations of the Customer (Cont'd)

6.3.5 Call Signaling

Depending on the signaling system used by the customer in its network, the customer's facilities shall transmit the following call signaling information to the Telephone Company on traffic the customer’s end users originate which is handed off for termination on the Telephone Company’s network.

(A) Signaling System 7 (SS7) Signaling

When the customer uses SS7 signaling, it will transmit the Calling Party Number (CPN) or, if different from the CPN, the Charge Number (CN) information in the SS7 signaling stream.

(B) Multi-Frequency (MF) Signaling

When the customer uses MF signaling, it will transmit the number of the calling party or, if different from the number of the calling party, the Charge Number (CN) information in the MF Automatic Number Identification (ANI) field.

(C) Internet Protocol (IP) Signaling

When the customer uses IP signaling, it will transmit the telephone number of the calling party or, if different from the telephone number, the billing number of the calling party.
6. Switched Access Service (Cont'd)

6.4 Rate Regulations

This section contains the specific regulations governing the rates and charges that apply for Switched Access Service.

The rates in Section 17 of this Tariff for Switched Access Services and miscellaneous services related to Switched Access are referenced to the applicable current rates in NECA Tariff F.C.C. No. 5. For purposes of references to the rates of NECA, Tariff F.C.C. No. 5, current rate shall mean the NECA tariffed rate in effect at the time the service is provided by the Company.

The Company is a rural CLEC under Section 61.26(a)(6) of the Federal Communications Commission’s (FCC’s) Rules, 47 C.F.R. §61.26(a)(6). The Company’s operations are exclusively in the rural areas of a Non-rural ILEC and several Rural ILECs. As a Rural CLEC originating and terminating traffic in the rural territory of a Non-rural ILEC, the Company’s rates for Switched Access Services are equal to the rates prescribed in NECA Tariff F.C.C. No. 5 for Switched Access Services, assuming the highest rate band for local switching. Consistent with Section 61.26(c) of these rules, this Tariff does not include any charges for Carrier Common Line services or a presubscribed interexchange carrier charge.

6.4.1 Description and Application of Rates and Charges

There are two types of rates and charges that apply to Switched Access Service; recurring (usage and flat rates) and nonrecurring charges. These rates and charges are applied differently to the various rate elements as set forth in (C) following.

(A) Recurring Rates

(1) Usage Rates for Switched Access Service are rates that apply on a per-access minute or a per-call basis. Access minute charges and per-call charges are accumulated over a monthly period.

(2) Flat Rates for Switched Access Service are rates that apply on a per-month, per-rate element basis.

(B) Nonrecurring Charges

Nonrecurring charges are one-time charges that apply for a specific work activity (i.e., installation or change to an existing service). The types of nonrecurring charges that apply for Switched Access Service are: installation of service, Interim NXX Translation optional feature, and service rearrangements. These charges, with the exception of the Interim NXX Translation optional feature, are in addition to the Access Order Charge as specified in 17.4.1(A) following.
6. **Switched Access Service (Cont'd)**

6.4 **Rate Regulations (Cont'd)**

6.4.1 **Description and Application of Rates and Charges (Cont'd)**

(B) **Nonrecurring Charges (Cont'd)**

(1) **Installation of Service**

For Entrance Facilities, a Local Transport nonrecurring installation charge, as set forth in 17.2.1(A) following, will be applied at the serving wire center for each Entrance Facility installed.

For Direct Trunked Transport ordered to the end office, a Local Transport nonrecurring trunk activation charge, as set forth in 17.2.1 (E) following, will be applied at the end office on a per order basis for each group of 24 Direct Trunked Transport trunks or fraction thereof that is activated at the end office.

For Direct Trunked Transport ordered to the access tandem, a Local Transport nonrecurring trunk activation charge, as set forth in 17.2.1(E) following, will be applied at the access tandem on a per order basis for each group of 24 Direct Trunked Transport trunks or fraction thereof that is activated at the access tandem.
6. **Switched Access Service** (Cont'd)

6.4 **Rate Regulations** (Cont'd)

6.4.1 **Description and Application of Rates and Charges** (Cont'd)

6.4.1 (B) **Nonrecurring Charges** (Cont'd)

(1) **Installation of Service** (Cont'd)

A maximum of 24 trunks can be activated on a DS1 facility and a maximum of 672 trunks can be activated on a DS3 facility.

For example, if a customer orders a DS1 Entrance Facility and requests activation of 18 of the available circuits, the customer will be charged one Local Transport High Capacity DS1 Installation nonrecurring charge at the serving wire center and one Direct Trunked Transport Activation nonrecurring charge at the end office. If at a later date the customer requests the activation of three more circuits, the customer will then be charged an additional Direct Trunked Transport Activation nonrecurring charge. These charges are in addition to the Access Order Charge as specified in 17.4.1(A) following.

(2) **Interim NXX Translation Optional Feature**

This nonrecurring charge applies to the initial order for the installation of the Interim NXX Translation optional feature with Feature Group D Switched Access Service and for each subsequent order received to add or change NXX translation codes. This charge, if applicable, applies whether this optional feature is installed coincident with or at any time subsequent to the installation of Switched Access Services. This charge is applied by the Telephone Company per order, per LATA or Market Area. When it is necessary for multiple telephone companies to provide the translation function, the nonrecurring charge is assessed only by the Telephone Company that provides the final translation function which identifies the customer's traffic and this traffic is then delivered to the customer's point of termination without any further translation.
6. **Switched Access Service (Cont'd)**

6.4 **Rate Regulations (Cont'd)**

6.4.1 **Description and Application of Rates and Charges (Cont'd)**

(B) **Nonrecurring Charges (Cont'd)**

(3) **Service Rearrangements**

All changes to existing services other than changes involving administrative activities will be treated as a discontinuance of the existing service and an installation of a new service. The nonrecurring charge described in (1) preceding will apply for this work activity. Moves that change the physical location of the point of termination are described and charged for as set forth in 6.4.4 following.

- If, due to technical limitations of the Telephone Company, a customer could not combine its Interim NXX traffic with its other trunk side Switched Access Services, no charge shall apply to combine these trunk groups when it becomes technically possible.
6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.1 Description and Application of Rates and Charges (Cont'd)

(B) Nonrecurring Charges (Cont'd)

(3) Service Rearrangements (Cont'd)

Administrative changes will be made without charge(s) to the customer. Administrative changes are as follows:

- Change of customer name,
- Change of customer or customer's end user premises address when the change of address is not a result of a physical relocation of equipment,
- Change in billing data (name, address, or contact name or telephone number),
- Change of agency authorization,
- Change of customer circuit identification,
- Change of billing account number,
- Change of customer test line number,
- Change of customer or customer's end user contact name or telephone number, and
- Change of jurisdiction.

Other changes made without charge to the customer are as follows:

- Changes and additions to existing Switched Access Services which are necessary due to Telephone Company initiated network reconfigurations, and required to provide the same grade of service to the customer that existed prior to the reconfiguration. Charges will apply to those changes and additions which are in excess of those required to provide the same grade of service and/or capacity. Grade of service will be as determined by industry standard engineering tables.
6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.1 Description and Application of Rates and (Cont'd)

(B) Nonrecurring Charges (Cont'd)

(3) Service Rearrangements (Cont'd)

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6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.1 Description and Application of Rates and Charges (Cont'd)

(B) Nonrecurring Charges (Cont'd)

(3) Service Rearrangements (Cont'd)

[RESERVED FOR FUTURE USE]
6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.1 Description and Application of Rates and Charges (Cont'd)

(B) Nonrecurring Charges (Cont'd)

(3) Service Rearrangements (Cont'd)

Changes to the point in time when the off-hook supervisory signal is provided in the originating call sequence i.e., when the off-hook supervisory signal is changed from being provided by the customer's equipment before the called party answers to being forwarded by the customer's equipment when the called party answers or vice versa, are subject to the Access Order Charge as set forth in 17.4.1(A) following.

For additions, changes or modifications to an optional feature which has a separate nonrecurring charge, that nonrecurring charge will apply.

For additions, changes, or modifications to optional features that do not have their own separate nonrecurring charges, an Access Order Charge as set forth in 17.4.1(A) following will apply (with the exception of the addition of 64 Clear Channel Capability to an existing service). When an optional feature is not required on each transmission path, but rather for an entire transmission path group, an end office or an access tandem switch, only one such charge will apply (i.e., it will not apply per transmission path).

When the 64 Clear Channel Capability optional feature is installed on an existing facility, the addition will be treated as a discontinuance and start of service and all associated non-recurring charges will apply.

For conversion of FGD trunks from multi-frequency address signaling to SS7 signaling or from SS7 signaling to multi-frequency address signaling, nonrecurring charges will apply as set forth in 17.2.1(D).
6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.1 Description and Application of Rates and Charges (Cont'd)

(C) Application of Rates

Rates are applied either as premium or non-premium rates.

The application of these rates is dependent upon the Feature Group, type of Entrance Facility, type of transport (e.g., Direct Trunked Transport, Tandem Switched Transport, type of Multiplexing) and the availability of equal access capabilities in the end office to which the service is provided.

The following rules provide the basis for applying the rates and charges:

(1) Premium Rates

Premium rates apply to all access minutes that originate or terminate at end offices equipped with equal access (i.e., FGD) capabilities, and to Directory Transport Service. Premium rates also apply to FGD access minutes that originate or terminate at a Wireless Switching Center (WSC) that is directly connected to a Telephone Company access tandem office.
6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.1 Description and Application of Rates and Charges (Cont'd)

(C) Application of Rates (Cont'd)

(1) Premium Rates (Cont'd)

In addition, premium rates always apply to the following Local Transport rate elements:

- Entrance Facility
- Direct Trunked Facility
- Direct Trunked Termination
- Multiplexing
- Tandem Switched Facility
- Tandem Switched Termination
- Tandem Switching

(2) Non-premium Rates

Non-premium rates do not apply to the following Local Transport rate elements:

- Entrance Facility
- Direct Trunked Facility
- Direct Trunked Termination
- Multiplexing
- Tandem Switched Facility
- Tandem Switched Termination
- Tandem Switching
6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.1 Description and Application of Rates and Charges (Cont'd)

(C) Application of Rates (Cont'd)

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6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.1 Description and Application of Rates and Charges (Cont'd)

(C) Application of Rates (Cont'd)

(4) Transition Billing Arrangement

(a) The number of access minutes to be rated as premium access minutes is determined as follows:

(i) Where end office specific usage data is available, premium rates apply to the measured access minutes originating from or terminating at the equal access end office(s).
6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.1 Description and Application of Rates and Charges (Cont'd)

(C) Application of Rates (Cont'd)

(4) Transition Billing Arrangement (Cont’d)

(a) (Cont’d)

(ii) Such apportionment will be based on the ratio of the number of subscriber lines in the access area of the first point of switching that are served by equal access end offices to the total number of subscriber lines in that access area.
6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.1 Description and Application of Rates and Charges (Cont'd)

(C) Application of Rates (Cont'd)

(4) Transition Billing Arrangement (Cont’d)

(b) (Cont’d)

(ii) (Cont'd)

The ratios used to calculate the premium usage will be determined on a quarterly basis. The ratios to be used for the succeeding quarter will be provided to the customer with the last bill rendered in the quarter or mailed separately within five working days after the first day of the new quarter (i.e., January, April, July and October).

For purposes of administering this provision: (1) subscriber lines are defined as exchange service lines, Centrex lines and Centrex-type lines provided by the Telephone Company under its local and/or general exchange service tariff; and (2) the local calling area of the dial tone office is as defined in the Telephone Company's local and/or general exchange service tariff.
6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.1 Description and Application of Rates and Charges (Cont'd)

(C) Application of Rates (Cont'd)

(4) Transition Billing Arrangement (Cont'd)

(a) (Cont'd)

(iii) [RESERVED FOR FUTURE USE]
6. **Switched Access Service (Cont'd)**

6.4 **Rate Regulations (Cont'd)**

6.4.1 **Description and Application of Rates and Charges (Cont'd)**

(C) **Application of Rates (Cont'd)**

(5) **Notice of Equal Access Conversion**

The Telephone Company will provide written notification to all access customers of record within a particular LATA that an end office in that LATA is scheduled to be converted to an equal access end office. This notification will be sent, via certified U.S. Mail, to each customer of record in the LATA where the conversion is scheduled to occur, at least six months in advance of the conversion date.

The customer will have the choice of converting all or part of the existing services to equal access (i.e., Feature Group D) or retaining the existing services. The conversion of existing services will be at no charge provided the order to convert such services to Feature Group D is received as set forth in 6.4.3 following. Premium rates will apply to the total access minutes beginning on the actual conversion date, whether the customer chooses to convert to FGD or retain existing services.
6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.1 Description and Application of Rates and Charges (Cont'd)

(C) Application of Rates (Cont'd)

7) Common Channel Signaling/Signaling System 7 (CCS/SS7) Network Connection Service

The CCS/SS7 Network Connection is comprised of a Signaling Mileage Facility charge, a Signaling Mileage Termination charge, a Signaling Entrance Facility charge, and a Signaling Transfer Point (STP) Port charge.

The Signaling Mileage Facility charge is assessed on a per facility per mile basis. The Signaling Mileage Termination charge is assessed on a per termination basis (i.e., at each end of the Signaling Mileage Facility). When the Signaling Mileage Facility mileage measurement is zero, Signaling Mileage Termination charges do not apply.

The Signaling Entrance Facility charge is assessed on a per facility basis for the connection between the customer's designated premises (Signaling Point of Interface) and the serving wire center of that premises.

The STP Port charge is assessed on a per port basis for each termination of a Signaling Mileage Facility at an STP.

8) 800 Data Base Access Service

A Basic Query or Vertical Feature Query charge applies for each completed query that is returned from the 800 data base identifying the customer to whom the call will be delivered whether or not the actual call is delivered to the customer. The query is considered completed when the appropriate call routing information is returned to the Service Switching Point (SSP) that launched the query. Query charges, as set forth in 17.2.2(B), will only be applied by those companies whose wire centers are identified as assessing query charges in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.
6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.1 Description and Application of Rates and Charges (Cont'd)

(C) Application of Rates (Cont'd)

(8) 800 Data Base Access Service (Cont'd)

When Feature Group D switched access service is used for the provision of 800 Data Base Access Service and the total minutes of use and/or count of queries can be determined for each customer at a tandem or SSP but cannot be determined by individual end office, an allocation method will be utilized to determine minutes of use and/or queries by end office and customer. For each end office a ratio will be developed and applied against the total minutes of use and/or count of queries for a given customer as determined by the tandem or SSP. These ratios will be developed by dividing the unidentified originating 800 series minutes of use at an end office by the total unidentified originating minutes of use in all end offices subtending the tandem or SSP. For example, assume:

- Three end offices (EO-1, EO-2, and EO-3) subtend a tandem

  EO-1 measures 2,000 minutes of 800 use
  EO-2 measures 3,000 minutes of 800 use
  EO-3 measures 5,000 minutes of 800 use

  10,000  TOTAL

- The tandem delivers 800 usage to two customers:

  IC-A has 4,000 minutes of use
  IC-B has 6,000 minutes of use

- The allocation ratio for EO-1 is 20%

  \[ \frac{2,000}{10,000} \]

- The minutes of use to be billed by EO-1 are:

  800 to IC-A (20% \times 4,000)
  \[ 1,200 \]

  1,200 to IC-B (20% \times 6,000)

  2,000  TOTAL
6. **Switched Access Service** (Cont'd)

6.4 **Rate Regulations** (Cont'd)

6.4.2 **Minimum Monthly Charge**

Switched Access Service is subject to a minimum monthly charge. The minimum charge applies for the total capacity provided. The minimum monthly charge is calculated as follows.

For usage rated Local Transport, Local Switching and Information Surcharge rate elements, the minimum monthly charge is the sum of the recurring charges set forth in Sections 17.2.2 and 17.2.3, following, for either the actual measured usage or the assumed usage prorated to the number of days or major fraction of days based on a 30 day month.

For flat rated Local Transport rate elements, the minimum monthly charge is the sum of the recurring charges set forth in Section 17.2.2, following, prorated to the number of days or major fraction of days on a 30 day month.
6. **Switched Access Service (Cont'd)**

6.4 **Rate Regulations (Cont'd)**

6.4.3 [RESERVED FOR FUTURE USE]
6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.4 Moves

A move involves a change in the physical location of one of the following:

- The point of termination at the customer designated premises
- The customer designated premises

The charges for the move are dependent on whether the move is to a new location within the same building or to a different building.

(A) Moves Within the Same Building

When the move is to a new location within the same building, the charge for the move will be an amount equal to one half of the installation nonrecurring charge for the capacity affected. This charge is in addition to the Access Order Charge as specified in 17.4.1(A) following. There will be no change in the minimum period requirements.

(B) Moves to a Different Building

Moves to a different building will be treated as a discontinuance and start of service and all associated nonrecurring charges will apply. New minimum period requirements will be established for the new service. The customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued service.

6.4.5 Local Information Delivery Services

Calls over Switched Access Service in the terminating direction to certain community information services will be rated under the applicable rates for Switched Access Service as set forth in 17.2 following. In addition, the charges per call as specified under the Telephone Company's local and/or general exchange service tariffs, e.g., 976 (DIAL-IT) Network Services, will also apply.
6. **Switched Access Service (Cont'd)**

6.4 **Rate Regulations (Cont'd)**

6.4.6 **Mileage Measurement**

The mileage to be used to determine the monthly rate for Local Transport is calculated on airline distances between the end office switch, which may be a Remote Switching Module, (where the call carried by Local Transport originates or terminates) and the customer's serving wire center or between an end office switch, which may be a Remote Switching Module (where the call carried by Local Transport terminates) and an IPG SWC when the customer uses Feature Group D in conjunction with IPG as described in Section 16.4, following. When Direct Trunked Transport is ordered between the serving wire center and the end office, mileage is normally measured in one segment from the serving wire center to the end office. When Direct Trunked Transport is ordered between a serving wire center and a tandem and Tandem Switched Transport is ordered between the tandem and the end office, mileage is calculated separately for each segment. Exceptions to these methods are as set forth in (B) through (J) following. For SS7 signaling, the mileage to be used to determine the monthly rate for the Signaling Mileage Facility is calculated on the airline distance between the serving wire center associated with the customer's designated premises (Signaling Point of Interface) and the Telephone Company wire center providing the STP Port.

Where applicable, the V&H coordinates method is used to determine mileage. This method is set forth in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, for Wire Center Information (V&H coordinates).
6. **Switched Access Service (Cont'd)**

6.4 **Rate Regulations (Cont'd)**

6.4.6 **Mileage Measurement (Cont'd)**

Mileage rates are as set forth in Section 17.2.2, following. To determine the rate to be billed, first compute the airline mileage using the V&H coordinates method. If the calculation results in a fraction of a mile, always round up to the next whole mile before determining the mileage and applying the rates. Then multiply the mileage by the appropriate rate.

Exceptions to the mileage measurement rules are as follows:

(A) [RESERVED FOR FUTURE USE]
6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.6 Mileage Measurement (Cont'd)

(C) [RESERVED FOR FUTURE USE]
6. Switched Access Service (Cont'd)

6.4 Rate Regulations (Cont'd)

6.4.6 Mileage Measurement (Cont'd)

(D) Feature Group D - Alternate Traffic Routing

When the Alternate Traffic Routing optional feature is provided with Feature Group D, the Local Transport access minutes will be apportioned between the two trunk groups used to provide this feature. Such apportionment will be made using: (1) actual minutes of use if available, (2) standard Telephone Company traffic engineering methodology and will be based on the last trunk CCS desired for the high usage group, as described in 6.10.1(L) following (Alternate Traffic Routing), and the total busy hour minutes of capacity ordered to the end office, when the feature is provided at an end office switch, or to the subtending end offices when the feature is provided at an access tandem switch, or (3) an apportionment mutually agreed to by the Telephone Company and the customer. This apportionment will serve as the basis for Local Transport calculation.
6. **Switched Access Service (Cont'd)**

6.4 **Rate Regulations (Cont'd)**

6.4.6 **Mileage Measurement (Cont'd)**

(E) **Feature Group D - WSCs Directly Interconnected to Access Tandems**

The Local Transport mileage for Feature Group D switched access service provided to Wireless Switching Centers (WSCs) directly interconnected to a Telephone Company access tandem office will be determined on an airline basis, using the V&H coordinate method. The mileage will be measured between the customer's serving wire center and the Telephone Company access tandem office to which the WSC is interconnected.

(F) **Feature Group D - Remote Offices**

Local Transport mileage for Feature Group D Switched Access Service provided to a Remote Office will be measured in multiple segments.

When the facility is directly trunked to the Host Office, Direct Trunked Facility mileage will be measured between the customer's serving wire center and the Host Office, and Tandem Switched Facility mileage will be measured between the Host Office and the Remote Office. The Tandem Switching charge will not apply.

When the facility is routed through a tandem to the Host Office, Direct Trunked Facility will be measured from the Serving Wire Center to the tandem, Tandem Switched Facility will be measured from the tandem to the host, and another segment of Tandem Switched Facility will be measured from the host to the remote. A Tandem Switching charge will be applicable at the tandem.
6. **Switched Access Service (Cont'd)**

6.4 **Rate Regulations (Cont'd)**

6.4.6 **Mileage Measurement (Cont'd)**

(I) **Use of Telephone Company Hub**

When multiplexing is performed at Telephone Company Hubs, mileage is computed and rates applied separately for each segment of the Local Transport Direct Trunked Facility (i.e., customer serving wire center to Hub, Hub to Hub, and/or Hub to end office).

(J) **Feature Group D – Connected with Internet Protocol Gateway Access Service**

When required, the Tandem Switched Facility mileage for Feature Group D Switched Access Service connected with IPG will be measured as described below.

- When the IPG SWC is located at the Telephone Company’s tandem office and traffic is to be originated from or terminated to the end office, the Tandem Switched Facility mileage will be measured between the IPG SWC and the end office.

- When the IPG SWC is located at the Telephone Company’s tandem office and traffic is to be originated from or terminated to a host/remote complex, the Tandem Switched Facility mileage will be measured in multiple segments. The first segment will be measured between the IPG SWC and the host office and the second segment will be measured between the host office and subtending remote office.

- When the IPG SWC is located at the Telephone Company’s host office and traffic is to be originated from or terminated to the remote office, the Tandem Switched Facility mileage will be measured between the IPG SWC and the subtending remote office.
6. **Switched Access Service (Cont'd)**

6.4 **Rate Regulations (Cont'd)**

6.4.7 **Mixed Use**

Mixed use occurs when Switched Access Service and Special Access Service are provided over the same High Capacity or Synchronous Optical Channel facilities through a common interface. The regulations governing the provision of Mixed Use Facilities are set forth in 5.2.4 preceding and 7.2.7 following.

The Telephone Company will designate the first point(s) of switching and routing to be used where equal access traffic is provided through a centralized equal access arrangement. Those Telephone Company offices providing equal access through centralized arrangements are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.

6.4.8 [RESERVED FOR FUTURE USE]

6.4.9 [RESERVED FOR FUTURE USE]
6. **Switched Access Service** (Cont'd)

6.5 **Description and Provision of Feature Group A (FGA)**

[Not Currently Offered]
6. Switched Access Service (Cont'd)

6.6 Description and Provision of Feature Group B (FGB)

[Not Currently Offered]
6. Switched Access Service (Cont'd)

6.7 Description and Provision of Feature Group C (FGC)

[Not Currently Offered]
6. Switched Access Service (Cont'd)

6.8 Description and Provision of Feature Group D (FGD)

6.8.1 Description

(A) FGD Access, which is available to all customers, provides trunk side access to Telephone Company end office switches. Special Access Services utilized for connection with FGD at Telephone Company designated WATS Serving offices as set forth in Section 7, following, may be ordered separately by a customer other than the customer which orders the FGD Switched Access Service for the provision of WATS or WATS-type services. Special Access Services are ordered as set forth in Section 5.2, preceding. Internet Protocol Gateway Access Service (IPG) utilized for connection with FGD at Telephone Company (C) designated IPG SWCs as set forth in Section 16.4, following, is ordered as set forth in Section 5.2, preceding.

(B) FGD is provided at Telephone Company designated end office switches whether routed directly or via Telephone Company designated electronic access tandem switches. The Telephone Company will designate the first point(s) of switching for FGD services where the Telephone Company elects to provide equal access through a centralized equal access arrangement. Those Telephone Company offices providing equal access through centralized arrangements are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.
6. Switched Access Service (Cont'd)

6.8 Description and Provision of Feature Group D (FGD)

6.8.1 Description (Cont’d)

(C) FGD is provided as trunk side switching through the use of end office or access tandem switch trunk equipment. The switch trunk equipment is provided with wink start start-pulsing signals and answer and disconnect supervisory signaling.

(D) FGD switching is provided with multi-frequency address signaling or out of band SS7 signaling. With multi-frequency address signaling and SS7 signaling, up to 12 digits of the called party number dialed by the customer's end user using dual tone multi-frequency or dial pulse address signals will be provided by Telephone Company equipment to the customer's premises where the Switched Access Service terminates. Such address signals will be subject to the ordinary transmission capabilities of the Local Transport provided.
6. **Switched Access Service (Cont'd)**

6.8 **Description and Provision of Feature Group D (FGD)**

6.8.1 **Description (Cont’d)**

(E) FGD switching, when used in the terminating direction, may be used to access valid NXXs in the LATA, time or weather announcement services of the Telephone Company, community information services of an information service provider, and other customers' services (by dialing the appropriate codes) when such services can be reached using valid NXX codes. When directly routed to an end office, only those valid NXX codes served by that office may be accessed. When routed through an access tandem, only those valid NXX codes served by end offices subtending the access tandem may be accessed.

The customer will also be billed additional non-access charges for calls to certain community information services, for which rates are applicable under Telephone Company exchange service tariffs, e.g., 976 (DIAL-IT) Network Service. Additionally, non-access charges will also be billed for calls from a FGD trunk to another customer's service in accordance with that customer's applicable service rates when the Telephone Company performs the billing function for that customer.

Calls in the terminating direction will not be completed to 950-XXXX access codes, local operator assistance (0- and 0+), Directory Assistance (411 and 555-1212), service codes 611 and 911 and 101XXXX access codes. Calls will be completed to Directory Assistance (NPA-555-1212 or 555-1212) when FGD switching is combined with Directory Assistance switching.

The combination of FGD Switched Access Service with DA Service is provided as set forth in Section 9, following. FGD may not be switched, in the terminating direction, to Switched Access Service Feature Group D.
6. Switched Access Service (Cont'd)

6.8 Description and Provision of Feature Group D (FGD)

6.8.1 Description (Cont’d)

(F) The Telephone Company will establish a trunk group or groups for the customer at end office switches or access tandem switches where FGD switching is provided. When required by technical limitations, a separate trunk group will be established for each type of FGD switching arrangement provided. Different types of FGD or other switching arrangements may be combined in a single trunk group at the option of the Telephone Company.

(G) The access code for FGD switching is a uniform access code of the form 101XXXX. A uniform access code(s) will be the assigned number of all FGD access provided to the customer by the Telephone Company.

No access code is required for calls to a customer over FGD Switched Access Service if the end user's telephone exchange service is arranged for presubscription to that customer, as set forth in 13.4, following.

Where no access code is required, the number dialed by the customer's end user shall be a seven or ten digit number for calls in the North American Numbering Plan (NANP). For international calls outside the NANP, a seven to twelve digit number may be dialed. The form of the numbers dialed by the customer's end user is NXX-XXXX, 0 or 1 + NXX-XXXX, NPA + NXX-XXXX, 0 or 1 + NPA + NXX-XXXX, and, when the end office is equipped for International Direct Distance Dialing (IDDD), 01 + CC + NN or 011 + CC + NN.

When the 101XXXX access code is used, FGD switching also provides for dialing the digit 0 for access to the customer's operator, 911 for access to the Telephone Company's emergency reporting service, or the end-of-dialing digit (#) for cut-through access to the customer designated premises.
6. **Switched Access Service (Cont'd)**

6.8 **Description and Provision of Feature Group D (FGD)**

6.8.1 **Description (Cont’d)**

(H) FGD switching will be arranged to accept calls from telephone exchange service locations without the need for dialing the 101XXXX uniform access code. Each telephone exchange service line may be marked with a code to identify which 101XXXX code its calls will be directed to for interLATA service.

(I) Unless prohibited by technical limitations, the customer's Interim NXX Translation and/or 800 Data Base traffic may, at the option of the customer, be combined in the same trunk group arrangement with the customer's non-Interim NXX Translation and/or 800 Data Base traffic. When required by technical limitations, or at the request of the customer, a separate trunk group will be established for Interim NXX Translation and/or 800 Data Base traffic.

(J) For FGD switched access service to a Wireless Switching Center (WSC) directly interconnected to a Telephone Company access tandem office, the customer will be billed only the Local Transport premium rate element for the FGD usage. The mileage used to determine the monthly rate for the local transport rate element is as set forth in 6.4.6(G) preceding.
6. Switched Access Service (Cont'd)

6.8 Description and Provision of Feature Group D (FGD)

6.8.1 Description (Cont’d)

(K) Operator Transfer Service (forwarding of 0- calls) may be provided with FGD Switched Access Service at Telephone Company designated Operator Services locations.

The Telephone Company will provide Operator Transfer Service for calls originating from telephone numbers associated with exchange service lines in end office subtending the Operator Services location. Operator Transfer Service is provided as set forth in Section 6.10.4, following.

(L) For FGD Switched Access Service between an end user’s premises and an IPG SWC, the customer will be billed the applicable Local Switching, Information Surcharge and Tandem Switched Transport premium rate elements for its FGD usage. The mileage used to determine the monthly rate for the Tandem Switched Facility, when required, is as set forth in Section 6.4.6(J), preceding.
6. Switched Access Service (Cont'd)

6.8 Description and Provision of Feature Group D (FGD) (Cont'd)

6.8.2 Optional Features

Following are the various non-chargeable and chargeable optional features that are available in lieu of, or in addition to, the standard features provided with Feature Group D. Non-chargeable Optional Features are provided as Common Switching, Transport Termination and Local Transport options as set forth in (A) through (C) following. Chargeable optional features are set forth in (D) following.

(A) Common Switching Options

Descriptions of the common switching optional features are set forth in 6.10 following.

(1) Automatic Number Identification (ANI);
(2) Service Class Routing;
(3) Alternate Traffic Routing;
(4) Trunk Access Limitation;
(5) Call Gapping Arrangement;
(6) International Carrier Option;
(7) Band Advance Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services;
(8) End Office End User Line Service Screening for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services;
(9) Hunt Group Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services;
(10) Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services;
(11) Non-hunting Number Associated with Hunt Group Arrangement or Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services;
(12) Digital Switched 56 Service.
6. Switched Access Service (Cont’d)

6.8 Description and Provision of Feature Group D (FGD) (Cont’d)

6.8.2 Optional Features (Cont’d)

(B) Transport Termination Options

(1) Operator Trunk - Full Feature

The Operator Trunk optional feature is set forth in 6.10.2(C) following.

(C) Local Transport Options

(1) Supervisory Signaling

The Supervisory Signaling optional feature, due to its technical nature, is set forth in 15.1.1 following.

(2) Signaling System 7 (SS7)

The SS7 optional feature allows the customer to send and receive signals for out of band call set up and is available with Feature Group D. This option requires the establishment of a signaling connection between the customer's designated premises/ Signaling Point of Interface (SPOI) and a Telephone Company's Signaling Transfer Point (STP).

SS7 is provided in both the originating and terminating direction on FGD and each signaling connection is provisioned for two-way SS7 signaling information.

(3) Multi-frequency Address Signaling;

(4) Calling Party Number (CPN) Parameter;

(5) Charge Number Parameter (CNP);

(6) Carrier Selection Parameter (CSP);

(7) 64 Clear Channel Capability; (The 64 Clear Channel Capability optional feature, due to its technical nature, is set forth in 15.1.1 following.);

(8) Carrier Identification Parameter (CIP)
6. Switched Access Service (Cont'd)

6.8 Description and Provision of Feature Group D (FGD) (Cont'd)

6.8.2 Optional Features (Cont'd)

(D) Chargeable Optional Features

(1) **Interim NXX Translation**

The Interim NXX Translation Optional Feature is set forth in 6.10.3(A) following.
6. Switched Access Service (Cont'd)

6.8 Description and Provision of Feature Group D (FGD) (Cont'd)

6.8.2 Optional Features (Cont'd)

(D) Chargeable Optional Features

(2) Operator Transfer Service

The Operator Transfer Service Optional Feature is provided as set forth in 6.10.3 following.

(3) Common Channel Signaling/Signaling System 7 (CCS/SS7) Network Connection Service (CCSNC)

The CCSNC Optional Feature is provided as set forth in 6.10.3 following.

6.8.3 Design and Traffic Routing

For Feature Group D, the Telephone Company shall design and determine the routing of Tandem Switched Transport service, including the selection of the first point of switching and the selection of facilities from the interface to any switching point and to the end offices where busy hour minutes of capacity are ordered.

The Telephone Company shall also decide if capacity is to be provided by originating only, terminating only, or two-way trunk groups.

Finally, the Telephone Company will decide whether trunk side access will be provided through the use of two-wire or four-wire trunk terminating equipment.

For Feature Group D Direct Trunked Transport service, the Telephone Company will determine the routing of Switched Access Service from the point of interface to the first point of switching or, if the customer specifies one or more hub locations for multiplexing, from the point of interface to the hub location, from one hub location to another hub location, and/or from a hub location to the first point of switching.
6. Switched Access Service (Cont'd)

6.8 Description and Provision of Feature Group D (FGD) (Cont'd)

6.8.3 Design and Traffic Routing (Cont'd)

Selection of facilities and equipment and traffic routing of the service is based on standard engineering methods, available facilities and equipment, and actual traffic patterns. The Telephone Company will designate the first point(s) of switching and routing to be used where equal access is provided through a centralized equal access arrangement. Those Telephone Company offices providing equal access through centralized arrangements are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO 4.

6.8.4 Measuring Access Minutes

Customer traffic to end offices will be recorded at end office switches or access tandem switches. Originating and terminating calls will be measured or derived to determine the basis for computing chargeable access minutes. In the event the customer message detail is not available because the Telephone Company lost or damaged tapes or incurred recording system outages, the Telephone Company will estimate the volume of lost customer access minutes of use based on previously known values.

FGD access minutes or fractions thereof, the exact value of the fraction being a function of the switch technology where the measurement is made, are accumulated over the billing period for each end office, and are then rounded up to the nearest access minute for each end office.

(A) Originating Usage

For originating calls over FGD, the measured minutes are the chargeable access minutes.

For originating calls over FGD provided with Multi-Frequency Signaling, usage measurement begins when the originating FGD first point of switching receives the first wink supervisory signal forwarded from the customer's point of termination.
6. Switched Access Service (Cont'd)

6.8 Description and Provision of Feature Group D (FGD) (Cont'd)

6.8.4 Measuring Access Minutes (Cont'd)

(A) Originating Usage (Cont'd)

For originating calls over FGD provided with Signaling System 7 (SS7) Signaling when the FGD end office is not routed through an access tandem for connection to the customer, usage measurement begins when the SS7 Initial Address Message is sent from the Service Switching Point (SSP) to the Signal Transfer Point (STP).

For originating calls over FGD provided with Signaling System 7 (SS7) Signaling when the FGD end office is routed through a tandem for connection to the customer, usage measurement begins when the FGD end office receives the SS7 Exit Message from the tandem.

The measurement of originating call usage over FGD provided with Multi-Frequency Signaling ends when the originating FGD first point of switching receives disconnect supervision from either the originating end user's end office, indicating the originating end user has disconnected, or the customer's point of termination, whichever is recognized first by the first point of switching.

The measurement of originating call usage over FGD provided with SS7 Signaling ends when the originating FGD end office receives an SS7 Release Message indicating either the originating or terminating end user has disconnected.

(B) Terminating Usage

For terminating calls over FGD the chargeable access minutes are either measured or derived.

For terminating calls over FGD provided with Multi-Frequency Signaling, where measurement capability exists, the measurement of chargeable access minutes begins when the terminating FGD first point of switching receives answer supervision from the terminating end user's end office, indicating the terminating end user has answered. This measurement ends when the terminating FGD first point of switching receives disconnect supervision from either the terminating end user's end office, indicating the terminating end user has disconnected, or the customer's point of termination, whichever is recognized first by the first point of switching.
6. Switched Access Service (Cont'd)

6.8 Description and Provision of Feature Group D (FGD) (Cont'd)

6.8.4 Measuring Access Minutes (Cont'd)

(B) Terminating Usage (Cont'd)

For terminating calls over FGD, where measurement capability does not exist, terminating FGD usage is derived from originating usage, excluding usage from calls to closed end services or Directory Assistance Services.

For terminating calls over FGD with SS7 signaling, usage measurement begins when the terminating recording switch receives answer supervision from the terminating end user. The Telephone Company switch receives answer supervision and sends the indication to the customer in the form of an answer message. The measurement of terminating FGD call usage ends when the entry switch receives or sends a release message, whichever occurs first.

6.8.5 Design Blocking Probability

The Telephone Company will design the facilities used in the provision of Switched Access Service FGD to meet the blocking probability criteria as set forth in (A) and (B) following.

(A) For Feature Group D, the design blocking objective will be no greater than one percent (.01) between the point of termination at the customer's designated premises and the end office switch, whether the traffic is directly routed without an alternate route or routed via an access tandem. Standard traffic engineering methods as set forth in reference document Telecommunications Transmission Engineering - Volume 3 - Networks and Services (Chapters 6-7) will be used by the Telephone Company to determine the number of transmission paths required to achieve this level of blocking.

(B) The Telephone Company will perform routine measurement functions to assure that an adequate number of transmission paths are in service. The Telephone Company will recommend that additional capacity (i.e., busy hour minutes of capacity or trunks) be ordered by the customer when additional paths are required to reduce the measured blocking to the designed blocking level. For the capacity ordered, the design blocking objective is assumed to have been met if the routine measurements show that the measured blocking does not exceed the threshold listed in the following tables.
### Switched Access Service (Cont'd)

#### 6.8 Description and Provision of Feature Group D (FGD) (Cont'd)

#### 6.8.5 Design Blocking Probability (Cont'd)

(B) (Cont'd)

1. For transmission paths carrying only first routed traffic direct between an end office and customer's designated premises without an alternate route, and for paths carrying only overflow traffic, the measured blocking thresholds are as follows:

<table>
<thead>
<tr>
<th>Number of Transmission Paths Per Trunk Group</th>
<th>Measured Blocking Thresholds in the Time Consistent Busy Hour for the Number of Measurements Taken Between 8:00 a.m. and 11:00 p.m. Per Trunk Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-20 Measurements</td>
<td>11-14 Measurements</td>
</tr>
<tr>
<td>2</td>
<td>7%</td>
</tr>
<tr>
<td>3</td>
<td>5%</td>
</tr>
<tr>
<td>4</td>
<td>5%</td>
</tr>
<tr>
<td>5-6</td>
<td>4%</td>
</tr>
<tr>
<td>7 or more</td>
<td>3%</td>
</tr>
</tbody>
</table>

2. For transmission paths carrying first routed traffic between an end office and customer's premises via an access tandem, the measured blocking thresholds are as follows:

<table>
<thead>
<tr>
<th>Number of Transmission Paths Per Trunk Group</th>
<th>Measured Blocking Thresholds in the Time Consistent Busy Hour for the Number of Measurements Taken Between 8:00 a.m. and 11:00 p.m. Per Trunk Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-20 Measurements</td>
<td>11-14 Measurements</td>
</tr>
<tr>
<td>2</td>
<td>4.5%</td>
</tr>
<tr>
<td>3</td>
<td>3.5%</td>
</tr>
<tr>
<td>4</td>
<td>3.5%</td>
</tr>
<tr>
<td>5-6</td>
<td>2.5%</td>
</tr>
<tr>
<td>7 or more</td>
<td>2.0%</td>
</tr>
</tbody>
</table>
6. Switched Access Service (Cont'd)

6.8 Description and Provision of Feature Group D (FGD) (Cont'd)

6.8.6 Network Blocking Charge

The customer will be notified by the Telephone Company to increase its capacity (busy hour minutes of capacity or quantities of trunks) when excessive trunk group blocking occurs on groups carrying Feature Group D traffic and the measured access minutes for that hour exceed the capacity purchased. Excessive trunk group blocking occurs when the blocking thresholds stated below are exceeded. They are predicated on time consistent, hourly measurements over a 30 day period excluding Saturdays, Sundays and national holidays. If the order for additional capacity has not been received by the Telephone Company within 15 days of the notification, the Telephone Company will bill the customer, at the rate set forth in 17.2.2 following, for each overflow in excess of the blocking threshold when (1) the average "30 day period" overflow exceeds the threshold level for any particular hour and (2) the "30 day period" measured average originating or two-way usage for the same clock hour exceeds the capacity purchased.

### Blocking Thresholds

<table>
<thead>
<tr>
<th>Trunks in Service</th>
<th>1%</th>
<th>1/2%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>7.0%</td>
<td>4.5%</td>
</tr>
<tr>
<td>3-4</td>
<td>5.0%</td>
<td>3.5%</td>
</tr>
<tr>
<td>5-6</td>
<td>4.0%</td>
<td>2.5%</td>
</tr>
<tr>
<td>7 or greater</td>
<td>3.0%</td>
<td>2.0%</td>
</tr>
</tbody>
</table>

The 1% blocking threshold is for transmission paths carrying traffic direct (without an alternate route) between an end office and a customer's premises. The 1/2% blocking threshold is for transmission paths carrying first routed traffic between an end office and a customer's premises via an access tandem.
6. Switched Access Service (Cont'd)

6.8 Description and Provision of Feature Group D (FGD) (Cont'd)

6.8.7 Testing Capabilities

FGD is provided, in the terminating direction where equipment is available, with seven digit access to balance (100 type) test line, milliwatt (102 type) test line, nonsynchronous or synchronous test line, automatic transmission measuring (105 type) test line, data transmission (107 type) test line, loop around test line, short circuit test line and open circuit test line. In addition to the tests described in 6.2.4 preceding, which are included with the installation of service (Acceptance Testing) and as ongoing routine testing, Additional Cooperative Acceptance Testing, Additional Automatic Testing and Additional Manual Testing, are available as set forth in 13.3.1 following.

When SS7 Signaling is ordered, network compatibility and other testing will be performed cooperatively by the Telephone Company and the customer as specified in Technical Reference GR-905-CORE.
6. Switched Access Service (Cont'd)

6.9 Interim Access

[RESERVED FOR FUTURE USE]
6. Switched Access Service (Cont'd)

6.9 Interim Access

[RESERVED FOR FUTURE USE]
6. **Switched Access Service (Cont'd)**

6.9 **Interim Access**

[RESERVED FOR FUTURE USE]
6. Switched Access Service (Cont'd)

6.10 Chargeable and Non-chargeable Optional Features

The following are descriptions of the various optional features that are available in lieu of, or in addition to, the standard features provided with the available Feature Groups. They are provided as Common Switching, Transport Termination, Interim NXX Translation options or Operator Transfer Service option. Local Transport options associated with Common Channel Signaling Network Connection Service (CCSNC) are described in 6.10.1 following. All other Local Transport options, due to their technical nature, are described in 15.1.1 following.
6. Switched Access Service (Cont'd)

6.10 Chargeable and Non-chargeable Optional Features (Cont’d)

6.10.1 Common Switching Non-chargeable Optional Features

(A) The following table shows the optional features that are available with Feature Group D:

Option

- Automatic Number Identification (ANI)
- Service Class Routing
- Alternate Traffic Routing
- Trunk Access Limitation
- Call Gapping Arrangement
- International Carrier Option
- Band Advance Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Service
- End Office End User Line Service Screening for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services
- Hunt Group Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services
- Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services
- Non-hunting Number Associated with Hunt Group Arrangement or Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services
- Digital Switched 56 Service
- Multi-frequency Address Signaling
- Signaling System 7 (SS7) Signaling
- Calling Party Number (CPN)
- Carrier Selection Parameter (CSP)
6. **Switched Access Service** (Cont'd)

6.10 **Chargeable and Non-chargeable Optional Features** (Cont'd)

6.10.1 **Common Switching Non-chargeable Optional Features** (Cont’d)

(A) (Cont’d)

Charge Number Parameter (CNP)

Flexible Automatic Number Identification (Flex ANI)

Carrier Identification Parameter (CIP)
6. Switched Access Service (Cont'd)

6.10 Chargeable and Non-chargeable Optional Features (Cont’d)

6.10.1 Common Switching Non-chargeable Optional Features (Cont’d)

[RESERVED FOR FUTURE USE]
6. Switched Access Service (Cont’d)

6.10 Chargeable and Non-chargeable Optional Features (Cont’d)

6.10.1 Common Switching Non-chargeable Optional Features (Cont’d)

[RESERVED FOR FUTURE USE]
6. Switched Access Service (Cont'd)

6.10 Chargeable and Non-chargeable Optional Features (Cont’d)

6.10.1 Common Switching Non-chargeable Optional Features (Cont’d)

(B) Automatic Number Identification (ANI)

(1) This option provides the automatic transmission of a seven digit or ten digit number and information digits to the customer designated premises for calls originating in the LATA, to identify the calling station. The ANI feature is an end office software function which is associated on a call-by-call basis with:

(a) all individual transmission paths in a trunk group routed directly between an end office and a customer designated premises or, where technically feasible, with

(b) all individual transmission paths in a trunk group between an end office and an access tandem, and a trunk group between an access tandem and a customer designated premises.
6. Switched Access Service (Cont'd)

6.10 Chargeable and Non-chargeable Optional Features (Cont'd)

6.10.1 Common Switching Non-chargeable Optional Features (Cont’d)

(B) Automatic Number Identification (ANI) (Cont’d)

(2) The ten digit ANI telephone number is only available with Feature Group D. The ten digit ANI telephone number consists of the Number Plan Area (NPA) plus the seven digit ANI telephone number. The ten digit ANI telephone number will be transmitted on all calls except those identified as multiparty line or ANI failure, in which case only the NPA will be transmitted (in addition to the information digit described below). Ten digit ANI is provided with multi-frequency address signaling or SS7 signaling.
6. Switched Access Service (Cont'd)

6.10 Chargeable and Non-chargeable Optional Features (Cont’d)

6.10.1 Common Switching Non-chargeable Optional Features (Cont’d)

(B) Automatic Number Identification (ANI) (Cont’d)

(3) Where complete ANI detail cannot be provided, e.g., on calls from 4 and 8 party services, information digits will be provided to the customer.

The information digits identify:

(a) Telephone number is the station billing number - no special treatment required,

(b) Multiparty line - telephone number is a 4- or 8-party line and cannot be identified - number must be obtained via an operator or in some other manner,

(c) ANI failure has occurred in the end office switch which prevents identification of calling telephone number - must be obtained by operator or in some other manner,

(d) Hotel/motel originated call which requires room number identification,

(e) Coinless station, hospital, inmate, etc. call which requires special screening or handling by the customer, and

(f) Call is an Automatic Identified Outward Dialed (AIOD) call from customer premises equipment. The AIOD ANI telephone number is the listed telephone number of the customer and is not the telephone number of the calling party.

These ANI information digits are generally available with Feature Group D.
6. Switched Access Service (Cont'd)

6.10 Chargeable and Non-chargeable Optional Features (Cont’d)

6.10.1 Common Switching Non-chargeable Optional Features (Cont’d)

(B) Automatic Number Identification (ANI) (Cont'd)

(4) Additional ANI information digits are available with Feature Group D also. They include:

(a) InterLATA restricted - telephone number is identified line
(b) InterLATA restricted - hotel/motel line
(c) InterLATA restricted - coinless, hospital, inmate, etc., line

These information digits will be transmitted as agreed to by the customer and the Telephone Company.

Flexible Automatic Number Identification (Flex ANI) is an enhancement to ANI and is offered as a Common Switching Non-chargeable Optional Feature of Feature Group D as described in 6.10.1(AA) following.

(5) Restrictions on Use and Sale of ANI

(a) Interstate access customers of this tariff may use ANI in the following manner:

(i) For billing and collection information, for routing, screening, and completing the originating subscriber's call or transaction, or for services directly related to the originating telephone subscriber's call or transaction.

The customer may use ANI to offer a product or service that is directly related to the products or services previously acquired from the customer by the originating subscriber.
6. **Switched Access Service (Cont'd)**

6.10 **Chargeable and Non-chargeable Optional Features (Cont'd)**

6.10.1 **Common Switching Non-chargeable Optional Features (Cont’d)**

(F) **Automatic Number Identification (ANI) (Cont’d)**

(5) **Restrictions on Use and Sale of ANI (Cont'd)**

(b) Interstate access customers of this Tariff **may not** use ANI in the following manner:

(i) Reusing or selling the telephone number or billing information without first notifying the originating telephone subscriber and obtaining the affirmative consent of such subscriber for such reuse or sale.

(ii) Disclosing (except as permitted in (a), preceding), any information derived from the ANI for any purpose other than 1) performing the services or transactions that are the subject of the originating subscriber's call, 2) ensuring network performance security and the effectiveness of call delivery, 3) compiling, using, and disclosing aggregate information, and 4) complying with applicable law or legal process.
6. **Switched Access Service (Cont’d)**

   6.10 **Chargeable and Non-chargeable Optional Features (Cont’d)**

   6.10.1 **Common Switching Non-chargeable Optional Features (Cont’d)**

   (G) **RESERVED FOR FUTURE USE**
6. Switched Access Service (Cont'd)

6.10 Chargeable and Non-chargeable Optional Features (Cont’d)

6.10.1 Common Switching Non-chargeable Optional Features (Cont’d)

(H) Service Class Routing

This option provides the capability of directing originating traffic from an end office to a trunk group to a customer designated premises, based on the line class of service (e.g., coin, multiparty or hotel/motel), service prefix indicator (e.g., 0-, 0+, 01+ or 011+) or Service Access Code (e.g., 900). It is provided in suitably equipped end office or access tandem switches. It is available with Feature Group D.
6. Switched Access Service (Cont'd)

6.10 Chargeable and Non-chargeable Optional Features (Cont'd)

6.10.1 Common Switching Non-chargeable Optional Features (Cont’d)

(I) Alternate Traffic Routing

When the customer orders both Direct Trunked Transport and Tandem Switched Transport at the same end office, this option provides the capability of directing originating traffic from an end office (or appropriately equipped access tandem) to a trunk group (the "high usage" group) to a customer designated premises until that group is fully loaded, and then delivering additional originating traffic (the "overflowing" traffic) from the same end office or access tandem to a different trunk group (the "final" group) to a second customer designated premises. The customer shall specify the last trunk CCS desired for the high usage group. It is provided in suitably equipped end office or access tandem switches. It is available with Feature Group D.

(J) Trunk Access Limitation

This option provides for the routing of originating 900 service calls to a specified number of transmission paths in a trunk group, in order to limit (choke) the completion of such traffic to the customer. Calls to the designated service which could not be completed over the subset of transmission paths in the trunk group, i.e., the choked calls, would be routed to reorder tone. It is provided in all Telephone Company electronic end offices and where available in electromechanical end offices. It is available with Feature Group D.
6. **Switched Access Service (Cont'd)**

6.10 **Chargeable and Non-chargeable Optional Features (Cont’d)**

6.10.1 **Common Switching Non-chargeable Optional Features (Cont’d)**

(K) **Call Gapping Arrangement**

This option, provided in suitably equipped end office switches, provides for the routing of originating calls to 900 service to be switched in the end office to all transmission paths in a trunk group at a prescribed rate of flow, e.g., one call every five seconds, in order to limit (choke) the completion of such traffic to the customer. Calls to the designated service which are denied access by this feature, i.e., the choked calls, would be routed to a no-circuit announcement. It is provided in selected Feature Group D equipped end offices and is available only with Feature Group D.

(L) **International Carrier Option**

This option allows for Feature Group D end offices or access tandem switches equipped for International Direct Distance Dialing to be arranged to forward the international calls of one or more international carriers to the customer (i.e., the Telephone Company is able to route originating international calls to a customer other than the one designated by the end user either through presubscription or 101XXXX dialing). This arrangement requires provision of written verification to the Telephone Company that the customer is authorized to forward such calls. The written verification must be in the form of a letter of agency authorizing the customer to order the option on behalf of the international carrier. This option is only provided at Telephone Company end offices or access tandems equipped for International Direct Distance Dialing and is available only with Feature Group D.
6. Switched Access Service (Cont’d)

6.10 Chargeable and Non-chargeable Optional Features (Cont’d)

6.10.1 Common Switching Non-chargeable Optional Features (Cont’d)

(M) Band Advance Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services

This option, which is provided in association with two or more Special Access Service groups, provides for the automatic overflow of terminating calls to a second Special Access Service group, when the first group has exceeded its call capacity. This option is available with Feature Group D.

(N) End Office End User Line Service Screening for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services

This option provides the ability to verify that an end user has dialed a called party address (by screening the called NPA and/or NXX on the basis of geographical bands selected by the Telephone Company) which is in accordance with that end user's service agreement with the customer, e.g., WATS. This option is provided in all Telephone Company electronic end offices and, where available, in electromechanical end offices which are designated as WATS Serving Offices. It is available with Feature Group D.

(O) Hunt Group Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services

This option provides the ability to sequentially access one of two or more Special Access Services utilized in the provision of WATS services (e.g., 800 Series Service Special Access services) in the terminating direction, when the hunting number of the Special Access Service group is forwarded from the customer to the Telephone Company. This feature is provided in all Telephone Company designated WATS Serving Offices. It is available with Feature Group D.
6. Switched Access Service (Cont'd)

6.10 Chargeable and Non-chargeable Optional Features (Cont’d)

6.10.1 Common Switching Non-chargeable Optional Features (Cont’d)

(P) Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services

This option provides a type of multiline hunting arrangement which provides for an even distribution of terminating calls among the available Special Access Services utilized in the provision of WATS or WATS-type Services in the hunt group. Where available, this feature is only provided in Telephone Company designated WATS Serving Offices. It is available with Feature Group D.

(Q) Non-hunting Number Associated with Hunt Group Arrangement or Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services

This option provides an arrangement, for an individual Special Access Service utilized in the provision of WATS or WATS-type Services within a multiline hunt or uniform call distribution group, that provides access to that Special Access Service within the hunt or uniform call distribution group when it is idle or provides busy tone when it is busy, when the non-hunting number is dialed, without hunting to the next idle number. Where available, this feature is only provided in Telephone Company designated WATS Serving Offices. It is available with Feature Group D.

(R) Digital Switched 56 Service

This option provides for a connection between a customer's premise and a suitably equipped end user's premise which uses end office switching and facilities capable of transmitting digital data up to 56 Kilobits per second. Digital Switched 56 Service is only available in appropriately provisioned Feature Group D offices as set forth in National Exchange Carrier Association, Inc. Tariff F.C.C. No. 4.
6. Switched Access Service (Cont'd)

6.10 Chargeable and Non-chargeable Optional Features (Cont’d)

6.10.1 Common Switching Non-chargeable Optional Features (Cont’d)

(S) Multi-frequency Address Signaling

Multi-frequency Address Signaling is available as an optional feature with FGD. This feature provides for the transmission of number information and control signals (e.g., number address signals, automatic number identification) between the end office switch and the customer's premises (in either direction). Multi-frequency signaling arrangements make use of pairs of frequencies out of a group of six frequencies. Specific information transmitted is dependent upon feature group and call type (i.e., POTS, coin or operator). This feature is not available in combination with SS7 signaling.

(T) Signaling System 7 (SS7) Signaling

This feature provides common channel out of band transmission of address and supervisory SS7 protocol signaling information between the end office switch or the tandem office switching system and the customer's designated premises. The signaling information is transmitted over facilities provided with the Common Channel Signaling/Signal System 7 Network Connection Service (CCSNC) as specified in 6.1.3(A)(8) preceding. This feature is available with FGD and will be provided in accordance with the SS7 Interconnect specifications described in Technical Reference GR-905-CORE.

(U) Calling Party Number (CPN)

This feature provides for the automatic transmission of the ten digit telephone number, associated with a calling station, to the customer's premises for calls originating in the LATA. The ten digit telephone number consists of the NPA plus the seven digit telephone number, which may or may not be the same number as the calling station's charge number. The ten digit telephone number will be coded as presented, or restricted via a "privacy indicator" for delivery to the called end user. This feature is automatically provided with originating FGD with SS7 signaling. CPN is available where technically feasible.
6. Switched Access Service (Cont'd)

6.10 Chargeable and Non-chargeable Optional Features (Cont’d)

6.10.1 Common Switching Non-chargeable Optional Features (Cont’d)

(U) Calling Party Number (CPN) (Cont'd)

(1) Restrictions on Use and Sale of CPN

(a) Interstate access customers of this tariff may use CPN in the following manner:

(i) For billing and collection information, for routing, screening, and completing the originating subscriber's call or transaction, or for services directly related to the originating telephone subscriber's call or transaction.

The customer may use CPN to offer a product or service that is directly related to the products or services previously acquired from the customer by the originating subscriber.

(b) Interstate access customers of this tariff may not use CPN in the following manner:

(i) Reusing or selling the telephone number or billing information without first notifying the originating telephone subscriber and obtaining the affirmative consent of such subscriber for such reuse or sale.

(ii) Disclosing (except as permitted in (a), preceding) any information derived from the CPN for any purpose other than 1) performing the services or transactions that are the subject of the originating subscriber's call, 2) ensuring network performance security and the effectiveness of call delivery, 3) compiling, using, and disclosing aggregate information, and 4) complying with applicable law or legal process.
6. Switched Access Service (Cont’d)

6.10 Chargeable and Non-chargeable Optional Features (Cont’d)

6.10.1 Common Switching Non-chargeable Optional Features (Cont’d)

(V) Carrier Selection Parameter (CSP)

This feature provides for the automatic transmission of a signaling indicator which signifies to the customer whether or not the call being processed originated from a presubscribed line. If the line was presubscribed, the indicator will signify if the end user did or did not dial 101XXXX. This feature is provided with originating FGD with SS7 signaling.

(W) Charge Number Parameter (CNP)

(1) The CNP is equivalent to the existing ten digit Automatic Number Identification (ANI) available with FGD with MF signaling. The CNP provides for the automatic transmission of the ten digit billing number of the calling station and the originating line information. This feature is provided with originating FGD with SS7 signaling.

(2) Restrictions on Use and Sale of CNP

(a) Interstate access customers of this tariff may use CNP in the following manner:

(i) For billing and collection information, for routing, screening and completing the originating subscriber’s call or transaction, or for services directly related to the originating telephone subscriber’s call or transaction.

The customer may use CNP to offer a product or service that is directly related to the products or services previously acquired from the customer by the originating subscriber.
6. Switched Access Service (Cont'd)

6.10 Chargeable and Non-chargeable Optional Features (Cont’d)

6.10.1 Common Switching Non-chargeable Optional Features (Cont’d)

(W) Charge Number Parameter (CNP) (Cont’d)

(2) Restrictions on Use and Sale of CNP (Cont’d)

(b) Interstate access customers of this tariff may not use CNP in the following manner:

(i) Reusing or selling the telephone number or billing information without first notifying the originating telephone subscriber and obtaining the affirmative consent of such subscriber for such reuse or sale.

(ii) Disclosing, except as permitted in (a), preceding, any information derived from the CNP for any purpose other than 1) performing the services or transactions that are the subject of the originating subscribers call, 2) ensuring network performance security and the effectiveness of call delivery, 3) compiling, using, and disclosing aggregate information, and 4) complying with applicable law or legal process.

(X) Flexible Automatic Number Identification (Flex ANI)

Flex ANI is a Common Switching Optional Feature that enhances the existing Automatic Number Identification (ANI) optional feature (described in 6.10.1 (F) preceding) by allowing Feature Group D (FGD) customers to receive additional information digits. Flex ANI provides additional values for these information digits over and above the values currently available with ANI and is used to identify additional call types, e.g., 27 for pay telephones requiring central office coin supervision capability, 29 for prison/inmate pay telephones, and 70 for pay telephones not requiring central office coin supervision. Flex ANI can also be used to provide Originating Line Screening (OLS) service. OLS service is described in 13.10 following.
6. Switched Access Service (Cont'd)

6.10 Chargeable and Non-chargeable Optional Features (Cont’d)

6.10.1 Common Switching Non-chargeable Optional Features (Cont’d)

(X) Flexible Automatic Number Identification (Flex ANI) (Cont’d)

Flex ANI information digits are two digits in length and are activated through switched software program updates. These codes precede the 10-digit directory number of the calling line and are part of the signaling protocol in equal access end offices. The information digits are outpulsed by the switching system along with the directory number from the originating end office and are sent to the receiving office for billing, routing, or special handling purposes.

Customers who have ANI but do not order Flex ANI, will continue to receive the information digits associated with ANI. Flex ANI digits are assigned by the North American Numbering Plan Administrator. The Telephone Company will make available those information digits that are mutually agreed to by the customer and the Telephone Company.

Flex ANI is available to customers with FGD Switched Access Service equipped with ANI. Flex ANI is available in suitably equipped end offices as identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.

(Y) Carrier Identification Parameter (CIP)

Carrier Identification Parameter (CIP) provides for the automatic transmission of the Carrier Identification Code (CIC) to the Customer Designated Premises for FGD calls originating in the LATA. The CIC is included in the Signaling System 7 information provided to the customer when the call originates from a presubscribed line or when the end user dials the customer’s 101XXXXX access code. CIP is available from suitably equipped end office and access tandems as identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, when used in conjunction with Common Channel Signaling/Signaling System 7 Network Connection Service (CCSNC) as described in 6.10.3(C) following and Signaling System 7 Signaling as described in 6.10.1(W) preceding.
6. Switched Access Service (Cont'd)

6.10 Chargeable and Non-chargeable Optional Features (Cont'd)

6.10.2 Transport Termination Non-chargeable Optional Features

[RESERVED FOR FUTURE USE]
6. Switched Access Service (Cont'd)

6.10 Chargeable and Non-chargeable Optional Features (Cont'd)

6.10.2 Transport Termination Non-chargeable Optional Features (Cont'd)

(A) Operator Trunk - Full Feature

This option provides the initial coin return control function to the customer's operator. It is available with Feature Group D and is provided as a trunk type for Transport Termination. This feature is not available with SS7 signaling.
6. **Switched Access Service (Cont'd)**

6.10 **Chargeable and Non-chargeable Optional Features (Cont'd)**

6.10.3 **Chargeable Optional Features**

(A) **Interim NXX Translation**

This service is an originating offering utilizing trunk side Switched Access Service and provides a customer identification function based on the dialed SAC and NXX code.

For example, when a 1+900+NXX-XXXX call is originated by an end user, the Telephone Company will perform the customer identification function based on the dialed digits to determine the customer location to which the call is to be routed. If the call originates from an end office switch not equipped to provide the customer identification function, the call will be routed to an office at which the function is available. Once customer identification has been established, the call will be routed to that customer. Calls originating from an end office switch at which the customer identification function is performed, but to which the customer has not ordered Interim NXX Translation, will be blocked.

Calls to a 900 number dialed via 1+ from coin telephones, 0-, 101XXXX, Inmate Service, and Hotel/Motel Service will be blocked. Calls to a 900 number dialed via 0+ will normally be blocked. Orders received from customers to unblock 0+ calls to a 900 number will be accommodated where suitably equipped facilities exist.

The manner in which Interim NXX Translation is provided is dependent on the status of the end office from which the service is provided (i.e., equipped with equal access capabilities or not equipped with equal access capabilities).

The charge for Interim NXX Translation is as set forth in 17.2.1(C) following.
6. Switched Access Service (Cont'd)

6.10 Chargeable and Non-chargeable Optional Features (Cont'd)

6.10.3 Chargeable Optional Features (Cont'd)

(B) Operator Transfer Service

At the option of the customer, Operator Transfer Service as specified following, is available for use with Feature Group D Switched Access Service. Operator Transfer Service is ordered as set forth in 5.2 preceding and is provided to the customer via separate FGD trunks dedicated to Operator Transfer Service traffic.

Operator Transfer Service is an arrangement in which Telephone Company operators transfer 0 minus (0-) calls (calls for which the end user dials 0 with no additional digits) to the customer designated by the end user.

The operator transfer function will be performed in the following manner:

- The operator answers the 0- call.

- Initially, the Operator will suggest that the end user dial the customer on a direct basis. If the end user insists that the Operator transfer the call, the Operator will ask the end user to identify the desired customer and will then transfer the call as directed.

- If the end user has no preference, or the identified customer has not subscribed to Operator Transfer Service, the end user will be asked to select from a list of available customers.
6. Switched Access Service (Cont'd)

6.10 Chargeable and Non-chargeable Optional Features (Cont'd)

6.10.3 Chargeable Optional Features (Cont'd)

(B) Operator Transfer Service (Cont'd)

The list of available Operator Transfer Service customers will be updated monthly. The order in which customers will be read to end users will be initially determined by the sequence in which customers have ordered the Operator Transfer Service. For each subsequent month, following the initial order for Operator Transfer Service, the customer in the first position on the list will be moved to the last position on the list. All other customers on the list will be moved up one position, e.g. 3rd to 2nd, 2nd to first, etc. New Operator Transfer Service customers will initially be placed at the bottom of the list of customers.

0 minus pay telephone coin calls will be transferred to the end user designated customer. In order to accept coin sent-paid calls, the customer must order signaling as specified in GR-506-CORE and TR-NPL-000258.

The customer may receive inband, multi-wink, or expanded inband coin control signaling, where available, from end offices served by an Operator Services Access Point. Different signaling types cannot be mixed on a signal trunk group.

All non-recurring and usage sensitive rates and charges normally applicable to Feature Group D apply to Operator Transfer Service. Additionally, a charge as specified in 6.1.3(C)(2) preceding and 17.2.7 following, is assessed the customer per 0 minus call transferred.

(C) Common Channel Signaling/Signaling System 7 Network Connection Service (CCSNC)

Common Channel Signaling/Signaling System 7(CCS/SS7) Network Connection Service (CCSNC), which is available with Feature Group D, where technically feasible as designated in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF FCC NO. 4, WIRE CENTER INFORMATION, provides a signaling path between a customer's designated Signaling Point of Interface (SPOI) and a Signaling Transfer Point (STP). This service provides customers with the use of a two-way signaling path for accessing information necessary for the completion of their end user's calls.
6. **Switched Access Service (Cont'd)**

6.10 **Chargeable and Non-chargeable Optional Features (Cont'd)**

6.10.3 **Chargeable Optional Features (Cont'd)**

(C) **Common Channel Signaling/Signaling System 7 Network Connection Service (CCSNC) (Cont'd)**

CCS/SS7 Network Connection Service is comprised of two parts; a Signaling Network Access Link (SNAL, consisting of Signaling Mileage Facility, Signaling Mileage Termination and Signaling Entrance Facility) and a Signaling Transfer Point (STP) Port. The SNAL is provided as a dedicated 56 Kbps out-of-band signaling connection between the customer's SPOI and the STP Port on the STP.

The CCS/SS7 Network Connection Service is provisioned by a mated pair of STPs as described in Technical Reference GR-905–CORE in order to ensure network availability and reliability. The Telephone Company shall not be held liable for service outages if the customer employs technology related to the interconnection of signaling networks that do not adhere to generally accepted industry technical standards.

When CCS/SS7 Network Connection service is provisioned for use with SS7 Signaling, interconnection between signaling networks must occur at an STP.

Rates and charges for the CCS/SS7 Network Connection STP Ports and Signaling Network Access Links are contained in Section 17.2.2, following. The Telephone Company specific rate band assignment for the STP Port and Signaling Network Access Link rate elements is specified in the Local Transport (LT) column in Section 17.5.1, following.

(D) **800 Data Base Access Service**

800 Data Base Access Service is provided with FGD Switched Access Service. When a1+800series+NXX-XXXX call is originated by an end user, the Telephone Company will utilize the Signaling System 7 (SS7) network to query an 800 data base to perform the identification function. The call will then be routed to the identified customer over FGD switched access. The 800 series includes the following service area codes: 800, 888, 877, 866, 855, 844, 833 and 822.
6. **Switched Access Service (Cont'd)**

6.10 **Chargeable and Non-chargeable Optional Features (Cont'd)**

6.10.3 **Chargeable Optional Features (Cont'd)**

(D) **800 Data Base Access Service (Cont'd)**

The manner in which 800 data base access service is provided is dependent on the availability of SS7 service at the end office from which the service is provided as outlined following:

- When 800 data base access service originates at an end office equipped with Service Switching Point (SSP) capability for querying centralized data bases or at a non-SSP equipped end office that can accommodate direct trunking of originating 800 series calls, all such service will be provisioned from that end office.

- When 800 data base access service originates at an end office not equipped with SSP customer identification capability, the 800 series call will be delivered to the access tandem on which the end office is homed for 800 series service and which is equipped with the SSP feature to query centralized data bases.

- When 800 data base access service originates at an end office equipped with SSP capability that is not capable of accommodating direct trunking of originating 800 series (other than the 800 service access codes) calls, the 800 series (other than the 800 service access codes) call will be delivered to the access tandem on which the end office is homed and which is equipped with the SSP feature to query centralized data bases.

Query charges as set forth in 17.2.2 following are in addition to those charges applicable for the Feature Group D switched access service.
6. Switched Access Service (Cont'd)

6.10 Chargeable and Non-chargeable Optional Features (Cont'd)

6.10.3 Chargeable Optional Features (Cont'd)

(D) 800 Data Base Access Service (Cont'd)

The Federal Communications Commission ("FCC") has concluded that hoarding, defined as the acquisition of more toll free numbers than one intends to use for the provision of toll free service, as well as the sale of a toll free number by a private entity for a fee, is contrary to the public interest in the conservation of the scarce toll free number resource and contrary to the FCC's responsibility to promote the orderly use and allocation of toll free numbers.
6. Switched Access Service (Cont'd)

6.10 Chargeable and Non-chargeable Optional Features (Cont'd)

6.10.3 Chargeable Optional Features (Cont'd)

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7. Special Access Service

7.1 General

Special Access Service provides a transmission path to connect customer designated premises *, directly, or through a Telephone Company hub or hubs where bridging or multiplexing functions are performed, or to connect a customer designated premises and a WATS Serving Office, or to connect a customer designated premises to a DSL Access Service Connection Point, or to connect a customer designated premises to a Public Packet Data Network Service. Special Access Service includes all exchange access not utilizing Telephone Company end office switches.

The connections provided by Special Access Service can be analog, digital or optical. Analog connections are differentiated by spectrum and bandwidth. Digital and optical connections are differentiated by bit rate.

Special Access Service purchased from the provisions of this tariff may be commingled with unbundled network elements or unbundled network element combinations purchased pursuant to the Commission’s Part 51 Interconnection Rules and in compliance with the Federal Communications Commission’s Report and Order and Order on Remand and Further Notice of Proposed Rulemaking in CC Docket Nos. 01-338, 96-98 and 98-147, adopted February 20, 2003 and released August 21, 2003 (FCC 03-36).

Individual Case Basis

Special Access Services, as set forth below, and corresponding rates for such services are provided by the Telephone Company on an Individual Case Basis (“ICB”).

* Telephone Company Centrex CO and CO-like switches and packet switches included in Public Packet Switching Network (PPSN) Service are considered to be a customer designated premises for purposes of this Tariff.
7. Special Access Service (Cont’d)

7.1 General (Cont’d)

7.1.1 Channel Types

There are eight types of channels used to provide Special Access Services. Each type has its own characteristics. All are subdivided by one or more of the following:

- Transmission specifications,
- Bandwidth,
- Speed (i.e., bit rate),
- Spectrum

Customers can order a basic channel and select from a list of those available transmission parameters and channel interfaces that they desire in order to meet specific communications requirements.

For purposes of ordering channels, each has been identified as a type of Special Access Service. However, such identification is not intended to limit a customer's use of the channel, nor to imply that the channel is limited to a particular use. For example, if a customer's equipment is capable of transmitting voice over a channel that is identified as a Metallic Service in this tariff, there is no restriction against doing so.
7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.1 Channel Types (Cont'd)

Following is a brief description of each type of channel:

Metallic - a channel for the transmission of low speed varying signals at rates up to 30 baud.

Voice Grade - a channel for the transmission of analog signals within an approximate bandwidth of 300 to 3000 Hz.

Program Audio - a channel for the transmission of audio signals. The nominal frequency bandwidths are from 200 to 3500 Hz, from 100 to 5000 Hz, from 50 to 8000 Hz, or from 50 to 15000 Hz.

Video - a channel for the transmission of standard 525 line 60 field monochrome or National Television Systems Committee color video signal and one or two associated 5 or 15 kHz audio signals. The bandwidth is either 30 Hz to 4.5 MHz or 30 Hz to 6.6 MHz.

Digital Data - a channel for the digital transmission of synchronous serial data at rates of 2.4, 4.8, 9.6, 19.2, 56.0 or 64.0 Kbps.

High Capacity - a channel for the transmission of isochronous serial digital data at rates of 1.544, 3.152, 6.312, 44.736 or 274.176 Mbps.

Synchronous Optical - a high speed channel for the transmission of synchronous full duplex data over optical fiber at rates of 155.52 or 622.08 Mbps.
7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.1 Channel Types (Cont'd)

Detailed descriptions of each of the channel types are provided in 7.4 through 7.11 following.

The Customer also has the option of ordering Voice Grade and High Capacity facilities (e.g., 1.544 Mbps and 44.736 Mbps) to Telephone Company hubs for multiplexing to individual channels of a lower capacity or bandwidth. Descriptions of the types of multiplexing available at the hubs, as well as the number of individual channels which may be derived from each type of facility, are set forth in 7.6 and 7.10 following. Additionally, the Customer may specify optional features for the individual channels derived from the facility to further tailor the channel to meet specific communications requirements. Descriptions of the optional features and functions available are set forth in 7.2.1 following.

For example, a Customer may order a 44.736 Mbps High Capacity channel from a Customer designated premises to a Telephone Company hub for multiplexing to twenty-eight 1.544 Mbps channels. The 1.544 Mbps channels may be further multiplexed at the same or a different hub to Voice Grade channels or may be extended to other Customer designated premises or hubs. Optional features may be added to either the 1.544 Mbps or the Voice Grade channels.

Similarly, the Customer has the option of ordering Synchronous Optical Channel Service to a wire center equipped for Add/Drop Multiplexing. This allows lower level signals to be added or dropped from a high speed optical carrier channel for delivery to a Customer designated premises, WATS office, Public Packet Data Network Service, or another wire center. A description of Add/Drop Multiplexing is set forth in 7.11.3(B) following.
7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.2 Service Descriptions

For the purposes of ordering, there are eight categories of Special Access Service. These are:

<table>
<thead>
<tr>
<th>Service Designator Codes</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Metallic</td>
<td>MT</td>
</tr>
<tr>
<td>Voice</td>
<td>VG</td>
</tr>
<tr>
<td>Program Audio</td>
<td>AP</td>
</tr>
<tr>
<td>Video</td>
<td>TV</td>
</tr>
<tr>
<td>Digital Data</td>
<td>DA</td>
</tr>
<tr>
<td>High Capacity</td>
<td>DS</td>
</tr>
<tr>
<td>Synchronous Optical</td>
<td>OC</td>
</tr>
</tbody>
</table>

Each service consists of a basic channel to which a technical specifications package (customized or predefined), channel interface(s) and, when desired, optional features and functions are added to construct the service desired by the customer.

Technical specifications packages are described in Section 15, following. Optional features and functions are described in this section. Channel interfaces are described in 15.2 following.

Customized technical specifications packages will be provided where technically feasible. If the Telephone Company determines that the requested parameter specifications are not compatible, the customer will be advised and given the opportunity to change the order.

When a customized channel is ordered the customer will be notified whether Additional Engineering Charges apply. In such cases, the customer will be advised and given the opportunity to change the order.
7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.2 Service Descriptions (Cont'd)

The channel descriptions provided in 7.4 through 7.11 following, specify the characteristics of the basic channel and indicate whether the channel is provided between customer designated premises, between a customer designated premises and a Telephone Company hub where bridging or multiplexing functions are performed, between hubs, between a customer designated premises and a WATS Serving Office, between a customer designated premises and a DSL Access Service Connection Point, between a customer designated premises and a wire center equipped with a Public Packet Data Network Service, between a Telephone Company serving wire center equipped with Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS) and another telephone company ATM-equipped serving wire center, between a Telephone Company serving wire center equipped with Frame Relay Access Service (FRAS) and another telephone company serving wire center equipped with a frame relay switch that is located in a non-adjacent serving territory or between a Telephone Company serving wire center equipped with Ethernet Transport Service (ETS) and another telephone company Ethernet-equipped serving wire center that is located in a non-adjacent serving territory.

(A) Information pertaining to the technical specifications packages indicates the transmission parameters that are available with each package. This information is displayed in matrices set forth in 15.2 following.

(B) Channel interfaces at each Point of Termination on a two-point service may be symmetrical or asymmetrical. On a multipoint service they may also be symmetrical or asymmetrical, but communications can only be provided between compatible channel interfaces. Only certain channel interfaces are compatible. These are set forth in 15.2 following, in a combination format.
7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.2 Service Descriptions (Cont'd)

(C) Only certain channel interface combinations are available with the predefined technical specifications packages. These are delineated in the Technical References set forth in (F) following. When a customized channel is requested, all channel interface combinations available with the specified type of service are available with the customized channel.

(D) The optional features and functions available with each type of Special Access Service are described in this section. The optional features and functions information also indicates with which technical specifications packages they are available.

Such information is displayed in matrices set forth in 15.2 following with the optional feature or function listed down the left side and the technical specifications package listed across the top.
7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.2 Service Descriptions (Cont'd)

(E) The Telephone Company will maintain services installed prior to April 1, 1985, at their existing transmission specifications, provided such performance specifications do not exceed the standards listed in this provision.

Those services exceeding the standards listed will be maintained at the performance levels specified in this tariff.

(F) All services installed after April 1, 1985 will conform to the transmission specifications standards contained in this tariff or in the following Technical References for each category of service:

<table>
<thead>
<tr>
<th>Category</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metallic</td>
<td>TR-NPL-000336</td>
</tr>
<tr>
<td>Voice Grade</td>
<td>TR-NWT-000335</td>
</tr>
<tr>
<td>Program Audio</td>
<td>GR-337-CORE</td>
</tr>
<tr>
<td>Video</td>
<td>GR-338-CORE</td>
</tr>
<tr>
<td>Digital Data</td>
<td>TR-NWT-000341</td>
</tr>
<tr>
<td>(64 Kbps and Subrates)</td>
<td>Pub 62310 (MDP-326-726)</td>
</tr>
<tr>
<td></td>
<td>ATIS-0600410.2001</td>
</tr>
<tr>
<td>High Capacity</td>
<td>GR-342-CORE</td>
</tr>
<tr>
<td></td>
<td>GR-54-CORE</td>
</tr>
<tr>
<td>Synchronous Optical</td>
<td>GR-253-CORE</td>
</tr>
<tr>
<td>and OC12</td>
<td>GR-1374-CORE</td>
</tr>
<tr>
<td></td>
<td>ATIS-0900105</td>
</tr>
<tr>
<td></td>
<td>ATIS-0900102</td>
</tr>
</tbody>
</table>
ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.3 Service Configurations

There are three types of service configurations over which Special Access Services are provided: two-point service, multipoint service and Synchronous Optical Channel Service.

(A) Two-Point Service

A two-point service connects two customer designated premises, either on a directly connected basis or through a hub where multiplexing functions are performed, or a customer designated premises and a DSL Access Service Connection Point, or a customer designated premises and a wire center equipped with a Public Packet Data Network Service, or a customer designated premises and a WATS Serving Office (WSO).
7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.3 Service Configurations (Cont'd)

(A) Two-Point Service (Cont'd)

Applicable rate elements are:

- Channel Terminations
- Channel Mileage (as applicable)
- Optional Features and Functions (when applicable)

A Special Access Surcharge, as set forth in 7.3 following, may be applicable.

The following diagram depicts a two-point Voice Grade service connecting two Customer-Designated Premises (CDP). The service is provided with C-Type conditioning.

---

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David Stoll
Vice President/Chief Executive Officer
123 W. Orchard Street, P.O. Box 127
Delton, Michigan 49046
(269) 623-2311
dstoll@mei.net
7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.3 Service Configurations (Cont'd)

(A) Two-Point Service (Cont'd)

Rate elements applicable to the foregoing diagram are:

- Channel Terminations (applicable one (1) per CDP)
- Channel Mileage
- 2 Channel Mileage Terminations plus
- 1 section, Channel Mileage Facility per mile
- C-Type Conditioning Optional Feature
7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.3 Service Configurations (Cont'd)

(A) Two-Point Service (Cont'd)

The following diagram depicts a two-point Voice Grade service connecting a customer designated premises to a WATS serving office.

![Diagram of two-point Voice Grade service]

Applicable rate elements for Special Access are:

- Channel Termination
- Channel Mileage
- 2 Channel Mileage Terminations plus 1 section, Channel Mileage Facility per mile
- Special Access Surcharge*
7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.3 Service Configurations (Cont'd)

(B) Multipoint Service

Multipoint service connects three or more customer designated premises through one or more Telephone Company hubs. Only certain types of Special Access Service are provided as multipoint service. These are so designated in the descriptions for the appropriate channel.

The channel between hubs (i.e., bridging locations) on a multipoint service is a mid-link. There is no limitation on the number of mid-links available with a multipoint service. However, when more than three mid-links in tandem are provided the quality of the overall service may be degraded.

Multipoint service utilizing a customized technical specifications package, as set forth in 7.1.2 preceding and 15.2 following, will be provided when technically possible. If the Telephone Company determines that the requested characteristics for a multipoint service are not compatible, the customer will be advised and given the opportunity to change the order.

When ordering, the customer will specify the desired bridging hub(s). NATIONAL EXCHANGE CARRIER ASSOCIATION TARIFF F.C.C. NO. 4 identifies serving wire centers, hub locations and the type of bridging functions available.

Applicable Rate Elements are:

- Channel Terminations (one per customer designated premises)
- Channel Mileage (as applicable between the serving wire center for each customer designated premises and the hub and between hubs).
- Bridging
- Additional Optional Features and Functions (when applicable).

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David Stoll
Vice President/Chief Executive Officer
123 W. Orchard Street, P.O. Box 127
Delton, Michigan 49046
(269) 623-2311
dstoll@mei.net

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7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.3 Service Configurations (Cont'd)

(B) Multipoint Service (Cont'd)

The Special Access Surcharge, as set forth in 7.3 following, may be applicable.

Example: Voice Grade multipoint service connecting four customer-designated premises (CDP) via two customer specified bridging hubs.

---

Applicable rate elements are:

- Channel Terminations (4 applicable);
- Channel Mileage (2 Channel Mileage Terminations per Channel Mileage Facility section for a total of 8, plus 4 sections, Channel Mileage Facility per mile);
- Bridging Optional Feature (6 applicable, i.e., each bridge port)
7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.3 Service Configurations (Cont'd)

(C) Synchronous Optical Channel Service

A Synchronous Optical Channel Service connects two customer designated premises, or a customer designated premises and a DSL Access Service Connection Point, or a customer designated premises and a wire center equipped for Add/Drop Multiplexing, or a customer designated premises and a wire center equipped with an Asynchronous Transfer Mode Cell Relay Access Service, or a customer designated premises and a wire center equipped with an Ethernet Transport Service. The connection is provided via a high speed optical carrier communications path delivering an optical handoff.

(1) The following diagram depicts a synchronous optical channel service connecting two Customer Designated Premises (CDP). The Optional Feature and Function of a Customer Node was ordered at one CDP.

![Diagram of Synchronous Optical Channel Service]

Applicable rate elements are:

- Channel Terminations (2 Channel Terminations/1 per CDP)
- Channel Mileage (2 Channel Mileage Terminations plus 1 Segment Channel Mileage Facility, per mile)
- Optional Feature: 1 Customer Node plus 3 Customer Premise Ports
7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.3 Service Configurations (Cont'd)

(C) Synchronous Optical Channel Service (Cont'd)

(2) The following diagram depicts a Synchronous Optical Channel Service connecting three Customer Designated Premises. CDP-A and CDP-B are connected using an Add/Drop Multiplexer. At the Add/Drop Multiplexer, the customer may drop off lower speed special access services.

![Diagram of Synchronous Optical Channel Service]

Applicable rate elements are:

- Channel Terminations (applicable one (1) per CDP)
- Channel Mileage
  - Channel Mileage Termination (2 applicable)
  - 1 Section, Channel Mileage Facility per mile
- Add/Drop Multiplexing Optional Feature
  (1 Central Office Port applicable, i.e., each port)
7. **Special Access Service (Cont'd)**

7.1 **General (Cont'd)**

7.1.4 **Alternate Use**

Alternate Use occurs when a service is arranged by the Telephone Company so that the customer can select different types of transmission at different times. A customer may use a service in any privately beneficial manner. However, where technical or engineering changes are required to effectuate an alternate use, the Telephone Company will make such special arrangements available on an individual case basis.

The arrangement required to transfer the service from one operation to the other (i.e., the transfer relay and control leads) will be rated and provided on an individual case basis and filed in Section 12, following, Specialized Service or Arrangements. The customer will pay the stated tariff rates for the Access Service rate elements for the service ordered [i.e., Channel Terminations, Channel Mileage (as applicable) and Optional Features and Functions (if any)].

7.1.5 **Special Facilities Routing**

A customer may request that the facilities used to provide Special Access Service be specially routed. The regulations, rates and charges for Special Facilities Routing (i.e., Avoidance, Diversity and Cable-Only) are set forth in Section 11, following.

7.1.6 **Design Layout Report**

At the request of the customer, the Telephone Company will provide to the customer the make-up of the facilities and services provided under this tariff as Special Access Service to aid the customer in designing its overall service. This information will be provided in the form of a Design Layout Report. The Design Layout Report will be provided to the customer at no charge, and will be reissued or updated whenever these facilities are materially changed.
7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.7 Acceptance Testing

At no additional charge, the Telephone Company will, at the customer's request, cooperatively test the following at the time of installation:

(A) For Voice Grade analog services, the acceptance test will include tests for loss, 3-tone slope, DC continuity, operational signaling, C-notched noise, and C-message noise when these parameters are applicable and specified in the order of service. Additionally, for Voice Grade services, a balance (improved loss) test will be made if the customer has ordered the improved loss optional feature.

(B) For other analog services (i.e., Metallic, Program Audio, and Video) and for digital services (i.e., Digital Data and High Capacity), acceptance tests will include tests applicable to the service as specified by the customer in the order for service.

In addition to the above tests, Additional Cooperative Acceptance Testing for Voice Grade service to test other parameters, as described in 13.3.1(B) following, is available at the customer's request. All test results will be made available to the customer upon request.

7.1.8 Ordering Options and Conditions

Special Access Service is ordered under the Access Order provisions set forth in Section 5, preceding. Also included in that section are other charges which may be associated with ordering Special Access Service (e.g., Service Date Change Charges, Cancellation Charges, etc.).
7. Special Access Service (Cont’d)

7.2 Rate Regulations

This section contains the specific regulations governing the rates and charges that apply for Special Access.

7.2.1 Rate Categories

There are three basic rate categories which apply to Special Access Service:

- Channel Terminations (described in 7.2.1(A) following)
- Channel Mileage (described in 7.2.1(B) following)
- Optional Features and Functions (described in 7.2.1(C) following).

(A) Channel Terminations

The Channel Termination rate category recovers the costs associated with the communications path between a customer designated premises and the serving wire center of that premises. Included as part of the Channel Termination is a standard channel interface arrangement which defines the technical characteristics associated with the type of facilities to which the access service is to be connected at the Point of Termination (POT) and the type of signaling capability, if any. The signaling capability is provided as an optional feature as set forth in (C) following.

For Synchronous Optical Channel Service the high speed optical communications path is between the Optical Line Termination (OLT) at the customer designated premises and the serving wire center of that premises.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(A) Channel Terminations (Cont'd)

One Channel Termination charge applies per customer designated premises at which the channel is terminated. This charge will apply even if the customer designated premises and the serving wire center are collocated in a Telephone Company building, except as provided for below.

The Channel Termination charge will not apply when:

1) The customer designated premises and serving wire center are physically (including caged, cageless, shared and adjacent arrangements) or virtually collocated as those terms are used in 47 C.F.R. § 51.323 and

2) The customer obtains such collocation for the purpose of interconnection with the Telephone Company’s network for the transmission and routing of telephone exchange service, exchange access service or both, and for the purpose of providing local exchange or exchange access services to its customers.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(A) Channel Terminations (Cont'd)

For a Special Access Digital Data Service 56.0 or 64.0 Kbps Bit Rate or for a 1.544 Mbps or 44.736 Mbps High Capacity Service connecting a customer designated premises to a Frame Relay Access Service as described in Section 16.1, following, there will be a charge for only one Channel Termination.

For a 1.544 Mbps or 44.736 Mbps High Capacity Service or for an OC3 or OC12 Synchronous Optical Channel Service connecting a customer designated premises to an Asynchronous Transfer Mode Cell Relay Access Service as described in Section 16.2, following, there will be a charge for only one Channel Termination.

For a 44.736 Mbps High Capacity Service or for an OC3 or OC12 Synchronous Optical Channel Service connecting a customer designated premises to an Ethernet Transport Service as described in Section 16.3, following, there will be a charge for only one Channel Termination.

For a 1.544 Mbps or 44.736 Mbps High Capacity Service or for an OC3/OC3c Synchronous Optical Channel Service connecting a customer designated premises to a DSL Access Service Connection Point as described in Section 8, following, for interconnection with ADSL and/or SDSL Access Services provided by the Telephone Company under this tariff or for interconnection with a wireline broadband Internet transmission service provided on a non-tariffed, common carrier basis, there will be a charge for only one Channel Termination.

For a Metallic Service connecting to a DSL Access Service Connection Point as described in Section 8, following, for interconnection with ADSL and/or SDSL Access Services provided by the Telephone Company under this tariff or for interconnection with a wireline broadband Internet transmission service provided on a non-tariffed, common carrier basis, there will be a charge for two Channel Terminations for each DSL Access Service Connection function ordered.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(B) Channel Mileage

The Channel Mileage rate category recovers the costs associated with the end office equipment and the transmission facilities between the serving wire centers associated with two customer designated premises, between a serving wire center associated with a customer designated premises and a Telephone Company hub, between two Telephone Company hubs, between a serving wire center associated with a customer designated premises and a wire center equipped for Add/Drop Multiplexing (ADM) or between two ADM equipped wire centers. Channel Mileage rates are made up of the Channel Mileage Facility rate and the Channel Mileage Termination rate.

(1) Channel Mileage Facility

The Channel Mileage Facility rate recovers the per mile cost for the transmission path which extends between the Telephone Company serving wire centers and/or hub(s), between the Telephone Company serving wire center and another wire center equipped with a Public Packet Data Network Service, between a Telephone Company serving wire center equipped with ATM-CRS and another telephone company ATM-equipped serving wire center, between a Telephone Company serving wire center equipped with FRAS and another telephone company serving wire center equipped with a frame relay switch that is located in a non-adjacent serving territory, or between a Telephone Company serving wire center equipped with ETS and another telephone company Ethernet-equipped serving wire center that is located in a non-adjacent serving territory.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(B) Channel Mileage (Cont'd)

(1) Channel Mileage Facility (Cont’d)

The Synchronous Optical Channel Service Channel Mileage Facility provides high speed transmission facilities between the Telephone Company serving wire centers, or between a Telephone Company serving wire center and another wire center equipped for Add/Drop Multiplexing (ADM), or between two ADM equipped wire centers, or between the Telephone Company serving wire center and another wire center equipped with Asynchronous Transfer Mode Cell Relay Access Service, or between the Telephone Company serving wire center and another wire center equipped with Ethernet Transport Service, or between a Telephone Company serving wire center equipped with ETS and another telephone company Ethernet-equipped serving wire center that is located in a non-adjacent serving territory.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(B) Channel Mileage (Cont’d)

(2) Channel Mileage Termination

The Channel Mileage Termination rate recovers the cost for end office equipment associated with terminating the facility (i.e., basic circuit equipment and terminations at serving wire centers and hubs). The Channel Mileage Termination rate will apply at the serving wire center(s) for each customer designated premises and Telephone Company hub where the channel is terminated.

If the Channel Mileage is between Telephone Company bridging hubs, the Channel Mileage Termination rate will apply per Telephone Company designated hub.

If the Channel Mileage is between the serving wire center for a customer designated premises and a WATS Serving Office, the Channel Mileage Termination rate will apply at both the serving wire center associated with the customer designated premises and the WATS Serving Office.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(B) Channel Mileage (Cont'd)

(2) Channel Mileage Termination (Cont'd)

If the Channel Mileage is between the serving wire center for a customer designated premises and another wire center equipped for Public Packet Data Network Service, the Channel Mileage Termination Rate will apply only at the serving wire center for the customer designated premises.

If the Channel Mileage is between a Telephone Company serving wire center equipped with FRAS and another telephone company serving wire center equipped with a frame relay switch that is located in a non-adjacent serving territory, or between a Telephone Company serving wire center equipped with Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS) and another telephone company ATM-equipped serving wire center, or between a Telephone Company serving wire center equipped with ETS and another telephone company Ethernet-equipped serving wire center that is located in a non-adjacent serving territory, no Channel Mileage Termination Rate will apply.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(B) Channel Mileage (Cont'd)

(2) Channel Mileage Termination (Cont'd)

If the Channel Mileage for Synchronous Optical Channel Service is between the serving wire center for a customer designated premises and a wire center equipped for Add/Drop Multiplexing, the Channel Mileage Termination Rate will apply at both the serving wire center associated with the Customer Designated Premises and the wire center equipped for Add/Drop Multiplexing.

If the Channel Mileage is between two wire centers equipped for Add/Drop Multiplexing, the Channel Mileage Termination rate will apply at both wire centers equipped for Add/Drop Multiplexing.

When the Channel Mileage Facility is zero (i.e., collocated serving wire centers), neither the Channel Mileage Facility rate nor the Channel Mileage Termination rate will apply.

(C) Optional Features and Functions

The Optional Features and Functions rate category recovers the costs associated with optional features and functions which may be added to a Special Access Service to improve its quality or utility to meet specific communications requirements. These are not necessarily identifiable with specific equipment, but rather represent the end result in terms of performance characteristics which may be obtained. These characteristics may be obtained by using various combinations of equipment. Although the equipment necessary to perform a specified function may be installed at various locations along the path of the service, they will be charged for as a single rate element.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(C) Optional Features and Functions (Cont'd)

Examples of Optional Features and Functions that are available include, but are not limited to, the following:

- Signaling Capability
- Hubbing Functions
- Conditioning
- Transfer Arrangements

Descriptions for each of the available Optional Features and Functions are set forth in 7.4 through 7.11 following.

A hub is a Telephone Company designated serving wire center at which bridging or multiplexing functions are performed. The bridging functions performed are to connect three or more customer designated premises in a multipoint arrangement. The multiplexing functions are to channelize analog or digital facilities to individual services requiring a lower capacity or bandwidth.

NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4 identifies serving wire centers, hub locations, hub level (i.e., Hub, Terminus Hub, Intermediate Hub, or Super-Intermediate Hub) and the type of bridging or multiplexing functions available. Additionally, subtending wire centers are identified for Intermediate and Super-Intermediate Hubs.
7. Special Access Service (Cont’d)

7.2 Rate Regulations (Cont’d)

7.2.2 Types of Rates and Charges

There are three types of rates and charges. These are monthly rates, daily rates and nonrecurring charges. The rates and charges are described as follows:

(A) Monthly Rates

Monthly rates are recurring rates that apply each month or fraction thereof that a Special Access Service is provided. For billing purposes, each month is considered to have 30 days.

(B) Daily Rates

Daily rates are recurring rates that apply to each 24 hour period or fraction thereof that a Program Audio or Video Special Access Service is provided for part-time use. For purposes of applying daily rates, the 24 hour period is not limited to a calendar day.

Part-time Video or Program Audio Service provided within a consecutive 30 day period will be charged the daily rate, not to exceed the monthly rate. For each day or partial day after a consecutive 30 day period of service, a charge equal to 1/30th of the monthly rate shall apply.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.2 Types of Rates and Charges (Cont'd)

(C) Nonrecurring Charges

Nonrecurring charges are one-time charges that apply for specific work activity (i.e., installation or change to an existing service). The types of nonrecurring charges that apply for Special Access Service are: installation of service, installation of optional features and functions, and service rearrangements. These charges are in addition to the Access Order Charge as specified in 17.4.1 following.

(1) Installation of Service

Nonrecurring charges apply to each service installed. The nonrecurring charges for the installation of service are set for each channel type as a nonrecurring charge for the Channel Termination.

(2) Installation of Optional Features and Functions

When optional features and functions are installed coincident with the initial installation of service, no separate nonrecurring charge is applicable. When optional features and functions are installed or changed subsequent to the installation of service, an Access Order Charge as specified in 17.4.1 following will apply per order.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.2 Types of Rates and Charges (Cont'd)

(C) Nonrecurring Charges (Cont'd)

(3) Service Rearrangements

Service rearrangements are changes to existing (installed) services which may be administrative only in nature, as set forth following, or that involve actual physical change to the service. Changes to pending orders are set forth in 5.4 preceding.

Changes in the physical location of the point of termination or customer designated premises are moves as set forth in 7.2.3 following.

Changes in the type of Service or Channel Termination which result in a change of the minimum period requirement will be treated as a discontinuance of the service and an installation of a new service.

Changes in ownership or transfer of responsibility from one customer to another will be treated as a discontinuance of the service and an installation of a new service. In the event the change in ownership or transfer of responsibility is as set forth in 2.1.2(A), preceding, where there is no change in facilities or arrangements, the change will be treated as an administrative change.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.2 Types of Rates and Charges (Cont'd)

(C) Nonrecurring Charges (Cont'd)

(3) Service Rearrangements (Cont'd)

Administrative changes will be made without charge(s) to the customer. Administrative changes are as follows:

- Change of customer name,
- Change of customer or customer's end user premises address when the change of address is not a result of physical relocation of equipment,
- Change in billing data (name, address, or contact name or telephone number),
- Change of agency authorization,
- Change of customer circuit identification,
- Change of billing account number,
- Change of customer test line number,
- Change of customer or customer's end user contact name or telephone number, and
- Change of jurisdiction.

All other service rearrangements will be charged as follows:

If the change involves the addition of other customer designated premises to an existing service, the nonrecurring charge for the channel termination rate element will apply. The charge(s) will apply only for the location(s) that is being added. The charge(s) will be in addition to an Access Order Charge as set forth in 17.4.1 following.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.2 Types of Rates and Charges (Cont'd)

(C) Nonrecurring Charges (Cont'd)

(3) Service Rearrangements (Cont'd)

- If the change involves the addition of an optional feature or function (with the exception of the addition of Clear Channel Capability to an existing service), or if the change involves changing the type of signaling on a Voice Grade service, and for all other changes the Access Order Charge as set forth in 17.4.1 following will apply.

- When the Clear Channel Capability optional feature is installed on an existing facility, the addition will be treated as a discontinuance and start of service and all associated non-recurring charges will apply.

7.2.3 Moves

A move involves a change in the physical location of one of the following:

- The Point of Termination at the customer's premises;

- The customer's premises

The charges for the move are dependent on whether the move is to a new location within the same building or to a different building.

(A) Moves Within the Same Building

When the move is to a new location within the same building, the charge for the move will be an amount equal to one half of the non-recurring (i.e., installation) charge for the service termination affected. There will be no change in the minimum period requirements. This charge is in addition to the Access Order Charge as specified in 17.4.1 following.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.3 Moves (Cont'd)

(B) Moves To a Different Building (Cont’d)

Moves to a different building will be treated as a discontinuance and start of service and all associated nonrecurring charges will apply. New minimum period requirements will be established for the new services. The customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued service.

7.2.4 Minimum Periods

The minimum service period for all services except part-time Video and Program Audio services, DS3 High Capacity Service and Synchronous Optical Channel Service is one month and the full monthly rate will apply to the first month. Adjustments for the quantities of services established or discontinued in any billing period beyond the minimum period are as set forth in 2.4.1(F) preceding.

The minimum service period for part-time Video and Program Audio services is a continuous 24-hour period, not limited to a calendar day. The minimum service period for DS3 High Capacity Service and Synchronous Optical Channel Service is twelve months.

The minimum service period will be waived for a High Capacity Service included in a Term Discount plan that is replaced with a qualifying High Capacity Service Optional Rate Plan Replacement as set forth in Section 7.2.8(A)(1)(c), following.

The minimum service period will be waived for a Synchronous Optical Channel Service included in a Term Discount plan that is replaced with a qualifying SOCS Optional Rate Plan Replacement as set forth in Section 7.2.8(B)(3), following.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.5 Mileage Measurement

The mileage to be used to determine the monthly rate for the Channel Mileage Facility is calculated on the airline distance between the locations involved, i.e.,

- the serving wire centers associated with two customer designated premises,
- a serving wire center associated with a customer designated premises and a Telephone Company hub,
- a serving wire center associated with a customer designated premises and a wire center equipped with a Public Packet Data Network Service,
- a serving wire center equipped with ATM-CRS and another telephone company ATM-equipped serving wire center,
- a serving wire center equipped with FRAS and another telephone company serving wire center equipped with a frame relay switch that is located in a non-adjacent serving territory,
- a serving wire center equipped with ETS and another telephone company Ethernet-equipped serving wire center that is located in a non-adjacent serving territory,
- a serving wire center associated with a customer designated premises and a DSL Access Service Connection Point,
- two Telephone Company hubs,
- a serving wire center associated with a customer designated premises and a wire center equipped for Add/Drop Multiplexing,
- two wire centers equipped for Add/Drop Multiplexing,
- or between the serving wire center associated with a customer designated premises and a WATS Serving Office.

The serving wire center associated with a customer designated premises is the serving wire center from which this customer designated premises would normally obtain dial tone.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.5 Mileage Measurement (Cont'd)

Mileage charges are shown with each channel type. To determine the rate to be billed, first compute the mileage using the V&H coordinates method, as set forth in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, then multiply the resulting number of miles times the Channel Mileage Facility per mile rate, and add the Channel Mileage Termination rate for each termination. When the calculation results in a fraction of a mile, always round up to the next whole mile before determining the mileage and applying the rates. When more than one Telephone Company is involved in the provision of service, billing will be accomplished as set forth in 2.4.7, preceding.
7. **Special Access Service (Cont'd)**

7.2 **Rate Regulations (Cont'd)**

7.2.5 **Mileage Measurement (Cont'd)**

When hubs are involved, mileage is computed and rates applied separately for each section of the Channel Mileage, i.e.

- customer designated premises serving wire center to hub,
- hub to hub and/or
- hub to customer designated premises serving wire center.

However, when any service is routed through a hub for purposes other than customer specified bridging or multiplexing (e.g., the Telephone Company chooses to so route for test access purposes), rates will be applied only to the distance calculated between the serving wire centers associated with the customer designated premises.

See the service configuration example for multipoint service as set forth in 7.1.3(B) preceding.

When Add/Drop Multiplexing is offered in connection with Synchronous Optical Channel Service, mileage is computed and rates applied separately for each section of the Channel Mileage, i.e.,

- customer designated premises serving wire center to an Add/Drop Multiplexing (ADM) equipped wire center,
- ADM equipped wire center to ADM equipped wire center,
- ADM equipped wire center to a customer designated premises serving wire center.

7.2.6 **Facility Hubs**

A customer has the option of ordering Voice Grade service or High Capacity services (i.e., DS1, DS1C, DS2, DS3 or DS4) to a facility hub for channelizing to individual services requiring lower capacity facilities (e.g., Voice, Program Audio, etc.).
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.6 Facility Hubs (Cont'd)

Different locations may be designated as hubs for different facility capacities, e.g., multiplexing from digital to digital may occur at one location while multiplexing from digital to analog may occur at a different location. When placing an Access Order the customer will specify the desired hub.

NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4 identifies serving wire centers, hub locations, hub level (i.e., Hub, Terminus Hub, Intermediate Hub, or Super-Intermediate Hub) and the type of multiplexing functions available. Additionally, subtending wire centers are identified for Intermediate and Super-Intermediate Hubs.

Some of the types of multiplexing available include the following:

- from higher to lower bit rate
- from higher to lower bandwidth
- from high capacity to voice frequency channels.

Point to point services may be provided on channels of these services to a hub. The transmission performance for the point to point service provided between customer designated premises will be that of the lower capacity or bit rate. For example, when a 1.544 Mbps channel is multiplexed to voice frequency channels, the transmission performance of the channelized services will be Voice Grade, not High Capacity.

The Telephone Company will commence billing the monthly rate for the service to the hub on the date specified by the customer on the Access Order. Individual channels utilizing these services may be installed coincident with the installation of the service to the hub or may be ordered and/or installed at a later date, at the option of the customer. Except as provided for in Section 7.2.1 (A) preceding, the customer will be billed for a Voice Grade or a High Capacity Channel Termination, Channel Mileage (when applicable), and the multiplexer at the time the service is installed.

Individual service rates (by service type) will apply for a Channel Termination (when applicable) and additional Channel Mileage (as required) for each channelized service. These will be billed to the customer as each individual service is installed.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.6 Facility Hubs (Cont'd)

Cascading multiplexing occurs when a High Capacity service is de-multiplexed to provide channels with a lesser capacity and one of the lesser capacity channels is further de-multiplexed. For example, a 6.312 Mbps High Capacity service is de-multiplexed to four DS1 channels and then one of the DS1 channels is further de-multiplexed to 24 individual Voice Grade channels.

When cascading multiplexing is performed, whether in the same or a different hub, a charge for the additional multiplexing unit also applies. When cascading multiplexing is performed at different hubbing locations, Channel Mileage charges also apply between the hubs.

The Telephone Company will designate hubs for Program Audio and Video Services. Full-time or part-time service may be provided between customer designated premises or between a customer designated premises and a hub and billed accordingly at the monthly rates set forth on an ICB basis for a Channel Termination, Channel Mileage and Optional Features and Functions, as applicable. When the service is ordered to a hub, the customer may order full-time or part-time Video and Program Audio services as needed between that hub and additional customer designated premises. The rate elements required to provide the part-time service (i.e., Channel Termination, Channel Mileage and Optional Features and Functions, as applicable) will be billed at daily rates for the duration of the service requested.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.7 Mixed Use

Mixed use refers to a rate applicable when the customer orders High Capacity or Synchronous Optical Channel Service Special Access facilities between a customer designated premises and a Telephone Company hub or ADM equipped wire center where the Telephone Company performs multiplexing/de-multiplexing functions and the same customer then orders the derived channels as Special and Switched Access Services. Mixed use also applies when the customer orders Switched Access Service between a customer designated premises and an end office that is multiplexed at a Telephone Company hub or ADM equipped wire center and the same customer then orders the derived channels as Special and Switched Access Service. Rates and charges will apply for the existing facilities and new facilities as if the service were ordered as mixed use.

Except as noted above, the High Capacity or Synchronous Optical Channel Service facility will be ordered, provided and rated as Special Access Service (i.e., Channel Termination, Channel Mileage, as appropriate, Multiplexing, Customer Node, Customer Premises Port, and Add/Drop Multiplexing). The nonrecurring charge that applies when the mixed use facility is installed will be the nonrecurring charge associated with the appropriate Special Access High Capacity or Synchronous Optical Channel Service Channel Termination.

Rating as Special Access will continue until such time as the customer chooses to use a portion of the available capacity for Switched Access Service. Individual service (i.e., Switched or Special Access) nonrecurring charges will not apply to the individual channels of the mixed use facility.

When Special Access Service is provided utilizing a channel of the mixed use facility to a hub, High Capacity rates and charges will apply for the facility to the hub, as set forth preceding, and individual service rates and charges will apply from the hub to the customer designated premises.
7. Special Access Service (Cont’d)

7.2 Rate Regulations (Cont’d)

7.2.7 Mixed Use (Cont’d)

The rates and charges that will apply to the portion from the hub to the customer designated premises will be dependent on the specific type of Special Access Service that is provided (e.g., Voice Grade, etc.). The applicable rates and charges will include a Channel Termination and Channel Mileage, if applicable. Rates and charges for optional features and functions associated with the service, if any, will apply for the appropriate channel type.

As each individual channel of a Special Access High Capacity Service is activated for Switched Access Service, the Special Access Channel Termination, Channel Mileage and Multiplexing rates will be reduced accordingly (e.g., 1/24th for a DS1 service, 1/672nd for a DS3 service).

Similarly, as each individual channel of a Special Access Synchronous Optical Channel Service is activated for Switched Access Service, the Special Access Channel Termination, Channel Mileage, Customer Node, Customer Premises Port, and Add/Drop Multiplexing rates will be reduced accordingly (e.g., 1/2016th for an OC3 service, 1/8064th for an OC12 service).

If the Special Access charges for the mixed use facility are subject to Optional Rate Plan discounts (e.g., Term Discount Optional Rate Plan) as set forth in 7.2.8 following, the Special Access charges will be reduced to reflect mixed use before the Optional Rate Plan discounts are applied.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.7 Mixed Use (Cont'd)

Switched Access Service rates and charges, as set forth in 17.2 following, will apply for each channel that is used to provide a Switched Access Service. The Switched Access Service Entrance Facility charge will be reduced by multiplying its rate by a rate reduction factor (i.e., the ratio of derived Switched Access Service channels to the total number of channels that can be derived). If the Telephone Company is providing Direct Trunked Transport, then the Direct Trunked Transport, Multiplexing, Customer Node, Customer Premises Port, and Add/Drop Multiplexing charges will be reduced by multiplying their respective rates by the rate reduction factor.

The following table shows the total voice grade equivalents for each of the services that may be used for Mixed Use:

<table>
<thead>
<tr>
<th>High Capacity or Synchronous Optical Channel Service</th>
<th>DS3 Quantities</th>
<th>DS1 Quantities</th>
<th>Voice Grade Equivalents</th>
</tr>
</thead>
<tbody>
<tr>
<td>DS1</td>
<td>n/a</td>
<td>1</td>
<td>24</td>
</tr>
<tr>
<td>DS3</td>
<td>1</td>
<td>28</td>
<td>672</td>
</tr>
<tr>
<td>OC3</td>
<td>3</td>
<td>84</td>
<td>2,016</td>
</tr>
<tr>
<td>OC12</td>
<td>12</td>
<td>336</td>
<td>8,064</td>
</tr>
</tbody>
</table>

The customer must place an order for each individual Switched or Special Access Service utilizing the Mixed Use facilities and specify the channel assignment for each such service.
7. **Special Access Service (Cont'd)**

7.2 **Rate Regulations (Cont'd)**

7.2.8 **Optional Rate Plans**

There are two Optional Rate Plans: a High Capacity Optional Rate Plan and a Synchronous Optical Channel Service Optional Rate Plan.

(A) The High Capacity Optional Rate Plan offers a Term Discount. The Term Discount plan applies to Special Access DS1 and DS3 High Capacity Service Channel Termination, Channel Mileage Facility and Channel Mileage Termination monthly rates, as set forth following. The current monthly rates for such services are reduced by a fixed percentage. The amount of the discount percentage differs based on the length of the service commitment period selected by the customer. The Term Discount percentages for High Capacity Service are as set forth in individual based contracts.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.8 Optional Rate Plans (Cont'd)

(A) High Capacity Optional Rate Plan (Cont'd)

Discounts for the Term Discount plan are only applied to High Capacity Service provided to a customer within the same state and LATA by the same Telephone Company.

The minimum service period on a monthly rate basis is one month for DS1 service and twelve months for DS3 service.

(1) Term Discounts

DS1 and DS3 High Capacity Special Access Service may be ordered at the customer's option on a monthly rate basis or for Term Discount periods of 36 months (3 years) or 60 months (5 years).

The minimum service period for all Term Discount plans is twelve months. The minimum service period will be waived for a High Capacity Service included in a Term Discount plan that is replaced with a qualifying High Capacity Service Optional Rate Plan Replacement as set forth in Section 7.2.8(A)(1)(c), following.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.8 Optional Rate Plans (Cont'd)

(A) High Capacity Optional Rate Plan (Cont'd)

(1) Term Discounts (Cont'd)

The customer must specify the length of the service commitment period at the time the service is ordered.

For customers that subscribe to the Term Discount plan for 36 or 60 months, the Term Discount percentage as set forth on an individual case basis will be frozen from Company initiated decreases, for the entire discount period at the percent in effect at the beginning of the Term Discount period.

If a Term Discount percentage increase occurs during the term of an existing Term Discount plan, the increased percentage will be applied automatically to the remainder of the current Term Discount period.

At the end of the Term Discount period, the customer may convert to month-to-month service or subscribe to a new Term Discount plan. If the customer does not make a choice by the end of the discount period, the rates will automatically convert to month-to-month service rates.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.8 Optional Rate Plans (Cont'd)

(A) High Capacity Optional Rate Plan (Cont'd)

(1) Term Discounts (Cont'd)

To be included in a Term Discount plan, all eligible High Capacity rate elements must be ordered for the same commitment term (i.e., all 36 months or all 60 months) and with the same service date. When additional capacity is subsequently added, it will be available only on a month-to-month basis unless the discount period of the entire service is upgraded.

Eligible DS1 or DS3 High Capacity rate elements are those Channel Terminations, Channel Mileage Facility and Channel Mileage Terminations provided to a customer within the same state and LATA by the same Telephone Company. As long as the number of DS1s or DS3s included in a Term Discount plan remains constant, except for qualifying High Capacity Service Optional Rate Plan Replacements as set forth in Section 7.2.8(A)(1)(c), following, customer requests to install and disconnect DS1 or DS3 services, including changes affecting different wire centers and/or customer designated premises, will not change the current Term Discount period or the minimum service period, and Discontinuance of Service charges as set forth in (C), following, will not apply.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.8 Optional Rate Plans (Cont'd)

(A) High Capacity Optional Rate Plan (Cont'd)

(1) Term Discounts (Cont'd)

(a) Upgrades in Term Discounts

Services provided under monthly rates or Term Discount rates may be upgraded to a Term Discount plan at any time without incurring Channel Termination nonrecurring charges or discontinuance charges for existing services. The new Term Discount plan must meet or exceed the service term of the plan being upgraded. For example, a service with a 36 month commitment period may be upgraded to a new 36 month, or 60 month service period. The monthly rates will be those that are in effect at the time the service is upgraded. A new minimum service period applies to all High Capacity Service that is upgraded.

(b) Upgrades in Capacity (DS1 to DS3)

If the customer chooses to upgrade a service under the Term Discount rate plan to a higher capacity (i.e., DS1 to DS3), discontinuance charges will not apply, provided all the following conditions are met:

- the customer's order for the disconnect of the existing DS1 Service and the installation of the new DS3 Service are received at the same time and specifically reference the application of upgrade in capacity,

- the customer's disconnect order for the existing DS1 Service must reference the DS3 Service installation order,

- the new service has a total voice equivalent channel capacity greater than the total voice equivalent channel capacity of the service being discontinued and,

- the new Term Discount period meets or exceeds the Term Discount period being discontinued.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.8 Optional Rate Plans (Cont'd)

(A) High Capacity Optional Rate Plan (Cont'd)

(1) Term Discounts (Cont'd)

(b) Upgrades in Capacity (DS1 to DS3) (Cont'd)

A new minimum service period applies to all upgrades. Channel Termination nonrecurring charges for an equivalent channel capacity of the existing services being upgraded to the higher speed service will not be assessed. For example, 30 existing DS1 Services are being upgraded to DS3 Service at the customer’s request. A total of 2 DS3 Services will be installed without Channel Termination nonrecurring charges being assessed, as it will require 2 DS3 Services to provide the equivalent channel capacity of the existing services. Channel Termination nonrecurring charges will not apply to the upgraded lower speed services placed on the higher speed service if requested at the same time as the upgrade request.

Channel Termination nonrecurring charges will apply for capacity that exceeds the existing equivalent channel capacity.

Should the customer choose to upgrade either a portion of, or the entire DS1 Service under the Term Discount plan to a DS3 Service and move the service to a new customer location(s) within the same state and LATA, and when service is provided by the same telephone company, discontinuance charges will not apply.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.8 Optional Rate Plans (Cont'd)

(A) High Capacity Optional Rate Plan (Cont'd)

(1) Term Discounts (Cont'd)

(c) High Capacity Service Optional Rate Plan Replacements

All or a portion of existing DS1 or DS3 services included in a High Capacity Optional Rate Plan may be replaced before the end of its term commitment period with a new Synchronous Optional Channel Service (SOCS) Optional Rate Plan, with a new or existing ATM-CRS Term Discount Plan or with a new or existing ETS Term Discount Plan without incurring Discontinuance of Service charges as set forth in (d), following, if all of the requirements listed in (i), below, are met.

(i) A customer may replace all or a portion of the services included in its existing High Capacity Optional Rate Plan(s) before the end of its term commitment period(s) with newly committed SOCS channel(s) added to the customer’s new SOCS Term Discount Optional Rate Plan, with newly committed ATM-CRS Port(s) added to the customer’s new or existing ATM Term Discount Plan, or with newly committed ETS Port(s) added to the customer’s new or existing ETS Term Discount Plan provided:

a. The term commitment period remaining in the customer’s existing ATM-CRS Term Discount Plan or existing ETS Term Discount Plan or established in the new SOCS Optional Rate Plan, new ATM-CRS Term Discount Plan or new ETS Term Discount Plan meets or exceeds the number of months remaining in the customer’s existing High Capacity Optional Rate Plan(s);
ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.8 Optional Rate Plans (Cont'd)

(A) High Capacity Optional Rate Plan (Cont'd)

(1) Term Discounts (Cont'd)

(c) High Capacity Service Optional Rate Plan Replacements (Cont’d)

(i) (Cont’d)

b. The bandwidth capacity of the newly committed SOCS channel(s) included in the new SOCS Optional Rate Plan, the newly committed ATM-CRS Port(s) included in the new or existing ATM-CRS Term Discount Plan, or the newly committed ETS Port(s) included in the new or existing ETS Term Discount Plan meets or exceeds the bandwidth capacity of the service(s) being replaced in the customer’s existing High Capacity Optional Rate Plan(s);

c. The customer commits to retain the newly committed ATM-CRS Port(s) or newly committed ETS Port(s) in-service at the same bandwidth capacity for the remaining term commitment period for its existing ATM-CRS Term Discount Plan or its existing ETS Term Discount Plan or for the entire term commitment period of its new SOCS Term Discount Optional Rate Plan, new ATM-CRS Term Discount Plan or new ETS Term Discount Plan;
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.8 Optional Rate Plans (Cont'd)

(A) High Capacity Optional Rate Plan (Cont'd)

(1) Term Discounts (Cont'd)

(c) High Capacity Service Optional Rate Plan Replacements (Cont’d)

(i) (Cont’d)

d. The customer’s orders for the disconnect of all or a portion of the services included in its High Capacity Optional Rate Plan and the addition of newly committed SOCS channel(s) to a new SOCS Optional Rate Plan, newly committed ATM-CRS Port(s) to a new or existing ATM-CRS Term Discount Plan or newly committed ETS Port(s) to a new or existing ETS Term Discount Plan are submitted to the Telephone Company at the same time and include cross references as described in Section 5.2.2, preceding;

c. Any newly committed ATM-CRS Ports or newly committed ETS Ports are added to the customer’s existing ATM-CRS Term Discount Plan or existing ETS Term Discount Plan before the last year of the existing term commitment period; and

f. Any newly committed SOCS channels added to a new SOCS Optional Rate Plan, newly committed ATM-CRS Ports added to a new or existing ATM-CRS Term Discount Plan, or newly committed ETS Ports added to a new or existing ETS Term Discount Plan are installed at the same location as the service(s) being replaced in the customer’s existing High Capacity Optional Rate Plan(s).
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.8 Optional Rate Plans (Cont'd)

(A) High Capacity Optional Rate Plan (Cont'd)

(1) Term Discounts (Cont'd)

(c) High Capacity Service Optional Rate Plan Replacements (Cont'd)

(ii) If any of the requirements specified in (i), above, are not met, replacement SOCS channels, replacement ATM-CRS Port(s), and/or replacement ETS Port(s) will not qualify for the provisions under Section 7.2.8(A)(1)(c). Discontinuance charges will apply to replace all or a portion of the services in an existing High Capacity Optional Rate Plan as described in (d), below.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.8 Optional Rate Plans (Cont'd)

(A) High Capacity Optional Rate Plan (Cont'd)

(1) Term Discounts (Cont'd)

(c) High Capacity Service Optional Rate Plan Replacements (Cont'd)

(iii) When a customer replaces all or a portion of its services included in its existing High Capacity Optional Rate Plan with a newly committed SOCS channel(s) added to the customer’s new SOCS Optional Rate Plan, with a newly committed ATM-CRS Port(s) added to the customer’s new or existing ATM-CRS Term Discount Plan or with a newly committed ETS Port(s) added to the customer’s new or existing ETS Term Discount Plan provided pursuant to Sections 7.2.8(B), 16.2 and 16.3, following, the Telephone Company will waive any unsatisfied minimum period charges that may otherwise be applicable for disconnecting the customer’s High Capacity Service prior to satisfying the minimum service period.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.8 Optional Rate Plans (Cont'd)

(A) High Capacity Optional Rate Plan (Cont'd)

(1) Term Discounts (Cont'd)

(c) High Capacity Service Optional Rate Plan Replacements (Cont’d)

(iv) The term discount percentage for the replacement SOCS Optional Rate Plan, replacement ATM-CRS Term Discount Plan or replacement ETS Term Discount Plan will apply on a going forward basis based on the customer’s written request to establish a replacement term commitment period under Section 7.2.8(A)(1)(c).

(v) When a customer replaces all or a portion of its existing High Capacity Optional Rate Plan with a newly committed ATM-CRS Port(s) added to its existing ATM-CRS Term Discount Plan or with a newly committed ETS Port(s) added to its existing ETS Term Discount Plan, the customer’s existing ATM-CRS Term Discount Plan or existing ETS Term Discount Plan term commitment period would continue uninterrupted.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.8 Optional Rate Plans (Cont'd)

(A) High Capacity Optional Rate Plan (Cont'd)

(1) Term Discounts (Cont'd)

(c) High Capacity Service Optional Rate Plan Replacements (Cont'd)

(vi) An Access Order Charge, as described in Section 5.4.1, preceding, does not apply to make a change to an existing High Capacity Optional Rate Plan as a result of a High Capacity Service Optional Rate Plan Replacement under this section. An Access Order Charge per order does apply to install a SOCS channel(s), ATM-CRS Port(s), and ETS Port(s).

(vii) Terms and conditions for the SOCS Optional Rate Plan, ATM-CRS Term Discount Plan and ETS Term Discount Plan are specified in Sections 7.2.8(B), 16.2.5 and 16.3.5, following
7. Special Access Service (Cont’d)

7.2 Rate Regulations (Cont’d)

7.2.8 Optional Rate Plans (Cont’d)

(A) High Capacity Optional Rate Plan (Cont’d)

(1) Term Discounts (Cont’d)

(d) Discontinuance of Service

Except as specified in (c), above, discontinuance charges, as described below, will apply to the portion of the service being discontinued when the customer chooses to disconnect all or a portion of its service prior to the expiration of the term commitment period.

(i) Should the customer choose to discontinue a Term Discount plan prior to the completion of the minimum service period, discontinuance charges will apply. Discontinuance charges equal to one-hundred percent of the total undiscounted monthly rates, less any amounts previously paid, will apply for the minimum service period. Additionally, discontinuance charges of fifteen percent for DS1 service, and thirty-five percent for DS3 service, of the total undiscounted monthly charges, will apply to the remaining portion of the term commitment period.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.8 Optional Rate Plans (Cont'd)

(A) High Capacity Optional Rate Plan (Cont'd)

(1) Term Discounts (Cont’d)

(d) Discontinuance of Service (Cont’d)

(ii) Should the customer choose to discontinue service ordered under a Term Discount plan after the minimum service period but before the completion of the discount period, discontinuance charges will apply. Discontinuance charges of fifteen percent for DS1 Service, and thirty-five percent for DS3 Service, of the total undiscounted monthly charges will apply to the remaining portion of the term commitment period. For example, a customer has a DS1 Service which it chooses to discontinue after 33 months into a 60-month service term. The discontinuance charge would be 0.15 times 27 months times the undiscounted monthly rates for that service.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.8 Optional Rate Plans (Cont'd)

(B) Synchronous Optical Channel Service (SOCS) Optional Rate Plan

The Synchronous Optical Channel Service Optional Rate Plan offers a Term Discount. The Term Discount applies to Channel Terminations, Channel Mileage, Customer Nodes, Customer Premises Ports and Central Office Ports monthly rates, as set forth following. The Term Discount percentages for the Synchronous Optical Channel Service Term Discount are as set forth on an individual case basis.

Discounts for the Synchronous Optical Channel Service Optional Rate Plan are only applied to Synchronous Optical Channel Service provided to a customer within the same state and LATA by the same Telephone Company.

OC3/OC3c and OC12 Synchronous Optical Channel Service may be ordered at the customer's option on a monthly rate basis or for Term Discount periods of 36 months (3 years) or 60 months (5 years).
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.8 Optional Rate Plans (Cont'd)

(B) Synchronous Optical Channel Service (SOCS) Optional Rate Plan (Cont’d)

The minimum service period for all term discount plans is twelve months. The minimum service period will be waived for a Synchronous Optical Channel Service included in a Term Discount plan that is replaced with a qualifying SOCS Optional Rate Plan Replacement as set forth in Section 7.2.8(B)(3) following. The Customer must specify the length of the service commitment period at the time the service is ordered.

For customers that subscribe to the Term Discount plan for 36 or 60 months, the Term Discount percentage as set forth on an individual case basis will be frozen from Company initiated decreases, for the entire discount period at the percent in effect at the beginning of the Term Discount period.

If a Term Discount percentage increase occurs during the term of an existing Term Discount plan, the increased percentage will be applied automatically to the remainder of the current Term Discount period.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.8 Optional Rate Plans (Cont'd)

(B) Synchronous Optical Channel Service (SOCS) Optional Rate Plan (Cont’d)

At the end of the Term Discount period, the customer may convert to month-to-month service or subscribe to a new Term Discount plan. If the customer does not make a choice by the end of the discount period, the rates will automatically convert to month-to-month service rates. The minimum service period on a monthly rate basis is twelve months for Synchronous Optical Channel Service.

To be included in a Term Discount plan, all eligible Synchronous Optical Channel Service rate elements must be ordered for the same commitment term (i.e., all 36 months or all 60 months) and with the same service date. When additional capacity is subsequently added, it will be available only on a month-to-month basis unless the discount period of the entire service is upgraded.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.8 Optional Rate Plans (Cont'd)

(B) Synchronous Optical Channel Service (SOCS) Optional Rate Plan (Cont’d)

Eligible OC3/OC3c or OC12 Synchronous Optical Channel Service rate elements are those Channel Terminations, Channel Mileage Facility, Channel Mileage Terminations, Customer Nodes, Customer Premises Ports and Central Office Ports provided to a customer within the same state and LATA by the same Telephone Company. As long as the number of OC3s, OC3cs or OC12s included in a Term Discount plan remains constant, except for qualifying SOCS Optional Rate Plan Replacements as set forth in Section 7.2.8(B)(3), following, customer requests to install and disconnect OC3, OC3c or OC12 services, including changes affecting different wire centers and/or customer designated premises, will not change the current Term Discount period or the minimum service period, and Discontinuance of Service charges as set forth in (4) following will not apply.
ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.8 Optional Rate Plans (Cont'd)

(B) Synchronous Optical Channel Service (SOCS) Optional Rate Plan (Cont’d)

(1) Upgrades in Term Discounts

Services provided under monthly rates or Term Discount rates may be upgraded to a Term Discount plan at any time without incurring nonrecurring charges or discontinuance charges for existing services. The new Term Discount plan must meet or exceed the service term of the plan being upgraded. For example, a service with a 36 month commitment period may be upgraded to a new 36 month, or 60 month service period. The monthly rates will be those that are in effect at the time the service is upgraded. A new minimum service period applies to all Synchronous Optical Channel Service that is upgraded.

(2) Upgrades in Capacity (OC3/OC3c to OC12)

If the customer chooses to upgrade a service under the Term Discount rate plan to a higher capacity (i.e., OC3/OC3c to OC12), discontinuance charges will not apply, provided all the following conditions are met:

• the customer's order for the disconnect of the existing OC3/OC3c Service and the installation of the new OC12 Service are received at the same time and specifically reference the application of upgrade in capacity,

• the customer's disconnect order for the existing OC3/OC3c Service must reference the OC12 Service installation order,

• the new service has a total channel capacity greater than the total channel capacity of the service being discontinued and,

• the new Term Discount period meets or exceeds the Term Discount period being discontinued.

A new minimum service period applies to all upgrades. Nonrecurring charges will not be assessed when an existing OC3/OC3c service is upgraded to an equivalent channel capacity at a higher speed.
7. Special Access Service (Cont’d)

7.2 Rate Regulations (Cont’d)

7.2.8 Optional Rate Plans (Cont’d)

(B) Synchronous Optical Channel Service (SOCS) Optional Rate Plan (Cont’d)

(2) Upgrades in Capacity (OC3/OC3c to OC12) (Cont’d)

Should the customer choose to upgrade either a portion of, or the entire OC3/OC3c Service under the Term Discount plan to an OC12 Service and move the service to a new customer location(s) within the same state and LATA, and when service is provided by the same telephone company, discontinuance charges will not apply.

(3) SOCS Optional Rate Plan Replacements

All or a portion of existing OC3/OC3c or OC12 services included in a SOCS Optional Rate Plan may be replaced before the end of its term commitment period with a new or existing ATM-CRS Term Discount Plan or with a new or existing ETS Term Discount Plan without incurring Discontinuance of Service charges as set forth in (4), following, if all of the requirements listed in (a), below, are met.

(a) A customer may replace all or a portion of the services included in its existing SOCS Optional Rate Plan(s) before the end of its term commitment period(s) with newly committed ATM-CRS Port(s) added to the customer’s new or existing ATM-CRS Term Discount Plan or with newly committed ETS Port(s) added to the customer’s new or existing ETS Term Discount Plan provided:

(i) The term commitment period remaining in the customer’s existing ATM-CRS Term Discount Plan or existing ETS Term Discount Plan or established in the new ATM-CRS Term Discount Plan or new ETS Term Discount Plan meets or exceeds the number of months remaining in the customer’s existing SOCS Optional Rate Plan(s);
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.8 Optional Rate Plans (Cont'd)

(B) Synchronous Optical Channel Service (SOCS) Optional Rate Plan (Cont’d)

(3) SOCS Optional Rate Plan Replacements (Cont’d)

(a) (Cont’d)

(ii) The bandwidth capacity of the newly committed ATM-CRS Port(s) included in the new or existing ATM-CRS Term Discount Plan or the newly committed ETS Port(s) included in the new or existing ETS Term Discount Plan meets or exceeds the bandwidth capacity of the service(s) being replaced in the customer’s existing SOCS Optional Rate Plan(s);

(iii) The customer commits to retain the newly committed ATM-CRS Port(s) or newly committed ETS Port(s) in-service at the same bandwidth capacity for the remaining term commitment period for its existing ATM-CRS Term Discount Plan or its existing ETS Term Discount Plan or for the entire term commitment period of its new ATM-CRS Term Discount Plan or new ETS Term Discount Plan;
7. **Special Access Service (Cont'd)**

7.2 **Rate Regulations (Cont'd)**

7.2.8 **Optional Rate Plans (Cont'd)**

(B) **Synchronous Optical Channel Service (SOCS) Optional Rate Plan (Cont’d)**

(3) **SOCS Optional Rate Plan Replacements (Cont’d)**

(a) (Cont’d)

(iv) The customer’s orders for the disconnect of all or a portion of the services included in its SOCS Optional Rate Plan and the addition of newly committed ATM-CRS Port(s) to a new or existing ATM-CRS Term Discount Plan or newly committed ETS Port(s) to a new or existing ETS Term Discount Plan are submitted to the Telephone Company at the same time and include cross references as described in Section 5.2.2, preceding;

(v) Any newly committed ATM-CRS Ports or newly committed ETS Ports are added to the customer’s existing ATM-CRS Term Discount Plan or existing ETS Term Discount Plan before the last year of the existing term commitment period; and;

(vi) Any newly committed ATM-CRS Ports added to a new or existing ATM-CRS Term Discount Plan or a newly committed ETS Ports added to a new or existing ETS Term Discount Plan are installed at the same location as the service(s) being replaced under the customer’s existing SOCS Optional Rate Plan(s).
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.8 Optional Rate Plans (Cont'd)

(B) Synchronous Optical Channel Service (SOCS) Optional Rate Plan (Cont’d)

(3) SOCS Optional Rate Plan Replacements (Cont’d)

(b) If any of the requirements specified in (a), above, are not met, replacement ATM-CRS Port(s) and/or replacement ETS Port(s) will not qualify for the provisions under Section 7.2.8(B)(3). Discontinuance charges will apply to replace all or a portion of the services in an existing SOCS Optional Rate Plan as described in (4), below.

(c) When a customer replaces all or a portion of the services included in its existing SOCS Optional Rate Plan with a newly committed ATM-CRS Port(s) added to the customer’s new or existing ATM-CRS Term Discount Plan or with a newly committed ETS Port(s) added to the customer’s new or existing ETS Term Discount Plan provided pursuant to Sections 16.2 and 16.3, following, the Telephone Company will waive any unsatisfied minimum period charges that may otherwise be applicable for disconnecting the customer’s SOCS prior to satisfying the minimum service period.

(d) The term discount percentage for the replacement ATM-CRS Term Discount Plan or replacement ETS Term Discount Plan will apply on a going forward basis based on the customer’s written request to establish a replacement term commitment period under Section 7.2.8(B)(3).
7. **Special Access Service (Cont'd)**

7.2 **Rate Regulations (Cont'd)**

7.2.8 **Optional Rate Plans (Cont'd)**

(B) **Synchronous Optical Channel Service (SOCS) Optional Rate Plan (Cont’d)**

(3) **SOCS Optional Rate Plan Replacements (Cont’d)**

(c) When a customer replaces all or a portion of its existing SOCS Optional Rate Plan with a newly committed ATM-CRS Port(s) added to its existing ATM-CRS Term Discount Plan or with a newly committed ETS Port(s) added to its existing ETS Term Discount Plan, the customer’s existing ATM-CRS Term Discount Plan or existing ETS Term Discount Plan term commitment period would continue uninterrupted.

(f) An Access Order Charge, as described in Section 5.4.1, preceding, does not apply to make a change to an existing SOCS Optional Rate Plan as a result of a SOCS Optional Rate Plan Replacement under this section. An Access Order Charge per order does apply to install an ATM-CRS Port(s) and ETS Port(s).

(g) Terms and conditions for the ATM-CRS Term Discount Plan and ETS Term Discount Plan are specified in Sections 16.2.5 and 16.3.5, following.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.8 Optional Rate Plans (Cont'd)

(B) Synchronous Optical Channel Service (SOCS) Optional Rate Plan (Cont’d)

(4) Discontinuance of Service

Except as specified in (3) above, discontinuance charges, as described below, will apply to the portion of the service being discontinued when the customer chooses to disconnect all or a portion of the service prior to the expiration of the term commitment period.

(a) Should the customer choose to discontinue a Term Discount plan prior to the completion of the minimum service period, discontinuance charges will apply. Discontinuance charges equal to one-hundred percent of the total undiscounted monthly rates, less any amounts previously paid, will apply for the minimum service period. Additionally, discontinuance charges of fifteen percent for OC3/OC3c service, and thirty-five percent for OC12 service, of the total undiscounted monthly charges will apply to the remaining portion of the term commitment period.

Should the customer choose to discontinue service ordered under a Term Discount plan after the minimum service period but before the completion of the discount period, discontinuance charges will apply. Discontinuance charges of fifteen percent for OC3/OC3c Service, and thirty-five percent for OC12 Service, of the total undiscounted monthly charges will apply to the remaining portion of the term commitment period. For example, a customer has an OC3 Service which it chooses to discontinue after 33 months into a 60-month service term. The discontinuance charge would be 0.15 times 27 months times the undiscounted monthly rates for that service.
7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.8 Optional Rate Plans (Cont'd)

(B) Synchronous Optical Channel Service (SOCS) Optional Rate Plan (Cont’d)

(4) Discontinuance of Service (Cont’d)

(b) Should the customer choose to discontinue service ordered under a Term Discount plan after the minimum service period but before the completion of the discount period, discontinuance charges will apply. Discontinuance charges of fifteen percent for OC3/OC3c Service, and thirty-five percent for OC12 Service, of the total undiscounted monthly charges will apply to the remaining portion of the term commitment period. For example, a customer has an OC3 Service which it chooses to discontinue after 33 months into a 60-month service term. The discontinuance charge would be 0.15 times 27 months times the undiscounted monthly rates for that service.
7. **Special Access Service** (Cont'd)

7.3 **Surcharge for Special Access Service**

7.3.1 **General**

Special Access Services provided under this tariff may be subject to the monthly Special Access Surcharge.

7.3.2 **Application**

(A) The Special Access Surcharge will apply to each interstate Special Access Service that terminates on an end user's PBX or other device, where through a function of the device, the Special Access Service interconnects to the local exchange network. Interconnection functions include, but are not limited to, wiring and software functions, bridging, switching or patching of calls or stations. The Surcharge will apply irrespective of whether the interconnection function is performed in equipment located at the customer's premises or in a Centrex CO-type switch.

(B) Special Access Service will be exempted from the Surcharge by the Telephone Company upon receipt of the customer's written certification for the following Special Access Service terminations:

1. an open-end termination in a Telephone Company switch of an FX line, including CCSA and CCSA-equivalent ONALs; or

2. an analog channel termination that is used for radio or television program transmission; or

3. a termination used for TELEX service; or

4. a termination that by the nature of its operating characteristics could not make use of Telephone Company common lines such as, terminations which are restricted through hardware or software; or

5. a termination that interconnects either directly or indirectly to the local exchange network where the Special Access Service accesses no local exchange lines, or Special Access Service between customer points of termination, or Special Access Service connecting CCSA or CCSA type equipment (inter-machine trunks); or

6. a termination that the customer certifies to the Telephone Company is not connected to a PBX or other device which interconnects the Special Access Service to a local exchange subscriber line.
7. **Special Access Service (Cont'd)**

6.3 **Surcharge for Special Access Service (Cont'd)**

6.3.3 **Exemption of Special Access Service**

(A) Special Access Services which are terminated as set forth in 6.3.2(B) preceding will be exempted from the Special Access Surcharge if the customer provides the Telephone Company with written exemption certification. The certification may be provided to the Telephone Company as follows:

- at the time the Special Access Service is ordered or installed; or
- at such time as the service is re-terminated to a device which does not interconnect the service to local exchange facilities.

(B) The exemption certification is to be provided by the customer ordering the service. The certification must be signed by the customer or authorized representative and include the category of exemption, as set forth in 6.3.2(B) preceding, for each termination, and the date which the exemption is effective.

(C) The customer shall also notify the Telephone Company when an exempted Special Access Service is changed or re-terminated such that the exemption is no longer applicable.

(D) The Telephone Company will work cooperatively with the customer to resolve any questions regarding the exemption certification. In addition, the Telephone Company may withhold exemption of the service until the questions are resolved.
7. Special Access Service (Cont'd)

7.3 Surcharge for Special Access Service (Cont'd)

7.3.4 Rate Regulations

(A) The surcharge will apply as set forth in 7.3.2(A) preceding, except that a surcharge will be assessed on a per voice grade equivalent basis for Special Access Services derived from High Capacity Special Access Services as illustrated in the following example:

<table>
<thead>
<tr>
<th>Special Access Service</th>
<th>Voice Grade Equivalent</th>
<th>Surcharge</th>
<th>Monthly Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>DS1</td>
<td>24</td>
<td>x $25</td>
<td>$600.00</td>
</tr>
</tbody>
</table>

The preceding example illustrates the maximum number of surcharges applicable to a DS1. If the customer claims exemption(s) as set forth in 7.3.3 preceding or, is not utilizing all available voice grade equivalents and has spare capacity, the number of surcharges would be reduced accordingly. In the case of multipoint Special Access Services, one Special Access Surcharge will apply for each termination of a Special Access Channel at an end user's premises.
7. Special Access Service (Cont'd)

7.3 Surcharge for Special Access Service (Cont'd)

7.3.4 Rate Regulations (Cont'd)

(B) The Telephone Company will bill the appropriate Special Access Surcharge to the ordering customer for each interstate Special Access Service installed unless exemption certification is provided as set forth in 7.3.3 preceding.

(C) If a written certification is not received at the time the Special Access Service is obtained, the Surcharge will be applied. Exempt status will become effective on the certification date indicated by the customer, subject to the regulations set forth in (D) following.

(D) Crediting the Surcharge- The Telephone Company will cease billing the Special Access Surcharge when certification, as set forth in 7.3.3. preceding, is received. If the status of the Special Access Service was changed prior to receipt of the exemption certification, the Telephone Company will credit the customer's account, not to exceed ninety (90) days, based on the effective date of the change as specified by the customer in the letter of certification.
7. Special Access Service (Cont'd)

7.4 Metallic Service

7.4.1 Basic Channel Description

A Metallic channel is an unconditioned two-wire channel arranged to transmit direct current and capable of transmitting low speed varying signals at rates up to 30 baud. This channel is provided by metallic or equivalent facilities. Metallic channels are provided between customer designated premises or between a customer designated premises and a Telephone Company hub or hubs where bridging functions are performed. Interoffice metallic facilities will be limited in length to a total of five miles per channel.

Metallic Special Access Services are typically used for applications such as alarm, pilot wire protective relaying, and dc tripping protective relaying. These examples of applications are not intended to limit a customer's use of the channel nor to imply that the channel is limited to a particular use.

7.4.2 Technical Specifications Packages and Network Channel Interfaces

Technical Specifications Packages are set forth in Section 15.2.1(A), following. Compatible network channel interfaces are set forth in Section 15.2.2(C)(1), following.

7.4.3 Optional Features and Functions Central Office Bridging Capability

(A) Three Premises Bridging - Provision of tip-to-tip and ring-to-ring connection in a central office of a metallic pair to a third customer designated premises.

(B) Series Bridging of up to 26 customer designated premises. The table set forth in Section 15.2.1(A), following, shows the technical specifications packages with which the optional features and functions are available.
7. Special Access Service (Cont'd)

7.4 Metallic Service (Cont’d)

7.4.3 Optional Features and Functions Central Office Bridging Capability (Cont’d)

(C) DSL Access Service Connection

(1) The DSL Access Service Connection function provides for the interconnection of a customer’s Ethernet-based local area network (LAN) with ADSL Access Service as described in Section 8.1, following, and with SDSL Access Service as described in Section 8.2, following, provided by the Telephone Company under this tariff.

The function also provides for the interconnection of a customer's Ethernet-based LAN with a wireline broadband Internet transmission service provided on a non-tariffed, common carrier basis.

This function provides the ability to transmit data at speeds of up to 10 Mbps (i.e., 10BASE-T) or 100 Mbps (i.e., 100BASE-T) over distances no greater than 300 feet as specified in Technical Reference IEEE Std. 802.3-2008, Part 3, Section 1, Clause 14 for 10BASE-T and Section 2, Clauses 21 and 29 for 100BASE-T.

Each function requires two unconditioned two-wire Metallic Service Channel Terminations to be terminated at the DSL Access Service Connection Point. Each 100BASE-T function requires two unconditioned two-wire Metallic Service Channel Terminations to be terminated at a DSL Access Service Connection Point.
7. **Special Access Service** (Cont'd)

7.5 **Telegraph Grade Service**

[Not Currently Offered]
7. Special Access Service (Cont'd)

7.6 Voice Grade Service

7.6.1 Basic Channel Description

A Voice Grade channel is a channel which provides voice frequency transmission capability in the nominal frequency range of 300 to 3000 Hz and may be terminated as two-wire or four-wire. Voice Grade channels are provided between customer designated premises, between a customer designated premises and a Telephone Company hub or hubs, or between a customer designated premises and a WATS Serving Office (WSO).

Voice Grade Special Access Services are typically used for voice and voiceband data applications. Typical examples of voice grade circuits are Foreign Exchange lines (station end only), multipoint private line, voice trunk type, two-point voice grade data (one-way or simultaneous two-way), multipoint voice grade data, and voice grade telephoto or facsimile. These examples of applications are not intended to limit a customer's use of the channel nor to imply that the channel is limited to a particular use.

7.6.2 Technical Specifications Packages and Network Channel Interfaces

Technical Specifications Packages are set forth in Section 15.2.1(C), following. Compatible network channel interfaces are set forth in Section 15.2.2(C)(3), following.

7.6.3 Optional Features and Functions

(A) Central Office Bridging Capability

1. Voice Bridging (two-wire and four-wire);
2. Data Bridging (two-wire and four-wire);
3. Telephoto Bridging (two-wire and four-wire);
4. DATAPHONE Select-A-Station Bridging with sequential arrangement ports or addressable arrangement ports;
5. Telemetry and Alarm Bridging, Split Band, Active Bridging Passive Bridging Summation, Active Bridging
7. **Special Access Service (Cont'd)**

7.6 **Voice Grade Service (Cont’d)**

7.6.3 **Optional Features and Functions (Cont’d)**

(B) [RESERVED FOR FUTURE USE]

(C) **Conditioning**

Conditioning provides more specific transmission characteristics for Voice Grade services. For two-point services, the parameters apply to each service as measured end-to-end. For multipoint services, the parameters apply as measured on each mid-link or as measured on each end link. C-Type conditioning and Data Capability may be combined on the same service.

(1) **C-Type Conditioning**

C-Type Conditioning is provided for the additional control of attenuation distortion and envelope delay distortion on data services. The attenuation distortion and envelope delay distortion specifications for C-Type Conditioning are delineated in Technical Reference TR-NWT-000335.

(2) **Improved Attenuation Distortion**

Improved Attenuation Distortion upgrades the frequency versus loss limits of the channel. The technical specifications for Improved Attenuation Distortion are delineated in Technical Reference when ordered in combination with C-Type Conditioning.

(3) **Improved Envelope Delay Distortion**

Improved Envelope Delay Distortion upgrades the frequency versus delay response limits of the channel. The technical specifications for Improved Envelope Delay Distortion are delineated in Technical Reference TR-NWT-000335. This option is available only when ordered in combination with C-Type Conditioning.
7. Special Access Service (Cont’d)

7.6 Voice Grade Service (Cont’d)

7.6.3 Optional Features and Functions (Cont’d)

(C) Conditioning (Cont’d)

(4) Data Capability (D Conditioning)

Data Capability provides transmission characteristics suitable for data communications. Specifically, Data Capability provides for the control of Signal to C-Notched Noise Ratio and intermodulation distortion. It is available for two-point services or three-point multipoint services.

The Signal to C-Notched Noise Ratio and intermodulation distortion parameter for Data Capability are delineated in Technical Reference TR-NWT-000335.

When a service equipped with Data Capability is used for voice communications, the quality of the voice transmission may not be satisfactory.

(5) Telephoto Capability

Telephoto Capability provides transmission characteristics suitable for telephotographic communications. Specifically, Telephoto Capability is provided for the control of attenuation distortion and envelope delay distortion on telephotographic services. The attenuation distortion and envelope delay distortion parameters for Telephoto Capability are delineated in Technical Reference TR-NWT-000335.

(6) Sealing Current Conditioning

Sealing Current Conditioning is provided to help maintain continuity on dry metallic loops. It is usually associated with four-wire DA or NO type network channel interfaces.
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7. Special Access Service (Cont'd)

7.6 Voice Grade Service (Cont'd)

7.6.3 Optional Features and Functions (Cont'd)

(D) Customer Specified Premises Receive Level

This option allows the customer to specify the receive level at the Point of Termination. The level must be within a specific range on effective four-wire transmission. The ranges are delineated in Technical Reference TR-NWT-000335.

(E) Improved Return Loss

(1) On Effective Four-Wire Transmission at Four-Wire Point of Termination (applicable to each two-wire port): Provides for a fixed 600 ohm impedance, variable level range and simplex reversal. Telephone Company equipment is required at the customer's premises where this option is ordered. The Improved Return Loss parameters are delineated in Technical Reference TR-NWT-000335.

(2) On Effective Two-Wire Transmission at Two-Wire Point of Termination: Provides for more stringent Echo Control specifications. In order for this option to be applicable, the transmission path must be four-wire at one POT and two-wire at the other POT. Placement of Telephone Company equipment may be required at the customer's premises with the two-wire POT. The Improved Return Loss parameters are delineated in Technical Reference TR-NWT-000335.

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David Stoll
Vice President/Chief Executive Officer
123 W. Orchard Street, P.O. Box 127
Delton, Michigan 49046
(269) 623-2311
dstoll@mei.net
7. Special Access Service (Cont'd)

7.6 Voice Grade Service (Cont'd)

7.6.3 Optional Features and Functions (Cont'd)

(F) Signaling Capability

Signaling Capability provides for the ability to transmit signals from one customer premises to another customer premises on the same service.

The following network channel interfaces for Voice Grade service do not require signaling capability: AH, DA, DB, DD, DE, DS, NO, PR and TF.

The following network channel interfaces for Voice Grade service require signaling capability: AB, AC, CT, DX, DY, EA, EB, EC, EX, GO, GS, LA, LB, LC, LO, LR, LS, RV and SF. The signaling capability charge will not apply when used in the provision of WATS access service.

(G) Selective Signaling Arrangement

Selective Signaling Arrangement is an arrangement that permits code-selective ringing for up to ten codes on a multipoint service.

(H) Transfer Arrangement

A Transfer Arrangement is an arrangement that affords the customer an additional measure of flexibility in the use of an access channel(s). The arrangement can be utilized to transfer a leg of a Special Access Service to another channel that terminates in either the same or a different customer premises. A key activated or dial-up control service is required to operate the transfer arrangement. A spare channel, if required, is not included as part of the option.
7. **Special Access Service (Cont'd)**

7.6 **Voice Grade Service (Cont'd)**

7.6.3 **Optional Features and Functions (Cont'd)**

(I) **Public Packet Switching Network (PPSN) Interface Arrangement**

An arrangement that provides the interface requirements that permit a Voice Grade service to interface with a Public Packet Switching Network packet switch located in a Telephone Company premises. The interface is compatible with X.25 and X.75 packet switching protocols as defined by the CCITT.

(J) **Four-Wire/Two-Wire Conversions**

When a customer requests that an effective four-wire channel be terminated with a two-wire channel interface at the customer designated premises, a four-wire to two-wire conversion is required. The customer will be charged the four-wire Channel Termination rate when an effective four-wire is specified in the order for service. The rate for the conversion is included as part of the basic four-wire Channel Termination rate.
ACCESS SERVICE

7. Special Access Service (Cont'd)

7.6 Voice Grade Service (Cont'd)

7.6.3 Optional Features and Functions (Cont'd)

(K) Improved Two-Wire Voice Transmission

(1) Loss Deviation

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is -4.0 dB to +4.0 dB.

(2) Attenuation Distortion

The maximum Attenuation Distortion in the 404 to 280 Hz frequency band relative to loss at 1004 Hz is -2.0 dB to +6.0 dB.

(3) C-Message Noise

The maximum C-Message Noise for the transmission path at the route miles listed is less than:

<table>
<thead>
<tr>
<th>Route Miles</th>
<th>C-Message Noise</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 50</td>
<td>35 dBrnco</td>
</tr>
<tr>
<td>51 to 100</td>
<td>37 dBrnco</td>
</tr>
<tr>
<td>101 to 200</td>
<td>40 dBrnco</td>
</tr>
<tr>
<td>201 to 400</td>
<td>43 dBrnco</td>
</tr>
<tr>
<td>401 to 1000</td>
<td>45 dBrnco</td>
</tr>
</tbody>
</table>

(4) Return Loss

The Return Loss, expressed as Echo Return Loss (ERL) and Singing Return Loss (SRL), is equal to or greater than:

ERL 13.0 dB   SRL 6.0 dB

The rate for the provision of Improved Two-Wire Voice Transmission is included as part of the basic Channel Termination rate.
7. Special Access Service (Cont’d)

7.7 Program Audio Service

7.7.1 Basic Channel Description

A Program Audio channel is a channel with bandwidth measured in Hz for the transmission of a complex signal voltage. The actual bandwidth is a function of the channel interface selected by the customer. Only one-way transmission is provided. Program Audio channels are provided between customer designated premises or between a customer designated premises and a Telephone Company hub or hubs.

Program Audio Special Access services are typically used in full-time and part-time applications for radio broadcasting, noncommercial educational audio, and wired music. These examples of applications are not intended to limit a customer’s use of the channel or to imply that the channel is limited to a particular use.

7.7.2 Technical Specifications Packages and Network Channel Interfaces

Technical Specifications Packages are set forth in Section 15.2.1(D), following. Compatible network channel interfaces are set forth in Section 15.2.2(C)(4), following.

7.7.3 Optional Features and Functions

(A) Central Office Bridging Capability

Distribution Amplifier

(B) Gain Conditioning

Control of 1004 Hz AML at initiation of service to 0 dB 0.5 dB.
7. Special Access Service (Cont’d)

7.7 Program Audio Service (Cont’d)

7.7.3 Optional Features and Functions (Cont’d)

(C) Stereo

Provision of a pair of gain/phase equalized channels for stereo applications
(An additional Program Audio channel must be ordered separately.)

The table set forth in 15.2.1(D) following shows the technical specifications
packages with which the optional features and functions are available.
7. **Special Access Service (Cont’d)**

7.8 **Video Service**

7.8.1 **Basic Channel Description**

A Video channel is a channel with one-way transmission capability for a standard 525 line/60 field monochrome, or National Television Systems Committee color, video signal and one or two associated 5 or 15 kHz audio signal(s). The associated audio signal(s) may be either diplexed or provided as one or two separate channels. The provision and the bandwidth of the associated audio signal(s) is a function of the channel interface selected by the Customer. Video channels are provided between customer designated premises or between a customer designated premises and a Telephone Company hub or hubs.

7.8.2 **Technical Specifications Packages and Network Channel Interfaces**

Technical Specifications Packages are set forth in Section 15.2.1(E), following. Compatible network channel interfaces are set forth in Section 15.2.2(C)(5), following.

The following network channel interfaces (NCIs) define the bandwidth and the provision of the audio signal(s) associated with a Video channel:

<table>
<thead>
<tr>
<th>NCI</th>
<th>Bandwidth</th>
<th>Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>2TV6-1</td>
<td>15kHz</td>
<td>1 Channel, diplexed</td>
</tr>
<tr>
<td>2TV6-2</td>
<td>15kHz</td>
<td>2 Channels, diplexed</td>
</tr>
<tr>
<td>2TV7-1</td>
<td>15kHz</td>
<td>1 Channel, diplexed</td>
</tr>
<tr>
<td>2TV7-2</td>
<td>15kHz</td>
<td>2 Channels, diplexed</td>
</tr>
<tr>
<td>4TV6-5</td>
<td>5kHz</td>
<td>1 Channel, separate</td>
</tr>
<tr>
<td>4TV6-15</td>
<td>15kHz</td>
<td>1 Channel, separate</td>
</tr>
<tr>
<td>4TV7-5</td>
<td>5kHz</td>
<td>1 Channel, separate</td>
</tr>
<tr>
<td>4TV7-15</td>
<td>15kHz</td>
<td>1 Channel, separate</td>
</tr>
<tr>
<td>6TV6-5</td>
<td>5kHz</td>
<td>2 Channels, separate</td>
</tr>
<tr>
<td>6TV6-15</td>
<td>15kHz</td>
<td>2 Channels, separate</td>
</tr>
<tr>
<td>6TV7-5</td>
<td>5kHz</td>
<td>2 Channels, separate</td>
</tr>
<tr>
<td>6TV7-15</td>
<td>15kHz</td>
<td>2 Channels, separate</td>
</tr>
</tbody>
</table>
7. Special Access Service (Cont'd)

7.9 Digital Data Service

7.9.1 Basic Channel Description

A Digital Data channel is a channel for duplex four-wire transmission of synchronous serial data at the rate of 2.4, 4.8, 9.6, 19.2, 56.0 or 64.0 Kbps. The actual bit rate is a function of the channel interface selected by the customer. The channel provides a synchronous service with timing provided by the Telephone Company through the Telephone Company's facilities to the customer in the received bit stream. Digital Data channels are provided as either hubbed or non-hubbed services between customer designated premises or between a customer designated premises and a Telephone Company hub or hubs. The hubs providing hubbed digital service and the wire centers providing non-hubbed digital service are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC., WIRE CENTER INFORMATION, TARIFF F.C.C. NO. 4.

The Customer may provide the Channel Service Unit-type equipment or other Network Channel Terminating Equipment associated with the Digital Data channel at the customer premises.

The Telephone Company will provide a channel capable of meeting a monthly average performance equal to or greater than 99.875% error-free seconds (if provided through a Digital Data hub) while the channel is in service, if it is measured through a CSU equivalent which is designed, manufactured, and maintained to conform with the specifications contained in Technical Reference PUB 62310 (MDP-326-726).

7.9.2 Technical Specifications Packages and Network Channel Interfaces

Technical Specifications Packages are set forth in Section 15.2.1(F), following. Compatible channel interfaces are set forth in Section 15.2.2(C)(6), following.
ACCESS SERVICE

7. Special Access Service (Cont’d)

7.9 Digital Data Service (Cont’d)

7.9.2 Technical Specifications Packages and Network Channel Interfaces (Cont’d)

The following network channel interfaces (NCIs) define the bit rates that are available for a Digital Data channel:

<table>
<thead>
<tr>
<th>NCI</th>
<th>Bit Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>DU-24</td>
<td>2.4 Kbps</td>
</tr>
<tr>
<td>DU-48</td>
<td>4.8 Kbps</td>
</tr>
<tr>
<td>DU-96</td>
<td>9.6 Kbps</td>
</tr>
<tr>
<td>DU-19</td>
<td>19.2 Kbps</td>
</tr>
<tr>
<td>DU-56</td>
<td>56.0 Kbps</td>
</tr>
<tr>
<td>DU-64</td>
<td>64.0 Kbps</td>
</tr>
</tbody>
</table>

7.9.3 Optional Features and Functions

The Optional Features and Functions described in (A), (B), and (C) following are only available where Digital Data Service is provided via a hub. The Optional Features and Functions described in (D) following are available where Digital Data Service is provided on a non-hubbed basis.

(A) Central Office Bridging Capability

Bridging is not available on a 64.0 Kbps channel.

(B) Transfer Arrangement

An arrangement that affords the customer an additional measure of protection and/or flexibility in the use of their access channel(s) on a 1xN basis. The arrangement can be utilized to transfer a leg of a Special Access Service to either a spare or working channel that terminates in either the same or a different customer designated premises. This arrangement is only available at a Telephone Company designated hub. A key activated or dial-up control service is required to operate the transfer arrangement. A spare channel, if required, is not included as a part of the option.
7. Special Access Service (Cont’d)

7.9 Digital Data Service (Cont’d)

7.9.3 Optional Features and Functions (Cont’d)

(C) Public Packet Switching Network (PPSN) Interface Arrangement

An arrangement that provides the interface requirements that permit a Digital Data Service to interface with a Public Packet Switching Network packet switch located in a Telephone Company premises. The interface is compatible with X.25 and X.75 packet switching protocols as defined by the CCITT.

The table set forth in 15.2.1(F) following shows the technical specifications packages with which the optional features and functions are available.

(D) Public Packet Data Service Interface Arrangement

An arrangement that provides for the interface requirements that permit a Digital Data Service to interface with a Public Packet Data switch located in a Telephone Company premises. The interface is compatible with Frame Relay packet switching protocols. The interface is only available for 56.0 kbps and 64.0 kbps rates.

The table set forth in 15.2.1(F) following shows the technical specifications packages with which the optional features and functions are available.
7. Special Access Service (Cont’d)

7.10 High Capacity Service

7.10.1 Basic Channel Description

A High Capacity channel is a channel for the transmission of nominal 64.0 Kbps or 1.544, 3.152, 6.312, 44.736, or 274.176 Mbps isochronous serial data. The actual bit rate is a function of the channel interface selected by the customer. High Capacity channels are provided between customer premises and a Telephone Company hub or hubs.

In addition, 1.544 Mbps and 44.736 Mbps High Capacity Service channels may be provided between a customer designated premises and a Telephone Company designated DSL Access Service Connection Point, between a customer designated premises and a serving wire center equipped with Asynchronous Transfer Mode Cell Relay Access Service, between a customer designated premises and a serving wire center equipped with Frame Relay Access Service (FRAS), between a Telephone Company serving wire center equipped with ATM-CRS and another telephone company ATM-equipped serving wire center and/or between a Telephone Company serving wire center equipped with FRAS and another telephone company serving wire center equipped with a frame relay switch that is located in a non-adjacent serving territory.

Additionally, a 44.736 Mbps High Capacity Service channel may be provided between a customer designated premises and a serving wire center equipped with Ethernet Transport Service (ETS) and/or between a Telephone Company serving wire center equipped with ETS and another telephone company Ethernet-equipped serving wire center that is located in a non-adjacent serving territory.
7. **Special Access Service (Cont’d)**

7.10 **High Capacity Service (Cont’d)**

7.10.1 **Basic Channel Description (Cont’d)**

The Customer may provide the Network Channel Terminating Equipment associated with the High Capacity channel at the customer's premises.

A channel with technical specifications package DS1 will be capable of an error-free second performance of 98.75% over a continuous 24 hour period as measured at the 1.544 Mbps rate through a CSU equivalent which is designed, manufactured, and maintained to conform with the specifications contained in Technical Reference GR-342-CORE.

A term discount is available for High Capacity Service. Section 7.2.8(A), preceding, specifies the conditions under which a term discount is applicable.
7. Special Access Service (Cont’d)

7.10 High Capacity Service (Cont’d)

7.10.2 Technical Specifications Packages and Network Channel Interfaces

Technical Specifications Packages are set forth in 15.2.1(G) following. Compatible channel interfaces are set forth in 15.2.2(C)(7) following.

The following network channel interfaces (NCIs) define the bit rates that are available for a High Capacity channel:

<table>
<thead>
<tr>
<th>NCI</th>
<th>Bit Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>DS-15*</td>
<td>1.544 Mbps (DS1)</td>
</tr>
<tr>
<td>DS-27</td>
<td>274.176 Mbps (DS4)</td>
</tr>
<tr>
<td>DS-31</td>
<td>3.152 Mbps (DS1C)</td>
</tr>
<tr>
<td>DS-44</td>
<td>44.736 Mbps (DS3)</td>
</tr>
<tr>
<td>DS-63</td>
<td>6.312 Mbps (DS2)</td>
</tr>
</tbody>
</table>
7. Special Access Service (Cont’d)

7.10 High Capacity Service (Cont’d)

7.10.3 Optional Features and Functions

(A) Automatic Loop Transfer

The Automatic Loop Transfer provides protection on a 1xN basis against failure of the facilities between a Customer designated premises and the wire center serving that premises. Protection is furnished through the use of a switching arrangement that automatically switches to a spare channel line when a working line fails. The spare channel is not included as a part of the option. This option requires compatible equipment at both the serving wire center and the customer designated premises. The customer is responsible for providing the equipment at its designated premises. Equipment at the customer designated premises will be provided under tariff only if it existed in the Telephone Company inventory as of November 18, 1983.

(B) Transfer Arrangement

An arrangement that affords the customer an additional measure of flexibility in the use of their access channel(s). The arrangement can be utilized to transfer a leg of a Special Access Service to either a spare or working channel that terminates in either the same or a different customer designated premises. A key activated or dial-up control service is required to operate the transfer arrangement. A spare channel, if required, is not included as part of the option.
7. Special Access Service (Cont’d)

7.10 High Capacity Service (Cont’d)

7.10.3 Optional Features and Functions (Cont’d)

(C) Central Office Multiplexing

(1) DS4 to DS1

An arrangement that converts a 274.176 Mbps channel to 168 DS1 channels using digital time division multiplexing.

(2) DS3 to DS1

An arrangement that converts a 44.736 Mbps channel to 28 DS1 channels using digital time division multiplexing.

(3) DS2 to DS1

An arrangement that converts a 6.312 Mbps channel to four DS1 channels using digital time division multiplexing.

(4) DS1C to DS1

An arrangement that converts a 3.152 Mbps channel to two DS1 channels using digital time division multiplexing.

(5) DS1 to Voice

An arrangement that converts a 1.544 Mbps channel to 24 channels for use with Voice Grade Services. A channel(s) of this DS1 to the Hub can also be used for a Digital Data Service.

(6) DS1 to DS0

An arrangement that converts a 1.544 Mbps channel to 23 64.0 Kbps channels utilizing digital time division multiplexing.
7. **Special Access Service (Cont'd)**

7.10 **High Capacity Service (Cont'd)**

7.10.3 **Optional Features and Functions (Cont'd)**

(C) Central Office Multiplexing (Cont'd)

(7) DS0 to Subrate

An arrangement that converts a 64.0 Kbps channel to subspeeds of up to twenty 2.4 Kbps, ten 4.8 Kbps, or five 9.6 Kbps channels using digital time division multiplexing.

The table set forth in 15.2.1(G) following shows the technical specifications packages with which the optional features and functions are available.

(D) Clear Channel Capability (CCC)

(1) CCC is an arrangement that allows a customer to transport 1.536 Mbps information rate signals over a 1.544 Mbps High Capacity channel or over a 1.544 Mbps High Capacity channel derived from a multiplexed 44.736 Mbps High Capacity channel with no constraint on the quantity or sequence of one and zero bits.

This arrangement requires the customer signal at the channel interface to conform to Bipolar with Eight Zero Substitution (B8ZS) line code as described in Technical Reference GR-54-CORE and Technical Reference GR-342-CORE.

(2) CCC is provided, subject to availability of facilities, on DS1/1.544 Mbps High Capacity channels between two customer designated premises and on multiplexed DS3/44.736 Mbps High Capacity channels or multiplexed DS1/1.544 Mbps High Capacity channels between a Telephone Company hub office and a customer designated premises. The wire centers providing CCC are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC., WIRE CENTER INFORMATION, TARIFF F.C.C. NO. 4.

(3) The CCC optional feature may be ordered at the same time the High Capacity service is ordered or it may be ordered as an addition to an existing High Capacity Service. The customer must agree to out-of-service periods required to add this feature to an existing High Capacity Service. The charges for the CCC optional feature are as set forth in 7.2.2(C)(3) preceding.
7. Special Access Service (Cont'd)

7.10 High Capacity Service (Cont'd)

7.10.3 Optional Features and Functions (Cont'd)

(E) Shared SONET Ring Interoffice Transport

(1) Shared SONET Ring Interoffice Transport (SSRIT) is a non-chargeable optional feature which provides interoffice transmission of a DS3 High Capacity Service over a SONET-based facility deployed in a ring configuration. Shared SONET Ring Interoffice Transport provides increased reliability and functionality using a self-healing ring topology designed to continually monitor service quality, detect any failure within the system, and automatically self-heal within 50 milliseconds around the point of failure by switching to a protect path to ensure the flow of services between locations within the self-healing ring.

(2) Shared SONET Ring Interoffice Transport is provided for the interoffice portion of DS3 High Capacity Service, subject to availability of SONET ring facilities. The wire centers offering Shared SONET Ring Interoffice Transport are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC., WIRE CENTER INFORMATION, TARIFF F.C.C. NO. 4.

(3) The Shared SONET Ring Interoffice Transport optional feature may be ordered at the same time the DS3 High Capacity service is ordered or it may be ordered as an addition to an existing DS3 High Capacity Service. The customer must agree to out-of-service periods required to add this feature to an existing DS3 High Capacity Service. The charges for the Shared SONET Ring Interoffice Transport optional feature are as set forth in 7.2.2(C)(3) preceding.
7. Special Access Service (Cont'd)

7.10 High Capacity Service (Cont'd)

7.10.3 Optional Features and Functions (Cont'd)

(F) DSL Access Service Connection

(1) The DSL Access Service Connection function provides for the interconnection of a 1.544 Mbps or 44.736 Mbps High Capacity Service with ADSL Access Service as described in Section 8.1, following, and with SDSL Access Service as described in Section 8.2, following, provided by the Telephone Company under this tariff. The function also provides for the interconnection of a 1.544 Mbps or 44.736 Mbps High Capacity Service with a wireline broadband Internet transmission service provided on a non-tariffed, common carrier basis. This function applies to each 1.544 Mbps or 44.736 Mbps High Capacity Service terminated at a DSL Access Service Connection Point.
7. **Special Access Service (Cont'd)**

7.11 **Synchronous Optical Channel Service**

7.11.1 **Basic Channel Description**

A Synchronous Optical Channel Service channel provides dedicated transport utilizing Synchronous Optical Network (SONET) transmission standards. Synchronous Optical Channel Service provides optical network capability to customers requiring connections at transmission rates of 155.52 Mbps (OC3) and 622.08 Mbps (OC12). Synchronous Optical Channel Service is provided between two customer designated premises (CDP) through one or more Telephone Company wire centers, or between a CDP and a wire center equipped with Asynchronous Transfer Mode Cell Relay Access Service, or between a CDP and a wire center equipped for Add/Drop Multiplexing (ADM).

In addition, customers at an ADM equipped wire center may add or drop bandwidth capacity from the synchronous optical channel for delivery to a customer designated premises, WATS office, Public Packet Data Network Service, or another wire center. OC3/OC3c Synchronous Optical Channel Service may also be provided between a customer designated premises and a Telephone Company designated DSL Access Service Connection Point.

Additionally, a Synchronous Optical Channel Service channel may be provided between a customer designated premises and a serving wire center equipped with Ethernet Transport Service (ETS) and/or between a Telephone Company serving wire center equipped with ETS and another telephone company Ethernet-equipped serving wire center that is located in a non-adjacent serving territory, one protect fiber pair within the same sheath between the CDP and the serving wire center of the CDP which provides redundancy to protect the customer's service. Should a failure occur, the SONET technology will automatically switch the customer's transmission to the dedicated protect fiber pair.
7. **Special Access Service (Cont'd)**

7.11 **Synchronous Optical Channel Service (Cont'd)**

7.11.1 **Basic Channel Description (Cont'd)**

The customer may provide node and port equipment at the CDP which allows the high speed optical carrier channel to be converted to an electrical signal at a lower speed. The provision of such equipment by the customer is subject to compatibility with the Telephone Company's equipment in the serving wire center and must comply with the standards specified in GR-253-CORE.

The OC3 channel is available in a non-concatenated format (OC3) which provides three individual signals. The OC3 channel is also available in a concatenated format (OC3c) which provides a single signal appropriate for data transmissions.

A term discount is available for Synchronous Optical Channel Service. Section 7.2.8(B), preceding, specifies the conditions under which a term discount is applicable.

Synchronous Optical Channel Service is available at the wire centers as identified in National Exchange Carrier Association, Inc. Tariff F.C.C. No. 4.
7. Special Access Service (Cont'd)

7.11 Synchronous Optical Channel Service (Cont'd)

7.11.1 Network Channel Interfaces

Compatible channel interfaces for Synchronous Optical Channel Service are as set forth in Section 15.2.2(C)(8), following. The following network channel interfaces (NCIs) define the bit rates that are available for a synchronous optical channel:

<table>
<thead>
<tr>
<th>NCI</th>
<th>Bit Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCF-B</td>
<td>155.52 Mbps (OC3, OC3c)</td>
</tr>
<tr>
<td>FCF-D</td>
<td>622.08 Mbps (OC12)</td>
</tr>
</tbody>
</table>

7.11.2 Optional Features and Functions

(A) Customer Node

A Customer Node charge applies when the Telephone Company provides terminal equipment at the customer designated premises for Service Channel Termination. Such equipment may be used to convert the signal from an optical to electrical format. The Customer Node charge is determined by the level of optical service (i.e., OC3, OC3c or OC12) delivered to the premises. Each Customer Node must be configured with one or more Customer Premises Ports.
7. Special Access Service (Cont'd)

7.11 Synchronous Optical Channel Service (Cont'd)

7.11.2 Optional Features and Functions (Cont'd)

(B) Customer Premises Port

Customer Premises Port charges apply in conjunction with the Customer Node charge. Each Customer Premises Port provides the interface to derive a lower capacity service at the customer premises. The type and quantity of ports is determined by the customer and is based on the type of Customer Node selected and the number of DS1, DS3, STS-1 and/or OC3/OC3c channels ordered. Customer Premises Ports are available at the following speeds:

<table>
<thead>
<tr>
<th>Customer Premises Port</th>
<th>Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>OC3, OC3c</td>
<td>155.52 Mbps</td>
</tr>
<tr>
<td>STS-1</td>
<td>51.84 Mbps</td>
</tr>
<tr>
<td>DS3</td>
<td>44.736 Mbps</td>
</tr>
<tr>
<td>DS1</td>
<td>1.544 Mbps</td>
</tr>
</tbody>
</table>

(C) Add/Drop Multiplexing

An Add/Drop Multiplexing Central Office Port charge applies to the interface provided at a Telephone Company wire center for the purpose of adding or dropping lower capacity services from Synchronous Optical Channel Service Channel Termination or Channel Mileage transport facilities. Central Office Ports are available at the following speeds:

<table>
<thead>
<tr>
<th>Central Office Port</th>
<th>Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>OC3, OC3c</td>
<td>155.52 Mbps</td>
</tr>
<tr>
<td>DS3</td>
<td>44.736 Mbps</td>
</tr>
<tr>
<td>DS1</td>
<td>1.544 Mbps</td>
</tr>
</tbody>
</table>

OC12 service may only be multiplexed to OC3/OC3c channels.
7. Special Access Service (Cont'd)

7.11 Synchronous Optical Channel Service (Cont'd)

7.11.2 Optional Features and Functions (Cont'd)

(C) Add/Drop Multiplexing (Cont'd)

When an OC3 channel is derived from an OC12 service and is further multiplexed to obtain DS3 service, a DS3 port charge will apply in addition to the OC3 port charge.

When a DS3 channel is derived from an OC3 service and is further multiplexed to obtain DS1 service, a DS3 to DS1 Multiplexing charge will apply in addition to the DS3 port charge.

When a DS1 channel is directly derived from an OC3 service, a DS1 port charge will apply.

When a DS1 channel is further multiplexed to a lower level signal, a DS1 to Voice Grade Multiplexing charge will also apply.
7. **Special Access Service (Cont'd)**

7.11 **Synchronous Optical Channel Service (Cont'd)**

7.11.2 **Optional Features and Functions (Cont'd)**

(D) **Shared SONET Ring Interoffice Transport**

1. Shared SONET Ring Interoffice Transport (SSRIT) is a non-chargeable optional feature which provides interoffice transmission of a Synchronous Optical Channel Service over a SONET-based facility deployed in a ring configuration. Shared SONET Ring Interoffice Transport provides increased reliability and functionality using a self-healing ring topology designed to continually monitor service quality, detect any failure within the system, and automatically self-heal within 50 milliseconds around the point of failure by switching to a protect path to ensure the flow of services between locations within the self-healing ring.

2. Shared SONET Ring Interoffice Transport is provided for the interoffice portion of Synchronous Optical Channel Service, subject to availability of SONET ring facilities. The wire centers offering Shared SONET Ring Interoffice Transport are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC., WIRE CENTER INFORMATION, TARIFF F.C.C. NO. 4.

3. The Shared SONET Ring Interoffice Transport optional feature may be ordered at the same time the Synchronous Optical Channel Service is ordered or it may be ordered as an addition to an existing Synchronous Optical Channel Service. The customer must agree to out-of-service periods required to add this feature to an existing Synchronous Optical Channel Service. The charges for the Shared SONET Ring Interoffice Transport optional feature are as set forth in 7.2.2.(C)(3) preceding.
7. **Special Access Service (Cont'd)**

7.11 **Synchronous Optical Channel Service (Cont'd)**

7.11.2 **Optional Features and Functions (Cont'd)**

(E) **DSL Access Service Connection**

1) The DSL Access Service Connection function provides for the interconnection of an OC3 or OC3c Synchronous Optical Channel Service with ADSL Access Service as described in Section 8.1, following, and with SDSL Access Service as described in Section 8.2, following, provided by the Telephone Company under this Tariff. The function also provides for the interconnection of an OC3 or OC3c Synchronous Optical Channel Service with a wireline broadband Internet transmission service provided on a non-Tariffed, common carrier basis.

This function applies to each OC3 or OC3c Synchronous Optical Channel terminated at a DSL Access Service Connection Point.
7. Special Access Service (Cont'd)

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8. **Digital Subscriber Line Access Services**

Where offered under this tariff, Digital Subscriber Line Access Services provide transmission services over local exchange service facilities that can be used for simultaneous voice and data communications. Service is provided, where available, between customer designated premises and designated Telephone Company Serving Wire Centers.

8.1 **Asymmetric Digital Subscriber Line Access Service**

8.1.1 **General**

Asymmetric Digital Subscriber Line (ADSL) Access Service enables data traffic generated by a customer-provided modem to be transported to a DSL Access Service Connection Point using the Telephone Company’s local exchange service facilities. A DSL Access Service Connection Point is an interconnection point designated by the Telephone Company in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. Tariff F.C.C. No. 4 at which the customer may interconnect its ADSL Access Service provided by the Telephone Company under this Tariff or its wireline broadband Internet transmission service provided on a non-tariffed, common carrier basis with the tariffed, interstate access services described below.

The DSL Access Service Connection Point aggregates ADSL Access Service and/or wireline broadband Internet transmission service data traffic from and to suitably equipped Telephone Company Serving Wire Centers (SWCs). The DSL Access Service Connection Point may be located within the operating territory of the Telephone Company for connections to Special Access Services, Frame Relay Access Service, Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS) or Ethernet Transport Service (ETS). As specified below, the DSL Access Service Connection Point may also be located in the operating territory of another telephone company for connections to special access services, frame relay access service, or Ethernet access service, provided both telephone companies agree to such an arrangement.
8. Digital Subscriber Line Access Services (Cont'd)

8.1 Asymmetric Digital Subscriber Line Access Service (Cont’d)

8.1.1 General (Cont’d)

When both the ADSL-equipped SWC and its associated DSL Access Service Connection Point are located within the Telephone Company’s operating territory, the customer’s ADSL Access Service must be connected to the customer designated premises of a single telecommunications service provider (TSP) using the Telephone Company’s Special Access Services, Frame Relay Access Service, ATM-CRS, or ETS provided under this tariff.

When both the ADSL-equipped SWC from which the Telephone Company provides local exchange and exchange access services and its associated DSL Access Service Connection Point are located in the operating territory of an adjacent telephone company, the customer’s ADSL Access Service must be connected to the customer designated premises of a single TSP using either equivalent special access service, frame relay access service or Ethernet access service provided by the other telephone company.

When the ADSL-equipped SWC is located within the Telephone Company’s operating territory and its associated DSL Access Service Connection Point is located in the operating territory of an adjacent telephone company, the customer’s ADSL Access Service must be connected to the customer designated premises of a single TSP using either: 1) equivalent frame relay access service provided by the other telephone company, 2) a combination of DSL Extended Transport provided by the Telephone Company under this tariff and equivalent special access service provided by the other telephone company, or 3) a combination of DSL Extended Transport provided by the Telephone Company under this tariff and equivalent Ethernet access service provided by the other telephone company.

When the ADSL-equipped SWC is located within the Telephone Company's operating territory and its associated DSL Access Service Connection Point is located in the operating territory of a non-adjacent telephone company, the customer’s ADSL Access Service must be connected to the customer designated premises of a single TSP using either: 1) equivalent frame relay access service provided by the other telephone company or 2) a combination of DSL Extended Transport provided by the Telephone Company under this tariff and equivalent special access service provided by the other telephone company.
8. Digital Subscriber Line Access Services (Cont'd)

8.1 Asymmetric Digital Subscriber Line Access Service (Cont’d)

8.1.1 General (Cont’d)

Where technically feasible, ADSL Access Service is available as two service options, i.e., ADSL Voice-Data and ADSL Data-Only.

(A) The ADSL Voice-Data option provides transmission of data signals using the Telephone Company’s existing local exchange service line at peak data transmission speeds of 1 Mbps upstream/6 Mbps downstream, 3 Mbps upstream/15 Mbps downstream, 25 Mbps upstream/50 Mbps downstream, or 50 Mbps upstream/100 Mbps downstream. The DSL Voice-Data option may be used for simultaneous voice and data communications.

(B) The ADSL Data-Only option provides transmission of data signals using the Telephone Company’s existing local exchange facilities at peak transmission speeds of 1 Mbps upstream/6 Mbps downstream, 3 Mbps upstream/15 Mbps downstream or 5 Mbps upstream/50 Mbps downstream. The ADSL Data-Only option does not provide the ability to transmit voice communications.
8. Digital Subscriber Line Access Services (Cont'd)

8.1 Asymmetric Digital Subscriber Line Access Service (Cont'd)

8.1.1 General (Cont'd)

A generic view of how ADSL Access Service could be interconnected with a TSP’s network is depicted in the figures following. In the first example, the customer’s ADSL-equipped Serving Wire Center and associated DSL Access Service Connection Point are located in the same office within the Telephone Company’s operating territory. The ADSL Access Service customer orders ADSL Access Service pursuant to the provisions specified in this section.

The ADSL Access Service customer’s TSP orders Special Access Services, Frame Relay Access Service, Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS) and/or Ethernet Transport Service (ETS) pursuant to the provisions specified in Section 7, preceding, and Sections 16.1, 16.2 and 16.3, following, to connect its customer designated premises to the DSL Access Service Connection Point.
8. **Digital Subscriber Line Access Services (Cont'd)**

8.1 **Asymmetric Digital Subscriber Line Access Service (Cont'd)**

8.1.1 **General (Cont'd)**

In the example shown below, the DSL Access Service Connection Point is located outside the Telephone Company’s operating territory in an adjacent telephone company’s operating territory and the customer’s TSP uses special access service to connect its CDP to that DSL Access Service Connection Point. The ADSL Access Service customer orders ADSL Access Service pursuant to the provisions specified in this section. In order to connect its customer designated premises to the DSL Access Service Connection Point, the ADSL Access Service customer’s TSP orders DSL Extended Transport from the Telephone Company as specified in this section and equivalent special access service from the adjacent telephone company.

* If EC B is a non-NECA company, the application of their charges will depend on their access tariff
8. **Digital Subscriber Line Access Services (Cont'd)**

8.1 **Asymmetric Digital Subscriber Line Access Service (Cont'd)**

8.1.1 **General (Cont'd)**

In the example shown below, the DSL Access Service Connection Point is located outside of the Telephone Company's operating territory in the operating territory of an adjacent telephone company and the customer’s TSP uses Ethernet access service to connect its CDP to that DSL Access Service Connection Point. The ADSL Access Service customer orders ADSL Access Service pursuant to the provisions specified in this section. In order to connect its customer designated premises to the DSL Access Service Connection Point, the ADSL Access Service customer’s TSP orders DSL Extended Transport from the Telephone Company as specified in this section and equivalent Ethernet access service from the adjacent telephone company.

### ADSL ACCESS SERVICE

* If EC B is a non-NECA company, the application of their charges will depend on their access tariff.
8. Digital Subscriber Line Access Services (Cont'd)

8.1 Asymmetric Digital Subscriber Line Access Service (Cont'd)

8.1.2 Limitations

(A) Except as described in Section 8.1.1, preceding, ADSL Access Service is available as two service options. Where suitable facilities exist, the Telephone Company will offer ADSL Access Service at the following maximum upstream (i.e., from the customer’s equipment up to the DSL Access Service Connection Point) and downstream (i.e., from the DSL Access Service Connection Point down to the customer’s equipment) speeds:

(1) 1 Mbps upstream/6 Mbps downstream in compliance with the requirements specified in Technical References

ATIS-0600413.2009,
ITU-T G.983.1-January 2005,
ITU-T G.983.2-July 2005,
ITU-T G.983.3-March 2001,
ITU-T G.983.4-November 2001,
ITU-T G.984.1-March 2008,
ITU-T G.984.2-March 2003,
ITU-T G.984.3-March 2008,
ITU-T G.984.4-February 2008,
ITU-T G.992.1-June 1999,
ITU-T G.992.3-January 2005,
ITU-T G.992.4-July 2002,
ITU-T G.992.5-January 2005,
ITU-T G.993.1-June 2004,
ITU-T G.993.2-February 2006,
and/or IEEE Std. 802.3-2008, Part 3, Section 5, Clauses 56 through 67, unless otherwise specified in Section 8.1.6, following.
8. Digital Subscriber Line Access Services (Cont’d)

8.1 Asymmetric Digital Subscriber Line Access Service (Cont’d)

8.1.2 Limitations (Cont’d)

(A) (Cont’d)

(2) 3 Mbps upstream/15 Mbps downstream in compliance with the requirements specified in Technical References:

ITU-T G.983.1-January 2005,
ITU-T G.983.2-July 2005,
ITU-T G.983.3-March 2001,
ITU-T G.983.4-November 2001,
ITU-T G.984.1-March 2008,
ITU-T G.984.2-March 2003,
ITU-T G.984.3-March 2008,
ITU-T G.984.4-February 2008,
ITU-T G.992.5-January 2005,
ITU-T G.993.1-June 2004,
ITU-T G.993.2-February 2006,
and/or IEEE Std. 802.3-2008, Part 3, Section 5, Clauses 56 through 67.

(3) 5 Mbps upstream/50 Mbps downstream, 25 Mbps upstream/50 Mbps downstream, or 50 Mbps upstream/100 Mbps downstream in compliance) with the requirements specified in Technical References:

ITU-T G.983.1-January 2005,
ITU-T G.983.2-July 2005,
ITU-T G.983.3-March 2001,
ITU-T G.983.4-November 2001,
ITU-T G.984.1-March 2008,
ITU-T G.984.2-March 2003,
ITU-T G.984.3-March 2008,
ITU-T G.984.4-February 2008,
ITU-T.G 993.1–June 2004,
ITU-T.G 993.2-February 2006,
and/or IEEE Std. 802.3-2008, Part 3, Section 5, clauses 56 through 67.

These peak speeds are not guaranteed by the Telephone Company due to factors that may affect the actual speeds delivered, including the ADSL Access Service customer's distance from the Telephone Company Serving Wire Center, condition of the existing exchange service facilities, and any capacity limitations in the TSP's network design.
8. Digital Subscriber Line Access Services (Cont'd)

8.1 Asymmetric Digital Subscriber Line Access Service (Cont'd)

8.1.2 Limitations (Cont’d)

(B) The Telephone Company does not provide customer premises equipment (CPE) in conjunction with the ADSL Access Service offering.

(C) ADSL Access Service may not be used in conjunction with multi-point Special Access Service configurations as described in Section 7.1.3, preceding.

(D) ADSL Access Service will be furnished where suitable facilities exist as determined by the Telephone Company. The Telephone Company will identify its ADSL-equipped Serving Wire Centers, DSL Access Service Connection Point Serving Wire Centers, and, if applicable, DSL Transport Hub Serving Wire Centers in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. Tariff F.C.C. No. 4. The Telephone Companies listed in Section 17.6, following, will offer ADSL Access Service under the provisions specified in Section 8.1.

(E) ADSL Access Service will be provided over existing Telephone Company local exchange service facilities. When the customer orders the ADSL Voice-Data option, the rates and regulations for ADSL Access Service are in addition to any rates and regulations that apply for the associated local exchange service line provided under the terms and conditions in the Telephone Company's general and/or local exchange service tariffs. The Telephone Company will automatically disconnect the ADSL Access Service Voice-Data option when the associated local exchange service line is disconnected for any reason.
8. Digital Subscriber Line Access Services (Cont'd)

8.1 Asymmetric Digital Subscriber Line Access Service (Cont'd)

8.1.2 Limitations (Cont’d)

(F) Rates and regulations for Special Access Services, Frame Relay Access Service, Asynchronous Transfer Mode Cell Relay Access Service and Ethernet Transport Service provided under this tariff will apply for the access service(s) provided between the TSP’s customer designated premises and the DSL Access Service Connection Point, as described in Section 7, preceding, and Sections 16.1, 16.2 and 16.3, following.

8.1.3 Undertaking of the Telephone Company

Where technically feasible, the Telephone Company will offer ADSL Access Service as described in Section 8.1.2, preceding. The Telephone Company will provide ADSL Access Service at rates and charges as set forth in Sections 17.4.9(A) and/or 17.4.9(H), as follows:

(A) The Telephone Company will determine if the associated local exchange service line or facilities are suitable for use with the ADSL Access Service option ordered by the customer. Service will not be provided on lines that the Telephone Company determines are not suitable for ADSL Access Service or on lines that produce interference with other services provided by the Telephone Company.

(B) The Telephone Company, after determining if the facilities are suitable for ADSL Access Service, will notify the customer if any additional CPE is necessary to support ADSL Access Service.

(C) The Telephone Company will provision and maintain ADSL Access Service from the DSL Access Service Connection Point to the Point of Termination at the ADSL Access Service customer’s premises, except as provided for in Section 8.1.5(D), following.

(D) The Telephone Company will notify the ADSL Access Service customer’s TSP when DSL Extended Transport, as described in Section 8.1.5(D), following, is required.

The Telephone Company specific rate band assignment for ADSL Access Service is specified in the A/SDSL Rate Band column in Section 17.6(A), following.
8. Digital Subscriber Line Access Services (Cont'd)

8.1 Asymmetric Digital Subscriber Line Access Service (Cont'd)

8.1.4 Obligations of the Customer

In addition to the regulations described in other sections of this tariff, the following provisions apply to ADSL Access Service:

(A) The customer is responsible for providing the Telephone Company with the necessary information to provision ADSL Access Service (e.g., customer name, telephone number and premises address; billing name and address when different from the customer name and premise address; its internet Protocol (IP) address; and the contact name and telephone number of the TSP with which the customer’s ADSL Access Service will interconnect).

(B) The customer is responsible for providing and maintaining all required CPE, which is compatible with ADSL Access Service and complies with the applicable Technical References specified in Section 8.1.2(A), preceding.

(C) Where required, the ADSL Access Service customer’s TSP will order DSL Extended Transport from each Telephone Company designated DSL Transport Hub to its associated DSL Access Service Connection Point as described in Section 8.1.5(D), following.
8. Digital Subscriber Line Access Services (Cont'd)

8.1 Asymmetric Digital Subscriber Line Access Service (Cont'd)

8.1.5 Rate Regulations

This section contains the regulations governing the rates and charges that apply for ADSL Access Service. Regulations governing the rates and charges for the Special Access Services, Frame Relay Access Service, Asynchronous Transfer Mode Cell Relay Access Service and Ethernet Transport Service provided under this tariff used in conjunction with ADSL Access Service are as specified in Section 7, preceding, and Sections 16.1, 16.2 and 16.3, following.

(A) Minimum Period

The minimum period for which ADSL Access Service is provided to a customer and for which charges are applicable is one month.

(B) Moves

A move involves a change in the physical location of one of the following:

- The Point of Termination at the ADSL Access Service customer designated premises;
- The ADSL Access Service customer designated premises

The provisions for moves of ADSL Access Service are the same as those described in Section 7.2.3, preceding, except that an Access Order Charge will not apply to move orders for the ADSL Access Service Voice-Data option.
8. Digital Subscriber Line Access Services (Cont'd)

8.1 Asymmetric Digital Subscriber Line Access Service (Cont'd)

8.1.5 Rate Regulations (Cont’d)

(C) Temporary Suspension of Service*

When an end user temporarily suspends the local exchange service that is associated with an ADSL Voice-Data option, the ADSL Voice-Data option will also be placed on temporary suspension for the same period of time, and the Telephone Company will bill the customer a temporary suspension fee, per line, per occasion, as described in Section 17.4.9 (C), following. The Telephone Company will not bill the customer the monthly ADSL Voice-Data Line Charge while the ADSL Voice-Data option is placed on temporary suspension.

(D) DSL Extended Transport

DSL Extended Transport is required when: 1) the Telephone Company providing ADSL Access Service locates its DSL Access Service Connection Point outside its operating territory in the operating territory of another telephone company and 2) the ADSL Access Service customer’s TSP connects its customer designated premises to the DSL Access Service Connection Point using Special Access Service described in Section 7, preceding, or equivalent special access service provided by the other telephone company.

DSL Extended Transport is also required when: 1) the Telephone Company providing ADSL Access Service locates its DSL Access Service Connection Point outside its operating territory in the operating territory of an adjacent telephone company and 2) the ADSL Access Service customer’s TSP connects its customer designated premises to the DSL Access Service Connection Point using Ethernet Transport Service described in Section 16.3, following, or equivalent Ethernet access service provided by the adjacent telephone company.

* The nonrecurring temporary suspension fee, as described in Section 17.4.9 (C), following, will not apply to existing customers who temporarily suspended their ADSL Voice-Data service prior to December 20, 2011.
8. Digital Subscriber Line Access Services (Cont'd)

8.1 Asymmetric Digital Subscriber Line Access Service (Cont'd)

8.1.5 Rate Regulations (Cont’d)

(D) DSL Extended Transport (Cont’d)

DSL Extended Transport provides the TSP with a virtual circuit path between a Telephone Company-designated DSL Transport Hub and its associated DSL Access Service Connection Point location. The Telephone Company must designate at least one DSL Transport Hub SWC location within its operating territory when it locates a DSL Access Service Connection Point outside its operating territory. The DSL Transport Hub aggregates ADSL and/or SDSL Access Services data traffic within the operating territory of the Telephone Company providing the DSL Access Service.

DSL Extended Transport is available between: 1) a DSL Transport Hub SWC and its associate DSL Access Service Connection Point SWC located within the United States when the ADSL customer’s TSP connects its CDP to the DSL Access Service Connection Point using special access services, 2) a DSL Transport Hub SWC and a cross border connection point located within the United States when the Telephone Company has located its associated DSL Access Service Connection Point in Canada and the ADSL customer’s TSP connects its CDP to the DSL Access Service Connection Point using special access services, and 3) a DSL Transport Hub SWC and its associated DSL Access Service Connection Point SWC located in an adjacent telephone company’s operating territory when the ADSL customer’s TSP connects its CDP to the DSL Access Service Connection Point using Ethernet access service.
8. Digital Subscriber Line Access Services (Cont'd)

8.1 Asymmetric Digital Subscriber Line Access Service (Cont'd)

8.1.5 Rate Regulations (Cont’d)

(D) DSL Extended Transport (Cont’d)

Where required, DSL Extended Transport is used to transmit ADSL and/or SDSL data traffic. DSL Extended Transport is available at a speed of 1.544 Mbps when used in conjunction with special access service and at speeds of 2 Mbps, 5 Mbps, 10 Mbps, 20 Mbps, 50 Mbps, 100 Mbps, 250 Mbps, 500 Mbps, 750 Mbps, and 1 Gbps when used in conjunction with Ethernet access service. The TSP is responsible for determining and ordering the number of DSL Extended Transport virtual circuit paths it requires to meet its end users’ data transmission needs. The TSP must place an order for at least one 1.544 Mbps DSL Extended Transport virtual circuit path, where required, when it places the order for Special Access Service (or equivalent special access service) to connect its customer designated premises to the DSL Access Service Connection Point. The TSP must place an order for at least one 2 Mbps DSL Extended Transport virtual circuit path, where required, when it places the order for Ethernet Transport Service (or equivalent Ethernet access service) to connect its customer designated premises to the DSL Access Service Connection Point. An Access Order Charge applies per order for the installation of DSL Extended Transport.

When the DSL Access Service Connection Point is located in Canada, DSL Extended Transport will be furnished by the Telephone Company to a cross border connection point located in the United States. DSL Extended Transport from the cross border connection point to the DSL Access Service Connection Point will be provided by the Canadian telephone company. The Telephone Company will work cooperatively with the TSP and Canadian telephone company for the provisioning of DSL Extended Transport in Canada. Rates and regulations defined in this section only apply to that portion of the service between the DSL Transport Hub and the cross border connection point.
8. Digital Subscriber Line Access Services (Cont'd)

8.1 Asymmetric Digital Subscriber Line Access Service (Cont'd)

8.1.5 Rate Regulations (Cont’d)

(D) DSL Extended Transport (Cont’d)

(1) Mileage Measurement

(a) The mileage to be used to determine the monthly charges for each DSL Extended Transport virtual circuit path is calculated using the airline distance between each DSL Transport Hub and its associated DSL Access Service Connection Point when both locations are within the United States. To determine the applicable monthly charges, first compute the mileage using the V&H coordinates method, as described in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. No. 4. When the calculation results in a fraction of a mile, always round up to the next whole mile before determining the total mileage and applying the rates. Once the total mileage for each path is determined, multiply the number of miles times the DSL Extended Transport per mile rates specified in Section 17.4.9(F), following.

The Telephone Company specific rate band assignment for DSL Extended Transport is specified in the DSL Extended Transport Rate Band column in Section 17.6(A).

The following example is an illustrative model, only provided for the purpose of clarification. Actual charges will vary, dependent upon the effective DSL Extended Transport per mile rates specified in Section 17.4.9(F), following.

Example:

- TSP orders two 1.544 Mbps DSL Extended Transport paths between a DSL Transport Hub SWC and the associated DSL Access Service Connection Point SWC. Both SWCs are located within the United States.

- Total mileage between the SWCs is calculated at 28.4 miles.
8. Digital Subscriber Line Access Services (Cont’d)

8.1 Asymmetric Digital Subscriber Line Access Service (Cont’d)

8.1.5 Rate Regulations (Cont’d)

(D) DSL Extended Transport (Cont’d)

(1) Mileage Measurement (Cont’d)

Monthly charges for DSL Extended Transport are determined as follows:

- Telephone Company specific rate band assignment for DSL Extended Transport is Rate Band 1.
- Fractional mileage rounded up to the next whole mile equals 29 miles.
- First 25 miles x $0.00 per mile equals $0.00 per path.
- Next four miles x $11.00 per mile equals $44.00 per path.
- Total mileage charges for DSL Extended Transport in this example equal $88.00 per month (i.e., $44.00 x two paths).

(b) The mileage to be used to determine the monthly charges for each DSL Extended Transport virtual circuit path between a DSL Transport Hub and a cross border connection point is specified below. To calculate the monthly charges for each path, multiply the number of miles between the DSL Transport Hub and the cross border connection point times the DSL Extended Transport per mile rates specified in Section 17.4.9(F), following. The portion of the DSL Extended Transport furnished from the cross border connection point to the DSL Access Service Connection Point is the responsibility of the TSP and is not covered in this tariff as described in Section 8.1.5(D), above.

(i) The number of miles to be used for rating DSL Extended Transport provided under this tariff between the Ketchikan Public Utilities DSL Transport Hub SWC and the Garnet Point, AK cross border connection point is 60 miles.
8. Digital Subscriber Line Access Services (Cont'd)

8.1 Asymmetric Digital Subscriber Line Access Service (Cont'd)

8.1.5 Rate Regulations (Cont'd)

(E) Rate Categories

There are two types of rates and charges applicable to ADSL Access Service. These are monthly rates and nonrecurring charges.

The monthly rate for the ADSL Line Charge applies each month or fraction thereof for each ADSL Voice-Data option and ADSL Data-Only option ordered by the customer. The monthly rate for DSL Extended Transport applies each month or fraction thereof for each virtual circuit path as described in Section 8.1.5(D), preceding.

A nonrecurring charge applies for each ADSL Voice-Data and ADSL Data-Only option ordered by the customer for the installation of ADSL Access Service. The nonrecurring installation charge will be waived for each new ADSL Voice-Data option and ADSL Data-Only option Access Line ordered when the customer commits to retain the ADSL Access Line for a minimum period of 6 months following installation of service. If the ADSL Access Line is disconnected for any reason prior to the end of the 6-month minimum commitment period other than for:

- an ADSL service conversion as described below;
- a discontinuance of service within the first 30 days of service as described below; or
- a discontinuance of service due to a fire, flood or other occurrence as described below;

The Telephone Company will bill the customer an early termination fee, as described in Section 17.4.9(D), following, for each ADSL Voice-Data and Data-Only option disconnected by the customer, prior to satisfying the 6-month minimum commitment period. Existing ADSL Voice-Data and Data-Only customers as of December 20, 2011, who are committed to a not yet concluded 12-month minimum service period but have had service for at least 6 months, are considered to have met their commitment period for waiver of the nonrecurring installation charge.
8. Digital Subscriber Line Access Services (Cont’d)

8.1 Asymmetric Digital Subscriber Line Access Service (Cont’d)

8.1.5 Rate Regulations (Cont’d)

(E) Rate Categories (Cont’d)

Existing ADSL Voice-Data and Data-Only customers as of December 20, 2011, who have not yet completed 6 months of service will be covered under the new 6-month minimum commitment. The early termination fee, as described in Section 17.4.9 (D), following, will apply should service be disconnected prior to the end of the 6-month minimum commitment period.

Except as otherwise specified in Section 8.1.5(E), below, changes to an existing ADSL Access Service will be treated as a discontinuance of the existing service and an installation of a new service. Such changes include an ADSL service conversion or a change of TSP. A nonrecurring installation charge will apply per ADSL Access Service line for this work activity.

ADSL service conversions include change of a service option (i.e., replacing ADSL Voice-Data with ADSL Data-Only, or vice versa), any change of a speed level (e.g., replacing ADSL Voice-Data 1 Mbps with ADSL Voice-Data 3 Mbps), or any combination of a simultaneous change of service option and speed level (e.g., replacing ADSL Voice-Data 1 Mbps with ADSL Data-Only 3 Mbps).

When a customer orders an ADSL service conversion but has not met its 6-month minimum commitment on the existing ADSL service, the Telephone Company will not bill the early termination fee for the original ADSL service, if the customer commits to a new minimum 6-month period for the newly converted ADSL service.
8. Digital Subscriber Line Access Services (Cont'd)

8.1 Asymmetric Digital Subscriber Line Access Service (Cont'd)

8.1.5 Rate Regulations (Cont'd)

(E) Rate Categories (Cont’d)

Any existing customer who, as of May 2, 2012, had a speed option that is no longer available after May 3, 2012, will be automatically converted to the next higher speed option by the Telephone Company without having to re-order service. This is considered a Telephone Company initiated conversion and therefore any applicable Access Order Charge or nonrecurring installation charge would not apply. In addition, for any customer who is converted to a higher speed option by the Telephone Company under this provision, service will continue uninterrupted and the ADSL Line Charge Early Termination Fee will not apply if the customer has not yet satisfied a previously committed to 6-month minimum period on the original lower speed option.
8. Digital Subscriber Line Access Services (Cont'd)

8.1 Asymmetric Digital Subscriber Line Access Service (Cont'd)

8.1.5 Rate Regulations (Cont'd)

(E) Rate Categories (Cont’d)

For an ADSL customer who disconnects service within the first 30 days following installation, the Telephone Company will not bill the customer the early termination fee provided: 1) the customer had not previously had ADSL Access Service at the same location within the 30 days immediately prior to installing service and 2) the customer’s ADSL Access Service is disconnected by no later than the first business day following the 30th day after service was installed.

When a customer disconnects its ADSL Access Service prior to the expiration of its 6-month minimum commitment as a result of a fire, flood or other occurrence, as described in Section 2.4.5, preceding, the Telephone Company will not bill the early termination fee.

The following administrative changes will be made without charge to the customer:

- Change of customer premises address when the change of address is not a result of a physical relocation of equipment,
- Change of the associated local exchange service line over which ADSL Voice-Data Access Service is provided when there is no physical relocation of the ADSL Access Service involved,
- Change in billing data (name, address or contact name or telephone),
- Change of billing account number,
- Change of agency authorization that requires no changes to the Telephone Company’s network,
- Change in the ADSL Access Service customer’s existing IP address when requested by the customer’s TSP,
- Change to limit the data speed delivered over the customer’s existing ADSL Access Service line when requested by the customer’s TSP,
- Change of customer contact name or telephone number, and
- Change of jurisdiction.
8. Digital Subscriber Line Access Services (Cont'd)

8.1 Asymmetric Digital Subscriber Line Access Service (Cont'd)

8.1.5 Rate Regulations (Cont'd)

(E) Rate Categories (Cont’d)

The nonrecurring installation charge will not apply to restore an ADSL Access Service that was temporarily suspended by the Telephone Company for non-payment of charges. Rates and charges for ADSL Access Service are as set forth in Section 17.4.9(A), following, or in Section 17.4.9(H), following, when the customer purchases ADSL Access Service under the DSL Access Services Wholesale Pricing Plan as described in Section 8.5, following. The rates for DSL Extended Transport are as set forth in Section 17.4.9(F), following.

The Telephone Company specific rate band assignment for line charges associated with ADSL Voice-Data and ADSL Data-Only Access Service are specified in the A/SDSL Voice-Data and A/SDSL Data-Only Rate Band columns in Section 17.6(A), following.
8. Digital Subscriber Line Access Services (Cont'd)

8.2 Symmetric Digital Subscriber Line Access Service

8.2.1 General

Symmetric Digital Subscriber Line (SDSL) Access Service provides the customer the ability to transmit data to (upstream rate) and receive data from (downstream rate) a DSL Access Service Connection Point at the same speed using the Telephone Company’s existing local exchange service facilities. A DSL Access Service Connection Point is an interconnection point designated by the Telephone Company in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. Tariff F.C.C. No. 4 at which the customer may interconnect its SDSL Access Service provided by the Telephone Company under this tariff or its wireline broadband Internet transmission service provided on a non-tariffed, common carrier basis with the tariffed, interstate access services described below.

The DSL Access Service Connection Point aggregates SDSL Access Service and/or wireline broadband Internet transmission service data traffic from and to suitably equipped Telephone Company Serving Wire Centers (SWCs). The DSL Access Service Connection Point may be located within the operating territory of the Telephone Company for connections to Special Access Services, Frame Relay Access Service, Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS) or Ethernet Transport Service (ETS). As specified below, the DSL Access Service Connection Point may also be located in the operating territory of another telephone company for connections to special access services, frame relay access service, or Ethernet access service, provided both telephone companies agree to such an arrangement.

When both the SDSL-equipped SWC and its associated DSL Access Service Connection Point are located within the Telephone Company’s operating territory, the customer’s SDSL Access Service must be connected to the customer designated premises of a single telecommunications service provider (TSP) using the Telephone Company’s Special Access Services, Frame Relay Access Service, ATM-CRS, or ETS provided under this Tariff.
8. Digital Subscriber Line Access Services (Cont’d)

8.2 Symmetric Digital Subscriber Line Access Service (Cont’d)

8.2.1 General (Cont’d)

When both the SDSL-equipped SWC from which the Telephone Company provides local exchange and exchange access services and its associated DSL Access Service Connection Point are located in the operating territory of an adjacent telephone company, the customer’s SDSL Access Service must be connected to the customer designated premises of a single TSP using either equivalent special access service, frame relay access service or Ethernet access service provided by the other telephone company.

When the SDSL-equipped SWC is located within the Telephone Company’s operating territory and its associated DSL Access Service Connection Point is located in the operating territory of an adjacent telephone company, the customer’s SDSL Access Service must be connected to the customer designated premises of a single TSP using either: 1) equivalent frame relay access service provided by the other telephone company, 2) a combination of DSL Extended Transport provided by the Telephone Company under this tariff and equivalent special access service provided by the other telephone company, or 3) a combination of DSL Extended Transport provided by the Telephone Company under this tariff and equivalent Ethernet access service provided by the other telephone company.

When the SDSL-equipped SWC is located within the Telephone Company’s operating territory and its associated DSL Access Service Connection Point is located in the operating territory of a non-adjacent telephone company, the customer’s SDSL Access Service must be connected to the customer designated premises of a single TSP using either: 1) equivalent frame relay access service provided by the other telephone company or 2) a combination of DSL Extended Transport provided by the Telephone Company under this tariff and equivalent special access service provided by the other telephone company.
8. Digital Subscriber Line Access Services (Cont'd)

8.2 Symmetric Digital Subscriber Line Access Service (Cont’d)

8.2.1 General (Cont’d)

SDSL Access Service is available as two service options, i.e., SDSL Voice-Data and SDSL Data-Only.

(A) The SDSL Voice-Data option provides transmission of data signals at peak data transmission speeds of 256 kbps or 768 kbps using the Telephone Company’s existing local exchange service line. This option may be used for simultaneous voice and data communications.

(B) The SDSL Data-Only option provides transmission of data signals at peak transmission speeds of 144 kbps, 256 kbps, 768 kbps, 2 Mbps or 4 Mbps using the Telephone Company’s existing local exchange facilities. This option does not provide the ability to transmit voice communications.
8. Digital Subscriber Line Access Services (Cont’d)

8.2 Symmetric Digital Subscriber Line Access Service (Cont’d)

8.2.1 General (Cont’d)

A generic view of how SDSL Access Service could be interconnected with a TSP’s network is depicted in the figures following. In the first example, the customer’s SDSL-equipped Serving Wire Center and associated DSL Access Service Connection Point are located in the same office within the Telephone Company’s operating territory. The SDSL Access Service customer orders SDSL Access Service pursuant to the provisions specified in this section. The SDSL Access Service customer’s TSP orders Special Access Services, Frame Relay Access Service, Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS) and/or Ethernet Transport Service (ETS) pursuant to the provisions specified in Section 7, preceding, and Sections 16.1, 16.2 and 16.3, following, to connect its customer designated premises to the DSL Access Service Connection Point.
8. **Digital Subscriber Line Access Services (Cont'd)**

8.2 **Symmetric Digital Subscriber Line Access Service (Cont'd)**

8.2.1 **General (Cont'd)**

In the example shown below, the DSL Access Service Connection Point is located outside the Telephone Company’s operating territory in an adjacent telephone company’s operating territory and the customer’s TSP uses special access service to connect its CDP to that DSL Access Service Connection Point. The SDSL Access Service customer orders SDSL Access Service pursuant to the provisions specified in this section. In order to connect its customer designated premises to the DSL Access Service Connection Point, the SDSL Access Service customer’s TSP orders DSL Extended Transport from the Telephone Company as specified in this section and equivalent special access service from the adjacent telephone company.

**SDSL ACCESS SERVICE**

*If EC B is a non-NECA company, the application of their charges will depend on their access tariff*
8. Digital Subscriber Line Access Services (Cont'd)

8.2 Symmetric Digital Subscriber Line Access Service (Cont'd)

8.2.1 General (Cont'd)

In the example shown below, the DSL Access Service Connection Point is located outside of the Telephone Company’s operating territory in the operating territory of an adjacent telephone company and the customer’s TSP uses Ethernet access service to connect its CDP to that DSL Access Service Connection Point. The SDSL Access Service customer orders SDSL Access Service pursuant to the provisions specified in this section. In order to connect its customer designated premises to the DSL Access Service Connection Point, the SDSL Access Service customer’s TSP orders DSL Extended Transport from the Telephone Company as specified in this section and equivalent Ethernet access service from the adjacent telephone company.

SDSL ACCESS SERVICE

SDSL Customer Premises

SDSL Access Service

SDSL Access Service Connection Point

DSL Extended Transport

Telecommunications Service Provider Premises

Customer Designated Premises

SDSL Customer Premises

SDSL Access Service

Ethernet Access Service
8. Digital Subscriber Line Access Services (Cont’d)

8.2 Symmetric Digital Subscriber Line Access Service (Cont’d)

8.2.2 Limitations

SDSL Access Service is available as two service options as described above. Peak speeds are not guaranteed by the Telephone Company due to factors that may affect the actual speeds delivered, including the SDSL Access Service customer’s distance from the Telephone Company Serving Wire Center, condition of the existing local exchange service facilities, and any capacity limitations in the TSP’s network design.

The Telephone Company does not provide customer premises equipment (CPE) in conjunction with the SDSL Access Service offering.

SDSL Access Service may not be used in conjunction with multi-point Special Access Service configurations as described in Section 7.1.3, preceding.

SDSL Access Service will be furnished where suitable facilities exist as determined by the Telephone Company. The Telephone Company will identify its SDSL-equipped Serving Wire Centers, DSL Access Service Connection Point Serving Wire Centers, and, if applicable, DSL Transport Hub Serving Wire Centers in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. Tariff F.C.C. No. 4. The Telephone Companies listed in Section 17.6, following, will offer SDSL Access Service under the provisions specified in Section 8.2.

SDSL Access Service will be provided over existing Telephone Company local exchange service facilities. When the customer orders the SDSL Voice-Data option, the rates and regulations for SDSL Access Service are in addition to any rates and regulations that apply for the associated local exchange service line provided under the terms and conditions in the Telephone Company’s general and/or local exchange service tariffs. The Telephone Company will automatically disconnect the SDSL Access Service Voice-Data option when the associated local exchange service line is disconnected for any reason.
8. Digital Subscriber Line Access Services (Cont’d)

8.2 Symmetric Digital Subscriber Line Access Service (Cont’d)

8.2.2 Limitations (Cont’d)

Rates and regulations for Special Access Services, Frame Relay Access Service, Asynchronous Transfer Mode Cell Relay Access Service and Ethernet Transport Service provided under this tariff will apply for the access service(s) provided between the TSP’s customer designated premises and the DSL Access Service Connection Point, as described in Section 7, preceding, and Sections 16.1, 16.2 and 16.3, following.

8.2.3 Undertaking of the Telephone Company

The Telephone Company will provide SDSL Access Service at the rates and charges set forth in Sections 17.4.9(B) and/or 17.4.9(H), as follows:

(A) The Telephone Company will determine if the associated local exchange service line or facilities are suitable for use with the SDSL Access Service option ordered by the customer. Service will not be provided on facilities that the Telephone Company determines are not suitable for SDSL Access Service or on facilities that produce interference with other services provided by the Telephone Company.

(B) The Telephone Company, after determining if the facilities are suitable for SDSL Access Service, will notify the customer if the customer’s CPE is compatible with the equipment deployed in the Telephone Company’s Serving Wire Center and if any additional CPE is necessary to support SDSL Access Service.

(C) The Telephone Company will provision and maintain SDSL Access Service from the DSL Access Service Connection Point to the Point of Termination at the SDSL Access Service customer’s premises, except as provided for in Section 8.2.5(D), following.

(D) The Telephone Company will notify the SDSL Access Service customer’s TSP when DSL Extended Transport, as described in Section 8.2.5(D), following, is required.

The Telephone Company specific rate band assignment for SDSL Access Service is specified in the A/SDSL Rate Band column in Section 17.6(A), following.
8. Digital Subscriber Line Access Services (Cont'd)

8.2 Symmetric Digital Subscriber Line Access Service (Cont’d)

8.2.4 Obligations of the Customer

In addition to the regulations described in other sections of this tariff, the following provisions apply to SDSL Access Service:

(A) The customer is responsible for providing the Telephone Company with the necessary information to provision SDSL Access Service (e.g., customer name, telephone number and premises address; billing name and address when different from the customer name and premises address; its Internet Protocol (IP) address; and the contact name and telephone number of the TSP with which the customer’s SDSL Access Service will interconnect).

(B) The customer is responsible for providing and maintaining all required customer provided equipment (CPE), which is compatible with SDSL Access Service.

(C) Where required, the SDSL Access Service customer’s TSP will order DSL Extended Transport from each Telephone Company designated DSL Transport Hub to its associated DSL Access Service Connection Point as described in 8.2.5 (D), following.
8. Digital Subscriber Line Access Services (Cont'd)

8.2 Symmetric Digital Subscriber Line Access Service (Cont'd)

8.2.5 Rate Regulations

This section contains the regulations governing the rates and charges that apply for SDSL Access Service. Regulations governing the rates and charges for the Special Access Services, Frame Relay Access Service, Asynchronous Transfer Mode Cell Relay Access Service and Ethernet Transport Service provided under this tariff used in conjunction with SDSL Access Service are as specified in Section 7, preceding, and Sections 16.1, 16.2 and 16.3, following.

(A) Minimum Period

The minimum period for which SDSL Access Service is provided to a customer and for which charges are applicable is one month.

(B) Moves

A move involves a change in the physical location of one of the following:

- The Point of Termination at the SDSL Access Service customer designated premises;

- The SDSL Access Service customer designated premises

The provisions for moves of SDSL Access Service are the same as those described in Section 7.2.3, preceding, except that an Access Order Charge will not apply to move orders for the SDSL Access Service Voice-Data option.

(C) Temporary Suspension of Service*

When an end user temporarily suspends the local exchange service that is associated with a SDSL Voice-Data option, the SDSL Voice-Data option will also be placed on temporary suspension for the same period of time, and the Telephone Company will bill the customer a temporary suspension fee, per line, per occasion, as described in Section 17.4.9(C), following.

The Telephone Company will not bill the customer the monthly SDSL Voice-Data Line Charge while the SDSL Voice-Data option is placed on temporary suspension.
8. **Digital Subscriber Line Access Services (Cont’d)**

8.2 **Symmetric Digital Subscriber Line Access Service (Cont’d)**

8.2.5 **Rate Regulations (Cont’d)**

(D) **DSL Extended Transport**

DSL Extended Transport is required when: 1) the Telephone Company providing SDSL Access Service locates its DSL Access Service Connection Point outside its operating territory in the operating territory of another telephone company and 2) the SDSL Access Service customer’s TSP connects its customer designated premises to the DSL Access Service Connection Point using Special Access Service described in Section 7, preceding, or equivalent special access service provided by the other telephone company.

DSL Extended Transport is also required when: 1) the Telephone Company providing SDSL Access Service locates its DSL Access Service Connection Point outside its operating territory in the operating territory of an adjacent telephone company and 2) the SDSL Access Service customer’s TSP connects its customer designated premises to the DSL Access Service Connection Point using Ethernet Transport Service described in Section 16.3, following, or equivalent Ethernet access service provided by the adjacent telephone company.

DSL Extended Transport provides the TSP with a virtual circuit path between a Telephone Company-designated DSL Transport Hub and its associated DSL Access Service Connection Point location. The Telephone Company must designate at least one DSL Transport Hub SWC location within its operating territory when it locates a DSL Access Service Connection Point outside its operating territory. The DSL Transport Hub aggregates ADSL and/or SDSL Access Services data traffic within the operating territory of the Telephone Company providing the DSL Access Service.
8. Digital Subscriber Line Access Services (Cont'd)

8.2 Symmetric Digital Subscriber Line Access Service (Cont’d)

8.2.5 Rate Regulations (Cont’d)

(D) DSL Extended Transport (Cont’d)

DSL Extended Transport is available between: 1) a DSL Transport Hub SWC and its associated DSL Access Service Connection Point SWC located within the United States when the SDSL customer’s TSP connects its CDP to the DSL Access Service Connection Point using special access services, 2) a DSL Transport Hub SWC and a cross border connection point located within the United States when the Telephone Company has located its associated DSL Access Service Connection Point in Canada and the SDSL customer’s TSP connects its CDP to the DSL Access Service Connection Point using special access services, and 3) a DSL Transport Hub SWC and its associated DSL Access Service Connection Point SWC located in an adjacent telephone company’s operating territory when the SDSL customer’s TSP connects its CDP to the DSL Access Service Connection Point using Ethernet access service.
8. Digital Subscriber Line Access Services (Cont'd)

8.2 Symmetric Digital Subscriber Line Access Service (Cont’d)

8.2.5 Rate Regulations (Cont’d)

(D) DSL Extended Transport (Cont’d)

Where required, DSL Extended Transport is used to transmit ADSL and/or SDSL data traffic. DSL Extended Transport is available at a speed of 1.544 Mbps when used in conjunction with special access service and at speeds of 2 Mbps, 5 Mbps, 10 Mbps, 20 Mbps, 50 Mbps, 100 Mbps, 250 Mbps, 500 Mbps, 750 Mbps, and 1 Gbps when used in conjunction with Ethernet access service.

The TSP is responsible for determining and ordering the number of DSL Extended Transport virtual circuit paths it requires to meet its end users’ data transmission needs.

The TSP must place an order for at least one 1.544 Mbps DSL Extended Transport virtual circuit path, where required, when it places the order for Special Access Service (or equivalent special access service) to connect its customer designated premises to the DSL Access Service Connection Point.

The TSP must place an order for at least one 2 Mbps DSL Extended Transport virtual circuit path, where required, when it places the order for Ethernet Transport Service (or equivalent Ethernet access service) to connect its customer designated premises to the DSL Access Service Connection Point. An Access Order Charge applies per order for the installation of DSL Extended Transport.
8. Digital Subscriber Line Access Services (Cont’d)

8.2 Symmetric Digital Subscriber Line Access Service (Cont’d)

8.2.5 Rate Regulations (Cont’d)

(D) DSL Extended Transport (Cont’d)

When the DSL Access Service Connection Point is located in Canada, DSL Extended Transport will be furnished by the Telephone Company to a cross border connection point located in the United States. DSL Extended Transport from the cross border connection point to the DSL Access Service Connection Point will be provided by the Canadian telephone company. The Telephone Company will work cooperatively with the TSP and Canadian telephone company for the provisioning of DSL Extended Transport in Canada. Rates and regulations defined in this section only apply to that portion of the service between the DSL Transport Hub and the cross border connection point.

(1) Mileage Measurement

(a) The mileage to be used to determine the monthly charges for each DSL Extended Transport virtual circuit path is calculated using the airline distance between each DSL Transport Hub and its associated DSL Access Service Connection Point when both locations are within the United States. To determine the applicable monthly charges, first compute the mileage using the V&H coordinates method, as described in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. No. 4. When the calculation results in a fraction of a mile, always round up to the next whole mile before determining the total mileage and applying the rates. Once the total mileage for each path is determined, multiply the number of miles times the DSL Extended Transport per mile rates specified in Section 17.4.9(F), following.

The Telephone Company specific rate band assignment for DSL Extended Transport is specified in the DSL Extended Transport Rate Band Column in Section 17.6(A).

The following example is an illustrative model, only provided for the purpose of clarification. Actual charges will vary, dependent upon the effective DSL Extended Transport per mile rates specified in Section 17.4.9(F), following.
8. Digital Subscriber Line Access Services (Cont’d)

8.2 Symmetric Digital Subscriber Line Access Service (Cont’d)

8.2.5 Rate Regulations (Cont’d)

(D) DSL Extended Transport (Cont’d)

(1) Mileage Measurement (Cont’d)

Example:

- TSP orders two 1.544 Mbps DSL Extended Transport paths between a DSL Transport Hub SWC and the associated DSL Access Service Connection Point SWC. Both SWCs are located within the United States.

- Total mileage between the SWCs is calculated at 28.4 miles.

Monthly charges for DSL Extended Transport are determined as follows:

- Telephone Company specific rate band assignment for DSL Extended Transport is Rate Band 1.

- Fractional mileage rounded up to the next whole mile equals 29 miles.

- First 25 miles x $0.00 per mile equals $0.00 per path.

- Next four miles x $11.00 per mile equals $44.00 per path.

- Total mileage charges for DSL Extended Transport in this example equal $88.00 per month (i.e., $44.00 x two paths).
8. Digital Subscriber Line Access Services (Cont'd)

8.2 Symmetric Digital Subscriber Line Access Service (Cont'd)

8.2.5 Rate Regulations (Cont’d)

(D) DSL Extended Transport (Cont’d)

(1) Mileage Measurement (Cont’d)

(b) The mileage to be used to determine the monthly charges for each DSL Extended Transport virtual circuit path between a DSL Transport Hub and a cross border connection point is specified below. To calculate the monthly charges for each path, multiply the number of miles between the DSL Transport Hub and the cross border connection point times the DSL Extended Transport per mile rates specified in Section 17.4.9(F), following. The portion of the DSL Extended Transport furnished from the cross border connection point to the DSL Access Service Connection Point is the responsibility of the TSP and is not covered in this tariff as described in Section 8.2.5(D), above.

(i) The number of miles to be used for rating DSL Extended Transport provided under this tariff between the Ketchikan Public Utilities DSL Transport Hub SWC and the Garnet Point, AK cross border connection point is 60 miles.
8. Digital Subscriber Line Access Services (Cont'd)

8.2 Symmetric Digital Subscriber Line Access Service (Cont'd)

8.2.5 Rate Regulations (Cont'd)

(E) Rate Categories

There are two types of rates and charges applicable to SDSL Access Service. These are monthly rates and nonrecurring charges.

The monthly rate for the SDSL Line Charge applies each month or fraction thereof for each SDSL Voice-Data option and SDSL Data-Only option ordered by the customer. The monthly rate for DSL Extended Transport applies each month or fraction thereof for each virtual circuit path as described in Section 8.2.5(D), preceding.

A nonrecurring charge applies for each SDSL Voice-Data and SDSL Data-Only option ordered by the customer for the installation of SDSL Access Service.

The nonrecurring installation charge will be waived for each new SDSL Voice-Data 256 kbps option Access Line ordered when: 1) the customer has not previously had any ADSL or SDSL Access Service at the same location within the three months immediately prior to installing service and 2) the customer commits to retain the SDSL Voice-Data 256 kbps option Access Line for a minimum period of 6 months following installation of service.

The nonrecurring installation charge will be waived for each new SDSL Voice-Data 768 kbps option Access Line ordered when the customer commits to retain the SDSL Voice-Data 768 kbps option Access Line for a minimum period of 6 months following installation of service.
8. Digital Subscriber Line Access Services (Cont'd)

8.2 Symmetric Digital Subscriber Line Access Service (Cont'd)

8.2.5 Rate Regulations (Cont'd)

(E) Rate Categories (Cont'd)

If the SDSL Voice-Data option Access Line is disconnected for any reason prior to the end of the 6-month minimum commitment period, other than for:

- an SDSL service conversion as described below,
- an SDSL service upgrade as described below,
- a discontinuance of service within the first 30 days of service as described below, or
- a discontinuance of service due to a fire, flood or other occurrence as described below;

The Telephone Company will bill the customer an early termination fee, as described in Section 17.4.9(D), following, for each SDSL Voice-Data option disconnected by the customer, prior to satisfying the 6-month minimum commitment period. Existing SDSL Voice-Data customers as of December 20, 2011, who are committed to a not yet concluded 12-month minimum service period but have had service for at least 6 months, are considered to have met their commitment period for waiver of the nonrecurring installation charge. Existing SDSL Voice-Data customers as of December 20, 2011, who have not yet completed 6 months of service will be covered under the new 6-month minimum commitment. The early termination fee, as described in Section 17.4.9 (D), following, will apply should service be disconnected prior to the end of the 6-month minimum commitment period.

Except as otherwise specified in Section 8.2.5(E),below, changes to an existing SDSL Access Service will be treated as a discontinuance of the existing service and an installation of a new service. Such changes include an SDSL service conversion, an SDSL service upgrade, a change of service option, a change of service level speed, or a change of TSP. A nonrecurring installation charge will apply per SDSL Access Service line for this work activity.
8. Digital Subscriber Line Access Services (Cont'd)

8.2 Symmetric Digital Subscriber Line Access Service (Cont'd)

8.2.5 Rate Regulations (Cont'd)

(E) Rate Categories (Cont'd)

An SDSL service conversion occurs when the customer replaces its SDSL Voice-Data 256 kbps option with an SDSL Voice-Data 768 kbps option. When a customer orders an SDSL service conversion but has not met its 6-month minimum commitment on the existing SDSL Voice-Data 256 kbps option, the Telephone Company will not bill an early termination fee for the original SDSL service, if the customer commits to a new minimum 6-month period for the newly converted SDSL Voice-Data 768 kbps option.

An SDSL service upgrade occurs when the customer replaces its SDSL Voice-Data option with any ADSL Access Service as described in Section 8.1, preceding. When an SDSL Voice-Data customer orders a service upgrade to an ADSL Access Service but has not met its 6-month minimum commitment on the existing SDSL Voice-Data option, the Telephone Company will not bill the early termination fee if the customer commits to a new minimum 6-month period for the newly ordered ADSL Access Service.

For an SDSL customer who disconnects service within the first 30 days following installation, the Telephone Company will not bill the customer the early termination fee provided: 1) the customer had not previously had SDSL Access Service at the same location within the 30 days immediately prior to installing service and 2) the customer’s SDSL Access Service is disconnected by no later than the first business day following the 30th day after service was installed.

When a customer disconnects its SDSL Access Service prior to the expiration of its 6-month minimum commitment as a result of a fire, flood or other occurrence, as described in Section 2.4.5, preceding, the Telephone Company will not bill the early termination fee.
ACCESS SERVICE

8. Digital Subscriber Line Access Services (Cont'd)

8.2 Symmetric Digital Subscriber Line Access Service (Cont'd)

8.2.5 Rate Regulations (Cont'd)

(E) Rate Categories (Cont'd)

The following administrative changes will be made without charge to the customer:

- Change of customer premises address when the change of address is not a result of physical relocation of equipment,
- Change of the associated local exchange service line over which SDSL Voice-Data Access Service is provided when there is no physical relocation of the SDSL Access Service involved,
- Change in billing data (name, address or contact name or telephone),
- Change of billing account number,
- Change of agency authorization that requires no changes to the Telephone Company’s network,
- Change in the SDSL Access Service customer’s existing IP address when requested by the customer’s TSP,
- Change to limit the data speed delivered over the customer’s existing SDSL Access Service line when requested by the customer’s TSP,
- Change of customer contact name or telephone number, and
- Change of jurisdiction.

The nonrecurring installation charge will not apply to restore a SDSL Access Service that was temporarily suspended by the Telephone Company for non-payment of charges.

Rates and charges for SDSL Access Service are as set forth in Section 17.4.9(B), following, or in Section 17.4.9(H), following, when the customer purchases SDSL Access Service under the DSL Access Services Wholesale Pricing Plan as described in Section 8.5, following. The rates for DSL Extended Transport are as set forth in Section 17.4.9(F), following.

The Telephone Company specific rate band assignment for line charges associated with SDSL Voice-Data and SDSL Data-Only Access Service are specified in the A/SDSL Voice-Data and A/SDSL Data-Only Rate Band columns in Section 17.6(A), following.
8. Digital Subscriber Line Access Services (Cont'd)

8.3 [RESERVED FOR FUTURE USE]
8. Digital Subscriber Line Access Services (Cont'd)

8.3 [RESERVED FOR FUTURE USE]
8. Digital Subscriber Line Access Services (Cont'd)

8.4 [RESERVED FOR FUTURE USE]
8. Digital Subscriber Line Access Services (Cont'd)

8.4 [RESERVED FOR FUTURE USE]
8. **Digital Subscriber Line Access Services (Cont'd)**

8.5 **DSL Access Services Wholesale Pricing Plan**

8.5.1 **General**

The telecommunications services offered under the DSL Access Services Wholesale Pricing Plan (DSL WPP) are provided at wholesale rates to the customer under the conditions listed below.

(A) The customer purchases ADSL and/or SDSL Access Service as described in Sections 8.1 and 8.2, preceding, for the purpose of combining these telecommunications services with its own information service(s) to create a new retail service for sale to its end user customer(s).

(B) In addition to the obligations specified in Sections 8.1.4 and 8.2.4, preceding, the customer assumes the following obligations:

1. The customer will deal directly with its end user customers with respect to all matters pertaining to the service provided, including marketing, sales, ordering, installation, maintenance, trouble reporting, repair, billing and collections. The customer will not direct its end users to contact the Telephone Company for any aspect of the service the customer provides.

2. The customer will submit orders for ADSL and/or SDSL Access Service to the Telephone Company in a format and manner designated by the Telephone Company.

3. The customer will obtain the appropriate authorization to allow the Telephone Company to provision ADSL and/or SDSL Voice-Data Access Service over the customer’s end user’s existing telephone exchange service line.
8. Digital Subscriber Line Access Services (Cont'd)

8.5 DSL Access Services Wholesale Pricing Plan (Cont'd)

8.5.1 General (Cont'd)

When the customer purchases ADSL and/or SDSL Access Service under the DSL WPP, the rates and charges in Section 17.4.9(H), following, will apply in lieu of the rates and charges specified in Section 17.4.9(A), following, for ADSL Access Service and/or in Section 17.4.9(B), following, for SDSL Access Service. The DSL WPP is only available from those Telephone Companies listed in Section 17.6, following.

Services provided under the DSL WPP are available under a DSL WPP Monthly Plan at the rates and charges specified in Section 17.4.9(H)(1), following, or under a DSL WPP Term Plan described in 8.5.2, below, at the rates and charges specified in Section 17.4.9(H)(2), following. A customer with a DSL WPP Term Plan cannot also have a DSL WPP Monthly Plan as all ADSL and/or SDSL Access Service lines within the Telephone Company’s study area are included in the DSL WPP Term Plan.

The Telephone Company specific rate band assignment for services purchased under the DSL Access Services Wholesale Pricing Plan is specified in the A/SDSL Rate Band column in Section 17.6(A), following.

An Access Order Charge will not apply:

- To establish a new DSL WPP Monthly Plan, DSL WPP Term Plan or DSL WPP Volume Pricing Plan.
- To change an existing DSL WPP Term Plan or DSL WPP Volume Pricing Plan.
- To convert from an existing DSL WPP Monthly Plan to a DSL WPP Term Plan and vice versa.
- To terminate an existing DSL WPP Monthly Plan, DSL WPP Term Plan, or DSL WPP Volume Pricing Plan.

A monthly charge applies for each ADSL and/or SDSL Access Service line covered under the DSL WPP. A nonrecurring charge applies for the installation of each ADSL and/or SDSL Access Service line under the DSL WPP.

The Telephone Company will convert in-service ADSL and/or SDSL Access Service lines originally purchased under the provisions specified in Sections 8.1 and 8.2, preceding, to the DSL WPP, provided the customer obtains written authorization from its end users authorizing such conversions, where necessary. Per line nonrecurring charges specified in Section 17.4.9(H), following, do not apply to the conversion of in-service ADSL and/or SDSL Access Lines to a DSL WPP.
8. Digital Subscriber Line Access Services (Cont'd)

8.5 DSL Access Services Wholesale Pricing Plan (Cont'd)

8.5.2 DSL WPP Term Plan

(A) Description

The DSL WPP Term Plan provides the customer with reduced rates based on the length of the customer's term commitment and its selected pricing plan for all of the customer’s ADSL and/or SDSL Access Service lines provided in the Telephone Company’s study area. The DSL WPP Term Plan is available for term lengths of one or three years with a choice of two pricing plans. The Telephone Company will establish for the customer a single term plan commitment that will apply to all ADSL and/or SDSL Access Service lines in the Telephone Company’s study area.

When the customer subscribes to a DSL WPP Term Plan, all in-service ADSL and/or SDSL Access Service lines provided out of and subsequently installed in the Telephone Company’s study area will be billed the rates and charges specified in Section 17.4.9(H)(2), following, for the length of the term commitment. In addition to the applicable ADSL and/or SDSL Line Charges, the customer will be billed a recurring monthly DSL WPP Term Plan Charge per study area as specified in Section 17.4.9(H)(2)(a), following, based on its selected pricing plan.

The Telephone Company specific rate band assignment for the Study Area DSL Access Service Wholesale Pricing Plan Term Plan charge is specified in the DSL WPP Term Plan Rate Band column in Section 17.6(A), following.
8. Digital Subscriber Line Access Services (Cont'd)

8.5 DSL Access Services Wholesale Pricing Plan (Cont'd)

8.5.2 DSL WPP Term Plan (Cont'd)

(A) Description (Cont’d)

If the Telephone Company decreases the rates specified in Section 17.4.9(H)(2), following, during the term of a commitment period, the decreased rates will automatically be applied for the remainder of the current commitment period.

At the end of the DSL WPP Term Plan, the customer may elect to establish a new DSL WPP Term Plan commitment, convert to the rates available under the DSL WPP Monthly Plan, or discontinue service. If the customer does not make an election by the end of the DSL WPP Term Plan, the rates for all in-service ADSL and/or SDSL Access Service lines will automatically be converted to the rates available under the DSL WPP Monthly Plan specified in Section 17.4.9(H)(1), following.

A DSL WPP Term Plan is subject to payment for early termination as described in (D), below.
8. Digital Subscriber Line Access Services (Cont'd)

8.5 DSL Access Services Wholesale Pricing Plan (Cont'd)

8.5.2 DSL WPP Term Plan (Cont'd)

(B) Upgrades in DSL WPP Term Plan

A customer may terminate a DSL WPP Term Plan without the application of a termination liability charge when the customer replaces its original DSL WPP Term Plan commitment with a new DSL WPP Term Plan commitment provided the commitment period for the new DSL WPP Term Plan meets or exceeds the number of months remaining in the existing DSL WPP Term Plan commitment period.

(C) Termination without Liability

A customer may terminate a DSL WPP Term Plan commitment without the application of a termination liability charge if the Telephone Company increases the DSL WPP Term Plan rates described in Section 17.4.9(H)(2), following, during the term of the existing commitment. The customer has 90 days following such rate increase to notify the Telephone Company in writing of its intent to terminate its DSL WPP Term Plan commitment under this section; otherwise, the increased rates will apply for the remainder of the commitment period.
8. Digital Subscriber Line Access Services (Cont'd)

8.5 DSL Access Services Wholesale Pricing Plan (Cont'd)

8.5.2 DSL WPP Term Plan (Cont'd)

(D) Termination with Liability

If the customer elects to terminate its DSL WPP Term Plan prior to the end of the commitment period for any reason other than specified in (B) or (C), above, a termination liability charge will apply. If the DSL WPP Term Plan is terminated prior to the end of the commitment period, the Telephone Company will bill the customer a charge equal to the monthly DSL WPP Term Plan Charge for its selected pricing plan as specified in Section 17.4.9(H)(2)(a), following, multiplied by the number of months remaining in the commitment period.

DSL WPP Monthly Plan rates as described in Section 17.4.9(H)(1), following, will apply to all in-service ADSL and/or SDSL Access Lines following the early termination of a DSL WPP Term Plan.
8. Digital Subscriber Line Access Services (Cont'd)

8.5 DSL Access Services Wholesale Pricing Plan (Cont'd)

8.5.2 DSL WPP Term Plan (Cont'd)

(E) DSL Volume Pricing Plan

The DSL Volume Pricing Plan (DSL VPP) is an optional pricing plan that provides the DSL WPP Term Plan customer with a discount applied against the monthly ADSL and/or SDSL Line Charges for all of its in-service lines in the Telephone Company’s study area. In order to subscribe to and retain the DSL VPP, the customer must have a DSL WPP Term Plan commitment with the Telephone Company. The amount of the DSL VPP discount applied is based on the level of the monthly volume commitment selected by the DSL WPP Term Plan customer. The DSL VPP discount does not apply to any rate elements other than the monthly recurring DSL WPP Term Plan Line Charges specified in Section 17.4.9(H)(2)(b), following.

The customer will select its monthly volume commitment level based on its projected number of monthly in-service ADSL and SDSL Access Service lines within the Telephone Company’s study area.

In-service ADSL and SDSL Access Service lines billed under the DSL WPP Monthly Plan are not eligible for the DSL VPP discount.
8. Digital Subscriber Line Access Services (Cont'd)

8.5 DSL Access Services Wholesale Pricing Plan (Cont'd)

8.5.2 DSL WPP Term Plan (Cont'd)

(E) DSL Volume Pricing Plan (Cont’d)

Available DSL VPP commitment levels and associated discounts are specified in Section 17.4.9(H)(2)(c), following.

The customer may order the DSL VPP at the same time it establishes a DSL WPP Term Plan commitment or at any time prior to the expiration of the existing DSL WPP Term Plan. The DSL VPP monthly commitment and discount applies for the balance of the DSL WPP Term Plan commitment period and ends when: (1) the DSL WPP Term Plan is terminated by the customer, (2) the DSL VPP is terminated by the customer, or (3) the DSL WPP Term Plan commitment is satisfied.

Each month on the bill date, the Telephone Company will determine if the DSL WPP Term Plan customer achieved its monthly volume commitment level of in-service ADSL and SDSL Access Service lines. In any month in which the monthly volume commitment was not met, the Telephone Company will bill the customer a DSL VPP shortfall charge of $10.00 per line for each line below its volume commitment level. The following example illustrates the application of the shortfall charge for a DSL WPP Term plan customer that selected a monthly volume commitment level of 2,500 lines. If on the bill date, the customer had achieved only a total of 2,250 in-service lines, the Telephone Company would assess a shortfall charge of $2,500.00 (250 lines x $10.00 per line). The shortfall charge would be in addition to the applicable discounted billing for the 2,250 in-service lines.
8. Digital Subscriber Line Access Services (Cont'd)

8.5 DSL Access Services Wholesale Pricing Plan (Cont'd)

8.5.2 DSL WPP Term Plan (Cont'd)

(E) DSL Volume Pricing Plan (Cont’d)

Upon providing thirty (30) days written notice to the Telephone Company, a customer with an existing DSL VPP will be permitted to increase the existing volume commitment when it establishes a new higher volume commitment level. The DSL VPP discount associated with the higher level of commitment will apply on a prospective basis for the balance of the DSL WPP Term Plan commitment period.

Upon providing thirty (30) days written notice to the Telephone Company, a customer with an existing DSL VPP will be permitted to terminate its existing volume commitment on a prospective basis as described herein. When the customer elects to terminate its existing DSL VPP for any reason, it will be prohibited from establishing a new DSL VPP commitment with the Telephone Company within the ninety (90) days following such termination. During this 90-day period, the customer will not be eligible for any DSL VPP discounts. Downgrades from a higher volume commitment level to a lower volume commitment level are treated as terminations subject to the provisions in this Paragraph.
9. **Directory Assistance Service**

Not Currently Offered
9. Directory Assistance Service (Cont'd)

[RESERVED FOR FUTURE USE]
10. **Special Federal Government Access Services**

Not Currently Offered
ACCESS SERVICE

10. Special Federal Government Access Services (Cont'd)

[RESERVED FOR FUTURE USE]
11. Special Facilities Routing of Access Services

11.1 Description

The services provided under this tariff are provided over such routes and facilities as the Telephone Company may elect. Special Facilities Routing is involved when, in order to comply with requirements specified by the customer, the Telephone Company provides Switched Access Service, Special Access Service or Special Federal Government Access Service in a manner which includes one or more of the following conditions:

11.1.1 Diversity

Two or more circuits must be provided over not more than two different physical routes.

11.1.2 Avoidance

A circuit(s) must be provided on a route which avoids specified geographical locations.

11.1.3 Cable-Only Facilities

Certain Voice Grade services are provided on Cable-Only Facilities to meet the particular needs of a customer.

Service is provided subject to the availability of Cable-Only facilities. In the event of service failure, restoration will be made through the use of any available facilities as selected by the Telephone Company.

Avoidance and Diversity are available on Switched Access Service as set forth in Section 6. preceding; Metallic, Telegraph Grade and Voice Grade Special Access Services as set forth respectively in 7.4, 7.5 and 7.6 preceding and Special Federal Government Access Services as set forth in 10.5 preceding. Cable-Only Facilities are available for Switched Access Service as set forth in Section 6. preceding; Voice Grade Special Access Services as set forth in 7.6 preceding and Special Federal Government Access Services as set forth in 10.5 preceding.
11. Special Facilities Routing of Access Services (Cont'd)

11.1 Description (Cont'd)

In order to avoid the compromise of special routing information, the Telephone Company will provide the required routing information for each specially routed service to only the ordering customer. If requested by the customer, this information will be provided when service is installed and prior to any subsequent changes in routing.

The rates and charges for Special Facilities Routing of Access Services are developed on an individual case basis. Such rates and charges for Special Facilities Routing of Access Services are as set forth in 17.4.6 following and are in addition to all other rates and charges that may be applicable for services provided under other sections of this tariff.
12. Specialized Service or Arrangements

12.1 General

Specialized Service or Arrangements may be provided by the Telephone Company, at the request of a customer, on an Individual Case Basis if such service or arrangements meet the following criteria:

- The requested service or arrangements are not offered under other sections of this tariff.

- The facilities utilized to provide the requested service or arrangements are of a type normally used by the Telephone Company in furnishing its other services.

- The requested service or arrangements are provided within a LATA.

- The requested service or arrangements are compatible with other Telephone Company services, facilities, and its engineering and maintenance practices.

- This offering is subject to the availability of the necessary Telephone Company personnel and capital resources.

Rates and charges and additional regulations if applicable, for Specialized Service or Arrangements are provided on an Individual Case Basis and are as set forth in 17.4.7 following.
12. Specialized Service or Arrangements (Cont’d)

[RESERVED FOR FUTURE USE]
13. Additional Engineering, Additional Labor and Miscellaneous Services*

A Miscellaneous Service Order charge as described in 5.4.2 preceding may be applicable to services ordered from this section.

13.1 Additional Engineering

Additional Engineering, including engineering reviews as set forth in 5.4.3 preceding, will be undertaken only after the Telephone Company has notified the customer that additional engineering charges apply as set forth in 17.4.2 following, and the customer agrees to such charges.

Additional Engineering will be provided by the Telephone Company at the request of the customer only when:

(A) A customer requests additional technical information after the Telephone Company has already provided the technical information normally included on the Design Layout Report (DLR) as set forth in 6.1.5 and 7.1.6 preceding.

(B) Additional Engineering time is incurred by the Telephone Company to engineer a customer's request for a customized service as set forth in 7.1.2 preceding.

(C) A customer requested Design Change requires the expenditure of Additional Engineering time. Such Additional Engineering time is incurred by the Telephone Company for the engineering review as set forth in 5.4.3 preceding. The charge for additional engineering time relating to the engineering review, which is undertaken to determine if a design change is indeed required, will apply whether or not the customer authorizes the Telephone Company to proceed with the Design Change. In this case the Design Change charge, as set forth in 17.4.1(B) following, does not apply unless the customer authorizes the Telephone Company to proceed with the Design Change.

*In this section, normally scheduled working hours are an employee's scheduled work period in any given calendar day (e.g., 8:00 a.m. to 5:00 p.m.) for the application of rates based on working hours.
13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.2 Additional Labor

Additional Labor is that labor requested by the customer on a given service and agreed to by the Telephone Company as set forth in 13.2.1 through 13.2.5 following. The Telephone Company will notify the customer that Additional Labor charges as set forth in 17.4.3 following will apply before any additional labor is undertaken. A call-out of a Telephone Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours. When provisioning or restoring Telecommunications Service Priority services, the Telephone Company will, when possible, notify the customer of the applicability of these Additional Labor charges.

13.2.1 Overtime Installation

Overtime installation is that Telephone Company installation effort outside of normally scheduled working hours.

13.2.2 Overtime Repair

Overtime repair is that Telephone Company effort performed outside of normally scheduled working hours.

13.2.3 Standby

Standby includes all time in excess of one-half (1/2) hour during which Telephone Company personnel standby to make installation acceptance tests or cooperative tests with a customer to verify facility repair on a given service.

13.2.4 Testing and Maintenance with Other Telephone Companies

Additional testing, maintenance or repair of facilities which connect other telephone companies is that which is in addition to the normal effort required to test, maintain or repair facilities provided solely by the Telephone Company.

13.2.5 Other Labor

Other labor is that additional labor not included in 13.2.1 through 13.2.4 preceding and labor incurred to accommodate a specific customer request that involves only labor which is not covered by any other section of this tariff.
13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.3 Miscellaneous Services

13.3.1 Testing Services

Testing Services offered under this section of the tariff are optional and subject to rates and charges as set forth in 17.4.4 following. A call-out of a Telephone Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours. Other testing services, as described in 6.2.4 and 7.1.7 preceding, are provided by the Telephone Company in association with Access Services and are furnished at no additional charge.

Testing Services are normally provided by Telephone Company personnel at Telephone Company locations; however, provisions are made in (B)(2) following for a customer to request Telephone Company personnel to perform Testing Services at the customer designated premises.

The offering of Testing Services under this section of the tariff is made subject to the availability of the necessary qualified personnel and test equipment at the various test locations mentioned in (A) and (B) following.

(A) Switched Access Service

Testing Services for Switched Access are comprised of (a) tests which are performed during the installation of a Switched Access Service, (i.e., Acceptance Tests), (b) tests which are performed after customer acceptance of such access services and which are without charge (i.e., routine testing) and (c) additional tests which are performed during or after customer acceptance of such access services and for which additional charges apply, (i.e., Additional Cooperative Acceptance Tests and in-service tests).
13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.3 Miscellaneous Services

13.3.1 Testing Services (Cont'd)

(A) Switched Access Service (Cont'd)

Routine tests are those tests performed by the Telephone Company on a regular basis, as set forth in 6.2.4 preceding which are required to maintain Switched Access Service. Additional in-service tests may be done on an automatic basis (no Telephone Company or customer technicians involved), on a manual basis [Telephone Company technician(s) involved at Telephone Company office(s) and Telephone Company or customer technician(s) involved at the customer designated premises].

Testing services are ordered to the end office for FGD. Testing Services for Directory Assistance Service not routed through an access tandem is ordered to a Directory Assistance Location for each NPA.

(1) Additional Cooperative Acceptance Testing

Additional Cooperative Acceptance Testing of Switched Access Service involves the Telephone Company provision of a technician at its office(s) and the customer provision of a technician at its premises, with suitable test equipment to perform the required tests.

Additional Cooperative Acceptance Tests may, for example, consist of the following tests:

- Impulse Noise
- Phase Jitter
- Signal to C-Notched Noise Ratio
- Intermodulation (Nonlinear) Distortion
- Frequency Shift (Offset)
- Envelope Delay Distortion
- Dial Pulse Percent Break
13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.3 Miscellaneous Services

13.3.1 Testing Services (Cont'd)

(A) Switched Access Service (Cont'd)

(2) Additional Automatic Testing

Additional Automatic Testing (AAT) of Switched Access Services (Feature Group D) is a service where the customer provides remote office test lines and 105 test lines with associated responders or their functional equivalent. The customer may order, at additional charges, gain-slope and C-notched noise testing and may order the routine tests (1004 Hz loss, C-Message Noise and Balance) on an as-needed or more than routine schedule.

The Telephone Company will provide an AAT report that lists the test results for each trunk tested. Trunk test failures requiring customer participation for trouble resolution will be provided to the customer on an as-occurs basis.

The Additional Tests, (i.e., gain slope, C-notched noise, 1004 Hz loss, C-message noise and balance) may be ordered by the customer at additional charges, 60 days prior to the start of the customer prescribed schedule. The rates for Additional Automatic Tests are as set forth in 17.4.4(B) following.
13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.3 Miscellaneous Services

13.3.1 Testing Services (Cont'd)

(A) Switched Access Service (Cont'd)

(3) Additional Manual Testing

Additional Manual Testing (AMT) of Switched Access Services (Feature Group D and Directory Access Service not routed through an access tandem), is a service where the Telephone Company provides a technician at its office(s) and the Telephone Company or customer provides a technician at the customer designated premises, with suitable test equipment to perform the required tests. Such additional tests will normally consist of gain-slope and C-notched noise testing. However, the Telephone Company will conduct any additional tests which the IC may request.

The Telephone Company will provide an AMT report listing the test results for each trunk tested. Trunk test failures requiring customer participation for trouble resolution will be provided to the customer on a per occurrence basis.

The Additional Manual Tests may be ordered by the customer at additional charges, 60 days prior to the start of the testing schedule as mutually agreed to by the customer and the Telephone Company.

The rates for Additional Manual Testing are as set forth in 17.4.4(C) following.
13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.3 Miscellaneous Services

13.3.1 Testing Services (Cont'd)

(A) Switched Access Service (Cont'd)

(4) Obligations of the Customer

i) The customer shall provide the Remote Office Test Line priming data to the Telephone Company, as appropriate, to support routine testing as set forth in 6.2.4(B) preceding or AAT as set forth in 13.3.1(A)(2) preceding.

ii) The customer shall make the facilities to be tested available to the Telephone Company at times mutually agreed upon.
13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.3 Miscellaneous Services

13.3.1 Testing Services (Cont'd)

(B) Special Access Service

The Telephone Company will provide assistance in performing specific tests requested by the customer.

(1) Additional Cooperative Acceptance Testing

When a customer provides a technician at its premises or at an end user's premises, with suitable test equipment to perform the requested tests, the Telephone Company will provide a technician at its office for the purpose of conducting Additional Cooperative Acceptance Testing on Voice Grade Services. At the customer's request, the Telephone Company will provide a technician at the customer's premises or at the end user premises. These tests may, for example, consist of the following:

- Attenuation Distortion (i.e., frequency response)
- Intermodulation Distortion (i.e., harmonic distortion)
- Phase Jitter
- Impulse Noise
- Envelope Delay Distortion
- Echo Control
- Frequency Shift
13. **Additional Engineering, Additional Labor and Miscellaneous Services (Cont’d)**

13.3 **Miscellaneous Services**

13.3.1 **Testing Services (Cont’d)**

(B) **Special Access Service (Cont’d)**

(2) **Additional Manual Testing**

The Telephone Company will provide a technician at its premises, and the Telephone Company or customer will provide a technician at the customer's designated premises with suitable test equipment to perform the requested tests.

(3) **Obligation of the Customer**

When the customer subscribes to Testing Service as set forth in this section, the customer shall make the facilities to be tested available to the Telephone Company at times mutually agreed upon.
13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.3 Miscellaneous Services

13.3.2 Maintenance of Service

(A) When a customer reports a trouble to the Telephone Company for clearance and no trouble is found in the Telephone Company's facilities, the customer shall be responsible for payment of a Maintenance of Service charge as set forth in 17.4.4(F) following for the period of time from when Telephone Company personnel are dispatched, at the request of the customer, to the customer designated premises to when the work is completed. Failure of Telephone Company personnel to find trouble in Telephone Company facilities will result in no charge if the trouble is actually in those facilities, but not discovered at the time.

(B) The customer shall be responsible for payment of a Maintenance of Service charge when the Telephone Company dispatches personnel to the customer designated premises, and the trouble is in equipment or communications systems provided by other than the Telephone Company or in de-tariffed CPE provided by the Telephone Company.

In either (A) or (B), preceding, no credit allowance will be applicable for the interruption involved if the Maintenance of Service Charge applies.

13.3.3 Telecommunications Service Priority - TSP

(A) Priority installation and/or restoration of National Security Emergency Preparedness (NSEP) telecommunications services shall be provided in accordance with Part 64.401, Appendix A, of the Federal Communications Commission's (FCC's) Rules and Regulations.

13. **Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)**

13.3 **Miscellaneous Services**

13.3.3 **Telecommunications Service Priority - TSP (Cont'd)**

**(A) (Cont'd)**

The TSP System is a service, developed to meet the requirements of the Federal Government, as specified in the Service Vendor's Handbook and Service User's Manual which provides the regulatory, administrative and operational framework for the priority installation and/or restoration of NSEP telecommunications services. These include both Switched and Special Access Services. The TSP System applies only to NSEP telecommunications services, and requires and authorizes priority action by the Telephone Company providing such services.

For Switched Access Service, the TSP System's applicability is limited to those services which the Telephone Company can discreetly identify for priority provisioning and/or restoration.

**(B)**

A Telecommunications Service Priority charge applies as set forth in 17.4.4 when a request to provide or change a Telecommunications Service Priority is received subsequent to the issuance of an Access Order to install the service.

Additionally, a Miscellaneous Service Order Charge as set forth in 17.4.1 will apply to Telecommunications Service Priority requests that are ordered subsequent to the initial installation of the associated access service.

A Telecommunications Service Priority charge does not apply when a Telecommunications Service Priority is discontinued or when ordered coincident with an Access Order to install or change service.

In addition, Additional Labor rates as set forth in 17.4.3 may be applicable when provisioning or restoring Switched or Special Access Services with Telecommunications Service Priority.

When the customer requests an audit or a reconciliation of the Telephone Company's Telecommunications Service Priority records, a Miscellaneous Service Order Charge as set forth in 17.4.1(D) and Additional Labor rates as set forth in 17.4.3 are applicable.
13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.3 Miscellaneous Services (Cont'd)

13.3.4 Miscellaneous Equipment

(A) Controller Arrangement

This arrangement enables the customer to control up to 48 transfer functions at a Telephone Company central office via a remote keyboard terminal capable of either 300 or 1200 bps operation. Included as part of the Controller Arrangement is a dial-up data station located at the Telephone Company Central Office to provide access to the Controller Arrangement. This dial-up data station consists of a 212A DATAPHONE data set and an appropriate Telephone Company provided channel.

The Controller Arrangement must be located in the same Telephone Company central office as the transfer functions which it controls.

Charges for the Controller Arrangement are set forth in 17.4.4(H) following.
13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.4 Presubscription

Pursuant to the Federal Communications Commission's Memorandum Opinion and Order, CC Docket No. 83-1145, Phase I, adopted May 31, 1985, and released June 12, 1985, the Allocation Plan, outlined in the Appendix B of this Order, and subsequent orders related to presubscription obligations will be available for inspection in the Reference Information Center at the Federal Communications Commission's Washington D.C. location or may be obtained from the Commission's commercial contractor.

(A) Presubscription is the process by which end user customers may select and designate to the Telephone Company an IC to access, without an access code, for interLATA calls. This IC is referred to as the end user's presubscribed interexchange carrier (PIC).

(B) On the effective date of this tariff, all existing end users have access to interstate MTS/WATS. No later than 85 days prior to conversion to Feature Group D in a serving end office, the Telephone Company will notify end users of the availability of equal access in their particular area. The notification will include the names of all ICs wishing to participate in the presubscription process. This notification will be sent via U.S. Mail to each end user of record served by the end office to be converted.

(C) End users may select one of the following options at no charge:

- indicate a PIC or No-PIC for all of its lines,
- indicate a different PIC or No-PIC for each of its lines

Only one PIC may be selected for each line or lines terminating in the same hunt group.

End users may designate that they do not want to presubscribe to any IC (No-PIC). The end user must arrange this designation by directly notifying the Telephone Company's business office. This choice will require the end user to dial an access code (101XXXX) for all interLATA calls.

After the end user's initial selection of a PIC or the designation that it does not want to presubscribe to any IC (No-PIC), for any change in selection after conversion to Equal Access in the serving end office, a nonrecurring charge, as set forth in Section 13.4(J), following, applies.
13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.4 Presubscription (Cont'd)

(D) End users not responding to the initial notification will be sent a second notification for the selection of a PIC no earlier than 40 days prior to or no later than 90 days after the conversion to Equal Access in a serving end office. This second notification will indicate the default option of No-PIC will be assigned to them if they fail to respond to the second notification.

End users assigned to a No-PIC by default may change their No-PIC one time within six months after conversion to Equal Access in the serving end office at no charge. Following the six month period after conversion to Equal Access for any change in selection, a nonrecurring charge as set forth in Section 13.4(J), following, applies.

(E) When an end user indicates more than one IC selection on the return notification or returns an illegible return notification, the Telephone Company will contact the end user for clarification. If the end user indicates an IC selection on the return notification that does not match with information provided by an IC and both notifications indicate the same authorization date, the end user's notification takes precedence and the Telephone Company will process the end user's selection. In the event that two or more ICs provide to the Telephone Company notifications with the same authorization date and neither notification has been processed, the Telephone Company will contact the end user for clarification. A list of these end users in conflict must be sent to the affected IC by the Telephone Company.

In the event that two or more ICs have provided to the Telephone Company notifications with the same authorization date(s), and one IC notification has already been processed by the Telephone Company, those IC notifications not yet processed would be returned to the ICs.
13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.4 Presubscription (Cont'd)

(F) New end users who are served by end offices equipped with Feature Group D will be asked to select a PIC or designate that they do not want to presubscribe to any IC (No-PIC) at the time they place an order with the Telephone Company for Telephone Exchange Service. They may select either of the following options. There will be no charge for this initial selection.

- indicate a PIC or No-PIC for all of its lines,

- indicate a different PIC or No-PIC for each of its lines.

Only one PIC or No-PIC may be selected for each individual line, or lines terminating in the same hunt group. End users that select No-PIC must arrange this designation by directly notifying the Telephone Company’s business office. This choice will require the end user to dial an access code (101XXXX) for all interLATA calls. Subsequent to the installation of Telephone Exchange Service and after the end user's initial selection of a PIC or No-PIC, for any change in selection, a nonrecurring charge, as set forth in Section 13.4(J), following, applies.

(G) If the new end user fails to make a PIC or No-PIC selection prior to the date of installation of Telephone Exchange Service, the Telephone Company will (1) default the customer’s line to No-PIC, which will require the end user to dial an access code (101XXXX) for all interLATA calls or (2) block the end user from interLATA calling if unable to default customer’s line to No-PIC. The end user will be notified which option will be applied if it fails to make a PIC or No-PIC selection. The end user will be allowed a six month period from installation of their service to select a PIC one time at no charge.

For any change in selection after 6 months from the installation of Telephone Exchange Service, a nonrecurring charge, as set forth in Section 13.4(J), following, applies.
13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.4 Presubscription (Cont'd)

(H) If an IC elects to discontinue its Feature Group D service offering prior to or within 2 years of the conversion, the IC will notify the Telephone Company of the cancellation. The IC will also notify all end users who selected them that they are canceling their service and that they should contact the Telephone Company to select a new PIC. The IC will also inform the end user that it will pay the PIC Change Charge. The canceling IC will then be billed by the Telephone Company the nonrecurring charge set forth in Section 13.4(J), following, for each end user for a period of two years from the discontinuance of Feature Group D service.

(I) If an IC elects to change or discontinue use of a Carrier Identification Code (CIC) for any reasons other than those set forth in (H) above, the IC will identify to the Telephone Company any affected end users and advise the Telephone Company of the new CIC to be assigned to these end users. If the CIC change involves a change of carrier for any end users, the IC will notify the affected end users of the change. The Telephone Company will change the PIC of each end user identified by the IC to the new CIC and bill the IC the nonrecurring charge set forth in Section 13.4(J), following, for each end user line or trunk that is changed.
13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.4 Presubscription (Cont'd)

(J) As specified above, a nonrecurring charge will apply for subsequent changes to the end user’s selection of a PIC, including the establishment or removal of a PIC or No-PIC selection. The non-recurring charge to process a PIC change request is bifurcated into four (4) separate nonrecurring charges and applies as follows:

(1) A nonrecurring charge, as set forth in Section 17.4.4(I)(1), following, applies when the PIC change request is submitted to the Telephone Company through manual methods.

(2) A nonrecurring charge, as set forth in Section 17.4.4(I)(2), following, applies when the PIC change request is submitted to the Telephone Company through electronic methods.

(3) A nonrecurring charge, as set forth in Section 17.4.4(I)(3), following, applies to the PIC change when a request submitted to the Telephone Company through manual methods requests a simultaneous change to both the interLATA PIC and intraLATA PIC selections.

(4) A nonrecurring charge, as set forth in Section 17.4.4(I)(4), following, applies to the PIC change when a request submitted to the Telephone Company through electronic methods requests a simultaneous change to both the interLATA PIC and intraLATA PIC selections.

As used above, manual methods are (i) all personal interaction between an end user, or a person acting on behalf of the end user, and a Telephone Company employee and (ii) any facsimile or written submissions from an end user, or a person acting on behalf of the end user, to a Telephone Company service center. Electronic methods shall include all other methods. If a PIC change request utilizing an electronic method results in manual processing, the electronic nonrecurring charge shall apply upon completion of the request.
13. **Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)**

13.5 **Unauthorized Presubscribed Interexchange Carrier (PIC) Change**

For purposes of this section, a subscriber is defined as:

- the party identified in the account records of the Telephone Company as responsible for payment of the telephone bill, or
- any adult person authorized by such party to change telecommunications services or to charge services to the account, or
- any person contractually or otherwise lawfully authorized to represent such party.

If an IC requests a PIC change on behalf of a subscriber and the subscriber subsequently denies requesting the change; the Telephone Company will:

- Notify both carriers involved in the unauthorized change allegation made by the subscriber. This notification must include the identity of both carriers.
- Direct the subscriber to the appropriate state regulatory agency or the Federal Communications Commission to file a complaint.
- Inform the subscriber that if he or she has not already paid charges to the unauthorized carrier, he or she is not required to pay for any charges incurred for the first 30 days after the unauthorized change.
13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.6 Blocking Service

13.6.1 International Blocking Service

The Telephone Company will provide International Blocking Service to customers who obtain local exchange service from the Telephone Company under its general or local exchange tariffs. This service is only provided at appropriately equipped Telephone Company end offices. Those offices providing International Blocking Service are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.

On each line or trunk for which International Blocking Service is ordered, the Telephone Company will block all direct dialed international calls that use the call sequence of 011+ or 101XXXX-011+. When capable, the Telephone Company will route the blocked calls to a recorded message.

An International Blocking Service charge as set forth in 17.4.4(K) following is applicable for each new or existing exchange line or trunk to which International Blocking Service is added or removed. This charge does not apply when blocking is removed from an exchange line or trunk at the same time that it is disconnected.
13. **Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)**

13.6 **Blocking Service (Cont'd)**

13.6.1 **International Blocking Service (Cont'd)**

A Miscellaneous Service Order Charge as set forth in 17.4.1(D) will apply to orders adding or removing International Blocking Service that are placed subsequent to the initial installation of the associated exchange line(s) or trunk(s). This charge does not apply when blocking is removed from an exchange line or trunk at the same time that it is disconnected.

13.6.2 **900 Blocking Service**

The Telephone Company will provide 900 Blocking Service to customers who obtain local exchange service from the Telephone Company under its general or local exchange tariffs. This service is only provided at appropriately equipped end offices. Those offices providing 900 Blocking Service are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.

On each line or trunk for which 900 Blocking Service is ordered, the Telephone Company will block all direct dialed calls placed to a 900 number. When capable, the Telephone Company will route the blocked calls to a recorded message.

A Blocking Service charge as set forth in 17.4.4(K) following is applicable when ordered by the end user customer with the following exceptions:

- Blocking access to 900 Service is offered to all subscribers at no charge from November 1, 1993 through December 31, 1993.

- Blocking access to 900 Service is offered to all subscribers at no charge at the time telephone service is established at a new number and for 60 days thereafter.

The Blocking Service charge is applied for each line or trunk to which 900 Blocking Service is added or removed. Requests by subscribers to remove 900 Blocking Service must be in writing. This charge does not apply when blocking is removed from an exchange line or trunk at the same time that it is disconnected.
13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.7 Billing Name and Address Service

13.7.1 General Description

(A) Billing Name and Address (BNA) Service is the provision by the Telephone Company to an interstate service provider who is a customer of the Telephone Company of the complete billing name, street address, city or town, state and zip code for a telephone number or calling card account number assigned by the Telephone Company. An interstate service provider is defined as an interexchange carrier, an operator service provider, an enhanced service provider or any other provider of interstate telecommunications services.

(B) BNA Service is provided only for the purposes of allowing customers to bill their end users for telephone services provided by the customer, order entry and customer service information, fraud prevention identification of end users who have moved to a new address, any purpose associated with equal access requirement, and information associated with Local Exchange Carrier (LEC) calling card calls, collect and third party calls.

BNA information may not be resold or used for any other purpose including, but not limited to, marketing or merchandising activities.

(C) BNA information associated with listed/published telephone numbers will be provided. Requests for BNA information associated with non-published and unlisted telephone numbers will be provided, unless the subscriber to a non-published or unlisted telephone number has requested that its BNA not be disclosed affirmatively.

13.7.2 Undertaking of the Telephone Company

(A) A standard format for the receipt of BNA requests and the provision of BNA information will be established by the Telephone Company.

(B) Standard response to BNA requests will be by First Class Mail. Standard format will be on paper. Optional Magnetic Tape formatting will be offered where available.

(C) Where facilities are available, the customer may request an optional specialized output format required to meet a specific customer need.
13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.7 Billing Name and Address Service (Cont'd)

13.7.2 Undertaking of the Telephone Company (Cont'd)

(D) The Telephone Company will make every effort to provide accurate and complete BNA data. The Telephone Company makes no warranties, expressed or implied, as to the accuracy or completeness of this information.

(E) The Telephone Company will not disclose BNA information to parties other than interstate service providers and their authorized billing agents as defined in 13.9.1(A), preceding. BNA disclosure is limited to those purposes as defined in 13.9.1(B) preceding.

(F) The Telephone Company reserves the right to request from an interstate service provider who has placed an order for BNA service, the source data upon which the interexchange carrier has based the order. This request is made to ensure that the BNA information is to be used only for purposes as described in 13.9.1(B) preceding. The Telephone Company will not process the order until such time as the interstate service provider supplies the requested data.

13.7.3 Obligations of the Customer

(A) The customer shall order BNA Service on a separate BNA Order. The order must identify both the customer's authorized representative and the address to which the information is to be sent.

(B) The customer shall treat all BNA information as confidential. The customer shall insure that BNA information is used only for the purposes as described in 13.9.1(B) preceding.

(C) The customer shall not publicize or represent to others that the Telephone Company jointly participates with the customer in the development of the customer's end user records it assembles through the use of BNA Service.

(D) Upon request, the customer will provide to the Telephone Company the source data upon which the customer has based an order for BNA service. The Telephone Company will not process the order until such time as the customer provides the requested data.
13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.7 Billing Name and Address Service (Cont'd)

13.7.4 Rate Regulations

(A) For each order for BNA information received by the Telephone Company, a BNA Order Charge applies. In addition, a charge applies for each customer specific record provided. The BNA Order Charge and the Per Record Charge are specified in 17.4.4 following.

(B) Where available, the customer may order the response formatted on Magnetic Tape. The Optional Magnetic Tape Charge is specified in 17.4.4 following and is in addition to the BNA Order Charge and the BNA Record Charge.

(C) Where available, the customer may order an output format other than a standard paper format in order to meet a customer's specific requirement. This option is subject to an hourly programming charge as specified in 17.4.4 following and is in addition to the BNA Order Charge and the BNA Record Charge.

13.8 Originating Line Screening (OLS) Service

The Telephone Company will provide OLS Service to aggregators and other customers who obtain local exchange service from the Telephone Company under its general and/or local exchange tariff. OLS service enables customers to determine whether there are billing restrictions on exchange service lines from which a call originates. OLS service delivers codes on operator assisted calls made from aggregator locations to identify calls originating from privately owned payphones, inmate locations, and hotels/motels, etc.

OLS Service is provided at no charge when ordered with the installation of new local exchange service. However, when an OLS code is added to an existing exchange service line, a charge is applied as set forth in 17.4.4(M). This charge is applied for each exchange service line to which an OLS code is assigned. The customer must specify the number of exchange service lines and each individual telephone number equipped.
13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.8 Originating Line Screening (OLS) Service (Cont'd)

A Miscellaneous Service Order Charge as set forth in 17.4.1(D) will apply to orders adding OLS codes that are placed subsequent to the initial installation of the associated exchange service line. This charge does not apply when OLS codes are removed from an exchange service line at the same time that the exchange service line is disconnected.

OLS codes may be delivered using Line Information Database (LIDB) or Flexible Automatic Number Identification (Flex ANI) technology. Those telephone companies delivering OLS codes using LIDB are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO.4, as are those companies delivering OLS codes using Flex ANI.

13.9 Non-chargeable Confirmation Services

13.9.1 Billed Number Screening (BNS)

At the request of the customer, the Telephone Company business office will confirm BNS codes associated with a line to which a call is to be billed.

13.9.2 Originating Line Screening (OLS)

At the request of the customer, the Telephone Company business office will confirm OLS codes associated with an exchange service line from which a call originates.

13.10 Coin Supervision Additive Service

The Telephone Company will provide Coin Supervision Additive Service to Payphone Service Providers (PSPs) who order local exchange service lines for the provision of pay telephone service and where the pay telephone equipment connected to the local exchange service lines requires central office coin supervision capability. The local exchange service lines used for the provision of pay telephone service are obtained from and subject to the terms and conditions under the Telephone Company's general and/or local tariffs.
13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.10 Coin Supervision Additive Service (Cont'd)

Coin Supervision Additive Service provides the capability of central office line equipment to pass signals and/or tones from a local exchange service line to a trunk terminating at the PSP's operator service provider. These signals enable an operator service provider to recognize coin deposits and return coins to the pay telephone user. Coin Supervision Additive Service also permits a suitably equipped operator service provider to automatically ring back the originating local exchange service line upon completion of a call.

A Coin Supervision Additive Service charge as set forth in 17.4.4(N) following is assessed monthly to the PSP for each local exchange service line for which Coin Supervision Additive Service is provided.
13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.11 Local Number Portability (LNP)

Where facilities permit, Local Number Portability (LNP) provides an end user of local exchange telecommunications service the ability to retain its existing local exchange service telephone number (TN) when changing from one telecommunications service provider to another provided the end user remains at the same location. LNP also allows an end user the ability to complete calls to numbers that have been ported from one telecommunications service provider to another. LNP capability will be activated in Telephone Company end office or tandem switches. The Telephone Company will identify its LNP capable serving wire centers in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. No. 4. The technical specifications for Local Number Portability are contained in Telcordia Technologies Technical Reference GR-2936-CORE.

13.11.1 LNP End User Charge

(A) Description

The LNP End User Charge applies to local exchange service end users, resellers of the Telephone Company’s local exchange service, line side access customers, and purchasers of unbundled switch ports that are served by either:

- an LNP capable serving wire center or
- a non-LNP capable serving wire center that provides local exchange service through an Extended Area Service arrangement with either:
  - one of the 100 largest metropolitan statistical areas, or;
  - an adjacent LNP capable local exchange carrier.

The LNP End User Charge recovers the Telephone Company’s costs directly related to providing LNP.
13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont’d)

13.11 Local Number Portability (Cont’d)

13.11.1 LNP End User Charge (Cont’d)

(B) Rate Regulations

The Telephone Company will bill a monthly LNP End User Charge as set forth in Section 17.4.4(P), following, with the following exceptions:

- Each PBX trunk shall be assessed the equivalent of nine monthly LNP End User Charges as specified in Section 17.4.4(P), following;

- Each ISDN PRI arrangement shall be assessed the equivalent of five monthly LNP End User Charges as specified in Section 17.4.4(P), following;

- Lifeline end user customers shall not be assessed the LNP End User Charge.
13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont’d)

13.11 Local Number Portability (Cont’d)

13.11.2 LNP Query Service

(A) Description

LNP Query Service uses Advanced Intelligent Network (AIN) technology and the Common Channel Signaling (CCS) network to query an LNP database to obtain network routing instructions before completion of a call. The LNP database contains all of the TNs within an NXX and the location routing number (LRN) of the switch serving each of those TNs when at least one of the TNs within the NXX has been transferred from one telecommunications service provider to another. The LRN associates a unique NPA-NXX-XXXX routing number with each central office switch that has subscribers who have transferred their TNs.

Where more than one carrier is involved in completing the call, the carrier prior to the terminating carrier (i.e., the N-1 carrier) is responsible for querying an LNP database to obtain the LRN used in routing the call for a number portable NXX code. When the N-1 carrier forwards a non-queried call to a Telephone Company end office or tandem switch and the NXX code has one or more transferred TNs, the Telephone Company’s end office or tandem switch will suspend call processing and formulate and launch a query to an LNP database to secure the LRN of the transferred TN. When the LRN has been returned from an LNP database to the Telephone Company end office or tandem switch originating the query, call processing is resumed and the call is either processed in the Telephone Company’s network or routed to the correct telecommunications service provider’s network for completion to the called party. The Telephone Company will perform the query on behalf of the N-1 carrier (i.e., the LNP query service customer) that forwarded the call. The Telephone Company will bill the N-1 wireline or wireless telecommunications carrier a charge per query as specified in Section 17.4.4 (Q), following, regardless of whether the call is completed.

An LNP Order Charge will apply on a per order basis for those customers that have ordered LNP Query Service as specified in Section 17.4.4 (Q), following. N-1 carriers who terminate non-queried traffic into the Telephone Company’s network and have not placed an order for LNP Query Service will be assessed on a per account basis an LNP Billing Charge as specified in Section 17.4.4 (Q), following.

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David Stoll  
Vice President/Chief Executive Officer  
123 W. Orchard Street, P.O. Box 127  
Delton, Michigan 49046  
(269) 623-2311  
dstoll@mei.net
13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.11 Local Number Portability (Cont'd)

13.11.2 LNP Query Service (Cont'd)

   (B) Limitations

   LNP Query Service is to be used only on a call-by-call basis for routing calls to number portable NXX codes and cannot be used for purposes other than those functions described herein.

   (C) Network Management

   The Telephone Company will administer its network to ensure the provision of acceptable service levels to all customers of the LNP Query Service.

   The Telephone Company reserves the right to block any LNP query traffic in a nondiscriminatory manner, where the processing of the LNP queries threatens to disrupt operation of its network and impair network reliability.

   (D) Rate Regulations

   The LNP charge per query recovers the cost to query an LNP database on behalf of the N-1 carrier. The rate associated with an LNP query will be billed monthly, per query as set forth in Section 17.4.4(Q), following, based on the recorded number of queries. The Telephone Company will develop monthly charges based on an average number of queries per month if actual query recordings are not available. For billing purposes, each month is considered to have thirty (30) days.

   The LNP Order Charge and LNP Billing Charge recover the cost to establish the customer’s LNP query account. The LNP Order Charge will be billed per order as set forth in Section 17.4.4(Q), following, to those customers that have ordered LNP Query Service. The LNP Billing Charge will be applied per account as set forth in Section 17.4.4(Q), following, to the N-1 carrier who terminates non-queried traffic into the Telephone Company’s network and has not placed an order for LNP Query Service.
13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont’d)

13.12 Access Recovery Charge

The Access Recovery Charge (ARC) recovers a portion of the Telephone Company’s Eligible Recovery as defined in the Federal Communications Commission’s Report and Order and Further Notice of Proposed Rulemaking in CC Docket Nos. 96-45 and 01-92; GN Docket No. 09-51; WC Docket Nos. 03-109, 05-337, 07-135 and 10-90; and WT Docket No. 10-208 (76 FR 78384, 76 FR 76623).

ARC will be billed by only those Telephone Companies listed in Section 17.8, following.

13.12.1 Rate Regulations

Except as specified below, the Telephone Company will bill an ARC each month as follows:

(A) For each line or trunk assessed a Residence End User Common Line (EUCL), as specified in Section 4.6.7(A), preceding, one (1) Residential ARC charge as set forth in Section 17.8, following, will apply.

(B) For each line or trunk assessed a Single Line Business EUCL, as specified in Section 4.6.4(A), preceding, one (1) Single Line Business ARC charge as set forth in Section 17.8, following, will apply.

(C) For each line or trunk assessed a Multiline Business (MLB) EUCL, as specified in Section 4.6.4(B), preceding, one (1) Multiline Business ARC charge as set forth in Section 17.8, following, will apply.

The Telephone Company’s Residential (Res ARC), Single Line Business ARC (SLB ARC) and Multiline Business ARC (MLB ARC) rates are set forth in Sections 17.8, following.

The minimum period for which an ARC is applicable to an end user is the same as that in the general and/or local exchange tariffs for the associated local exchange service line or trunk.
13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont’d)

13.12 Access Recovery Charge (Cont’d)

13.12.1 Rate Regulations (Cont’d)

When an end user temporarily suspends its local exchange service that is associated with an ARC, one-half of the monthly ARC charge will be temporarily suspended for the time period the associated local exchange service is suspended.

13.12.2 Exceptions

(A) Lifeline Customers

Pursuant to Part 51.917(e)(6)(v) of the FCC’s rules, the Residential ARC charge as set forth in Section 17.8, following, will not apply on lines of Lifeline Customers.

(B) Integrated Services Digital Network (ISDN) Services

(1) ISDN Basic Rate Interface (BRI)

When an end user is provided local exchange service under any general and/or local exchange service tariff(s) using an Integrated Services Digital Network (ISDN) Basic Rate Interface (BRI) arrangement, one (1) Residential or one (1) Single Line Business ARC charge as set forth in Section 17.8, following, applies to each ISDN BRI arrangement.

(2) ISDN Primary Rate Interface (PRI)

When an end user is provided local exchange service under any general and/or local exchange service tariff(s) using an Integrated Services Digital Network (ISDN) Primary Rate Interface (PRI) arrangement, five (5) Multiline Business ARC charges as set forth in Section 17.8, following, apply to each ISDN PRI arrangement.
13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont’d)

13.12 Access Recovery Charge (Cont’d)

13.12.2 Exceptions (Cont’d)

(C) DS1 Channel Service

When an end user is provided local exchange service under any general and/or local exchange tariff(s) using a DS1 (1.544 Mbps) channel service where the customer provides the terminating channelization equipment, five (5) Multiline Business ARC charges as set forth in Section 17.8, following, apply to each DS1 channel service.

(D) Remote Call Forwarding

For each local exchange service provided as Remote Call Forwarding (RCF) residential or business service, under the general and/or local exchange service tariffs, the monthly ARC charge does not apply.
14. **Exceptions to Access Service Offerings**

The services offered under the provisions of this tariff are subject to availability as set forth in 2.1.4 preceding. In addition, the following exceptions apply:

(Paragraphs 14.1 through 14.5 following are reserved for future listings as a result of a subsequent survey. In the meantime, in planning an end-to-end service, the customer should contact the Telephone Company in each customer designated premises city to assure itself that all of the service or service components required for a given customer service are currently available.)

14.1 The following service(s) is (are) not offered in the operating territory of listed Issuing Carriers.

(RESERVED FOR FUTURE USE.)

14.2 The following offering(s) is (are) limited to existing locations. No inside moves, rearrangements or additions will be permitted.

(RESERVED FOR FUTURE USE.)

14.3 The following offering(s) is (are) limited to existing locations. Inside moves or rearrangements may be undertaken. However, no additions will be permitted.

(RESERVED FOR FUTURE USE.)

14.4 The following offering(s) is (are) limited to existing locations where additional units may be added for growth. Inside moves or rearrangements may be undertaken.

(RESERVED FOR FUTURE USE.)

14.5 The following offering(s) is (are) limited to existing locations where additional units may be added for growth. However inside moves or rearrangements will not be permitted.

(RESERVED FOR FUTURE USE.)
15. Access Service Interfaces and Transmission Specifications

15.1 Switched Access Service

Ten Interface Groups are provided for terminating the Local Transport Entrance Facility at the customer's designated premises. Each Interface Group provides a specified premises interface (e.g., two-wire, four-wire, DS1, etc.). Where transmission facilities permit, and at the option of the customer, the Entrance Facility may be provided with optional features as set forth in 15.1.1 following.

As a result of the customer's access order and the type of Telephone Company transport facilities serving the customer designated premises, the need for signaling conversions or two-wire to four-wire conversions, or the need to terminate digital or high frequency facilities in channel bank equipment may require that Telephone Company equipment be placed at the customer designated premises. For example, if a voice frequency interface is ordered by the customer and the Telephone Company facilities serving the customer designated premises are digital, then Telephone Company channel bank equipment must be placed at the customer designated premises in order to provide the voice frequency interface ordered by the customer.

15.1.1 Local Transport Interface Groups

Interface Groups are combinations of technical parameters which describe the Telephone Company handoff at the point of termination at the customer designated premises. The technical specifications concerning the available interface groups are set forth in (A) through (D) following.
ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.1 Local Transport Interface Groups (Cont'd)

Interface Group 1 is provided with Type C Transmission Specifications, as set forth in 15.1.2(C) following, and Interface Groups 2 through 10 are provided with Type A or B Transmission Specifications, as set forth respectively in 15.1.2(E) and (F) following, depending on the Feature Group and whether the Access Service is routed directly or through an access tandem. All Interface Groups are provided with Data Transmission Parameters.

Only certain premises interfaces are available at the customer designated premises. The premises interfaces associated with the Interface Groups may vary among Feature Groups.

(A) Interface Group 1

Interface Group 1, except as set forth in the following, provides two-wire voice frequency transmission at the point of termination at the customer designated premises. The interface is capable of transmission of voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz.

Interface Group 1 is not provided in association with FGD when the first point of switching is an access tandem. In addition, Interface Group 1 is not provided in association with FGD when the first point of switching provides only four-wire terminations.
ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.1 Local Transport Interface Groups (Cont'd)

(A) Interface Group 1 (Cont'd)

The transmission path between the point of termination at the customer designated premises and the customer's serving wire center may be comprised of any form or configuration of plant capable of and typically used in the telecommunications industry for the transmission of voice and associated telephone signals within the frequency bandwidth of 300 to 3000 Hz.

The interface is provided with loop supervisory signaling. When the interface is associated with FGD, such signaling, except for two-way calling which is E&M signaling, will be reverse battery signaling.

(B) Interface Group 2

Interface Group 2 provides four-wire voice frequency transmission at the point of termination at the customer designated premises. The interface is capable of transmission of voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz.

The transmission path between the point of termination at the customer designated premises and the customer's serving wire center may be comprised of any form or configuration of plant capable of and typically used in the telecommunications industry for the transmission of voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz.
ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.1 Local Transport Interface Groups (Cont'd)

(B) Interface Group 2 (Cont'd)

The interface is provided with loop supervisory signaling. When the interface is associated with FGD, such signaling, except for two-way calling which is E&M signaling, will be reverse battery signaling.

(C) Interface Groups 3 through 5

Interface Groups 3 through 5 provide analog transmission at the point of termination at the customer designated premises. The various interfaces are capable of transmitting electrical signals at the frequencies illustrated following, with the capability to channelize voice frequency transmission paths. Certain frequencies within the bandwidth of the Interface Groups are reserved for Telephone Company use, e.g., pilot and carrier group alarm tones. Before the first point of switching, the Telephone Company will provide multiplex equipment to derive the transmission paths of frequency bandwidth of approximately 300 to 3000 Hz.

The interfaces are provided with individual transmission path SF supervisory signaling.

<table>
<thead>
<tr>
<th>Interface Group Identification No.</th>
<th>Transmission Frequency Bandwidth</th>
<th>Analog Hierarchy Level</th>
<th>Maximum No. of Channelized Voice Freq. Trans. Paths</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>60 - 108 kHz</td>
<td>Group</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>312 - 552 kHz</td>
<td>Supergroup</td>
<td>60</td>
</tr>
<tr>
<td>5</td>
<td>564 - 3084 Khz</td>
<td>Masterfroup</td>
<td>600</td>
</tr>
</tbody>
</table>
15. **Access Service Interfaces and Transmission Specifications (Cont'd)**

15.1 **Switched Access Service (Cont'd)**

15.1.1 **Local Transport Interface Groups (Cont'd)**

(D) **Interface Groups 6 through 10**

Interface Groups 6 through 10 provide digital transmission at the point of termination at the customer designated premises. The various interfaces are capable of transmitting electrical signals at the nominal bit rates illustrated following, with the capability to channelize voice frequency transmission paths. Before the first point of switching, when analog switching utilizing analog terminations is provided, the Telephone Company will provide multiplex and channel bank equipment to derive transmission paths of a frequency bandwidth of approximately 300 to 3000 Hz. When digital switching or analog switching with digital carrier terminations is provided, the Telephone Company will provide a DS1 signal(s) in D3/D4 format.

The interfaces are provided with individual transmission path bit stream supervisory signaling.

<table>
<thead>
<tr>
<th>Interface Group Identification No.</th>
<th>Nominal Bit Rate (Mbps)</th>
<th>Digital Hierarchy Level</th>
<th>Max. No. of Channelized Voice Freq. Trans. Paths</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>1.544</td>
<td>DS1</td>
<td>24</td>
</tr>
<tr>
<td>7</td>
<td>3.152</td>
<td>DS1C</td>
<td>48</td>
</tr>
<tr>
<td>8</td>
<td>6.312</td>
<td>DS2</td>
<td>96</td>
</tr>
<tr>
<td>9</td>
<td>44.736</td>
<td>DS3</td>
<td>672</td>
</tr>
<tr>
<td>10</td>
<td>274.176</td>
<td>DS4</td>
<td>4032</td>
</tr>
</tbody>
</table>
15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.1 Local Transport Interface Groups (Cont'd)

(E) Local Transport Optional Features

Where transmission facilities permit, the Telephone Company will, at the option of the customer, provide the following features in association with Local Transport. An Access Order Charge as specified in 17.4.1(A) following is applicable on a per order basis when non-chargeable optional features are added subsequent to the installation of service (with the exception of the addition of 64 Clear Channel Capability to an existing service).

When the 64 Clear Channel Capability optional feature is installed on an existing facility, the addition will be treated as a discontinuance and start of service and all associated nonrecurring charges will apply.
15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.1 Local Transport Interface Groups (Cont'd)

(E) Local Transport Optional Features (Cont'd)

Supervisory Signaling

Supervisory Signaling allows the customer to order an optional supervisory signaling arrangement for each transmission path provided where the transmission parameters permit, and where signaling conversion is required by the customer to meet its signaling capability.

64 Clear Channel Capability

64 Clear Channel Capability allows the customer to transport voice or data signals over a 64 Kbps channel with no constraints on the quantity or sequence of ones and zero bits. This option employs the Bipolar 8 Zero Suppression (B8ZS) technique to permit customers to use the full 64 Kbps bandwidth of a DS0 channel. It is only available in suitably equipped electronic end offices as identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4. 64 Clear Channel Capability, as described in Technical Reference GR-334-CORE, is available with Interface Groups 6 and 9 for Feature Group D with Signaling System 7 (SS7) signaling.
ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont’d)

15.1 Switched Access Service (Cont’d)

15.1.1 Local Transport Interface Groups (Cont’d)

(E) Local Transport Optional Features (Cont’d)

The Interface Groups, as described in (A) through (D) preceding, represent industry standard arrangements. Where transmission parameters permit, the customer may select the following optional signaling arrangements in place of the signaling arrangements standardly associated with the Interface Groups.

- For Interface Groups 1 and 2 associated with FGD:
  DX Supervisory Signaling,
  E&M Type I Supervisory Signaling,
  E&M Type II Supervisory Signaling, or
  E&M Type III Supervisory Signaling

- For Interface Group 2 associated with FGD and in addition to the preceding:
  SF Supervisory Signaling, or Tandem Supervisory Signaling

- For Interface Groups 3 through 5:
  Optional Supervisory Signaling Not Available

- For Interface Groups 6 through 10:
  These Interface Groups may, at the option of the customer, be provided with individual transmission path SF supervisory signaling where such signaling is available in Telephone Company central offices. Generally such signaling is available only where the first point of switching provides an analog (i.e., non-digital) interface to the transport termination.
15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.1 Local Transport Interface Groups (Cont'd)

(E) Local Transport Optional Features (Cont'd)

These optional Supervisory Signaling arrangements not available in combination with the SS7 optional feature as described in 6.8.2(C)(2) preceding.

Additionally, in (F) following, there is a matrix of available Premises Interface Codes as a function of Interface Group, Telephone Company Switch Supervisory Signaling and Feature Group.
ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont’d)

15.1 Switched Access Service (Cont’d)

15.1.1 Local Transport Interface Groups (Cont’d)

(F) Available Premises Interface Codes

Following is a matrix showing premises interface codes which are available for each Interface Group. Their availability is a function of the Telephone Company switch supervisory signaling and Feature Group. For explanations of these codes, see the Parameter Codes and Options as set forth in 15.2.2(A) following.

<table>
<thead>
<tr>
<th>Interface Group</th>
<th>Telephone Company Switch Supervisory Signaling</th>
<th>Premises Interface Code</th>
<th>Feature Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LO</td>
<td>2LS2</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>LO</td>
<td>2LS3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GO</td>
<td>2GS2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GO</td>
<td>2GS3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LO, GO</td>
<td>2DX3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LO, GO</td>
<td>4EA3-E</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LO, GO</td>
<td>4EA3-M</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LO, GO</td>
<td>6EB3-E</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LO, GO</td>
<td>6EB3-M</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RV, EA, RB, EB, EC</td>
<td>4EA3-E</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>RV, EA, RB, EB, EC</td>
<td>4EA3-M</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>RV, EA, RB, EB, EC</td>
<td>6EB3-E</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>RV, EA, RB, EB, EC</td>
<td>6EB3-M</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>EA, EB, EC</td>
<td>6EC3</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>RV</td>
<td>2RV3-0</td>
<td>X</td>
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<tr>
<td></td>
<td>RV</td>
<td>2RV3-T</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>SS7</td>
<td>2NO2</td>
<td>X</td>
</tr>
<tr>
<td>2</td>
<td>LO, GO</td>
<td>4SF2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LO, GO</td>
<td>4SF3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LO</td>
<td>4LS2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LO</td>
<td>4LS3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LO</td>
<td>6LS2</td>
<td></td>
</tr>
</tbody>
</table>
15. **Access Service Interfaces and Transmission Specifications (Cont'd)**

15.1 **Switched Access Service (Cont'd)**

15.1.1 **Local Transport Interface Groups (Cont'd)**

(F) **Available Premises Interface Codes (Cont'd)**

<table>
<thead>
<tr>
<th>Interface Group</th>
<th>Telephone Company Switch Supervisory Signaling</th>
<th>Premises Interface Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 (Cont’d)</td>
<td>GO</td>
<td>4GS2</td>
</tr>
<tr>
<td></td>
<td>GO</td>
<td>4GS3</td>
</tr>
<tr>
<td></td>
<td>GO</td>
<td>6GS2</td>
</tr>
<tr>
<td></td>
<td>LO, GO</td>
<td>4DX2</td>
</tr>
<tr>
<td></td>
<td>LO, GO</td>
<td>4DZ3</td>
</tr>
<tr>
<td></td>
<td>LO, GO</td>
<td>6EA2-E</td>
</tr>
<tr>
<td></td>
<td>LO, GO</td>
<td>6EA2-M</td>
</tr>
<tr>
<td></td>
<td>LO, GO</td>
<td>8EB2-E</td>
</tr>
<tr>
<td></td>
<td>LO, GO</td>
<td>8EB2-M</td>
</tr>
<tr>
<td></td>
<td>RV, EA, EB, EC</td>
<td>6EX2-B</td>
</tr>
<tr>
<td></td>
<td>RV, EA, EB, EC</td>
<td>4SF3</td>
</tr>
<tr>
<td></td>
<td>RV, EA, EB, EC</td>
<td>3DX2</td>
</tr>
<tr>
<td></td>
<td>RV, EA, EB, EC</td>
<td>4DX3</td>
</tr>
<tr>
<td></td>
<td>RV, EA, EB, EC</td>
<td>6DX2</td>
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<tr>
<td></td>
<td>RV, EA, EB, EC</td>
<td>6EA2-E</td>
</tr>
<tr>
<td></td>
<td>RV, EA, EB, EC</td>
<td>6EA2-M</td>
</tr>
<tr>
<td></td>
<td>RV, EA, EB, EC</td>
<td>8EB2-E</td>
</tr>
<tr>
<td></td>
<td>RV, EA, EB, EC</td>
<td>8EB2-M</td>
</tr>
<tr>
<td></td>
<td>EA, EB, EC</td>
<td>8EC2-M</td>
</tr>
<tr>
<td></td>
<td>RV</td>
<td>4RV2-O</td>
</tr>
<tr>
<td></td>
<td>RV</td>
<td>4RV2-T</td>
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<tr>
<td></td>
<td>RV</td>
<td>4RV3-O</td>
</tr>
<tr>
<td></td>
<td>RV</td>
<td>4RV3-T</td>
</tr>
<tr>
<td></td>
<td>SS7</td>
<td>4NO2</td>
</tr>
<tr>
<td>3</td>
<td>LO, GO</td>
<td>4AH5-B</td>
</tr>
<tr>
<td></td>
<td>RV, EA, EB, EC</td>
<td>4AH5-B</td>
</tr>
<tr>
<td></td>
<td>SS7</td>
<td>4AH5-B</td>
</tr>
<tr>
<td>4</td>
<td>LO, GO</td>
<td>4AH6-C</td>
</tr>
<tr>
<td></td>
<td>RV, EA, EB, EC</td>
<td>4AH6-C</td>
</tr>
<tr>
<td></td>
<td>SS7</td>
<td>4AH6-C</td>
</tr>
<tr>
<td>5</td>
<td>LO, GO</td>
<td>4AH6-D</td>
</tr>
<tr>
<td></td>
<td>RV, EA, EB, EC</td>
<td>4AH6-D</td>
</tr>
<tr>
<td></td>
<td>SS7</td>
<td>4AH6-D</td>
</tr>
</tbody>
</table>

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David Stoll  
Vice President/Chief Executive Officer  
123 W. Orchard Street, P.O. Box 127  
Delton, Michigan 49046  
(269) 623-2311  
dstoll@mei.net
## ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.1 Local Transport Interface Groups (Cont'd)

### (F) Available Premises Interface Codes (Cont'd)

<table>
<thead>
<tr>
<th>Interface Group</th>
<th>Telephone Company</th>
<th>Switch Supervisory Signaling</th>
<th>Premises Interface Code</th>
<th>Feature Group D</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>LO, GO</td>
<td></td>
<td>4DS9-15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LO, GO</td>
<td></td>
<td>4DS9-15L</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RV, EA, EB, E</td>
<td></td>
<td>4DS9-15</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>RV, EA, EB, C</td>
<td></td>
<td>4DS9-15L</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>SS7</td>
<td></td>
<td>4DS9-15</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>LO, GO</td>
<td></td>
<td>4DS9-31</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LO, GO</td>
<td></td>
<td>4DS9-131L</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RV, EA</td>
<td></td>
<td>4DS9-31</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RV, EA, EB, EA</td>
<td></td>
<td>4DS9-31L</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>SS7</td>
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<td></td>
</tr>
<tr>
<td>8</td>
<td>LO, GO</td>
<td></td>
<td>4DS0-63</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LO, GO</td>
<td></td>
<td>4DS0-63L</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RV, EA</td>
<td></td>
<td>4DS0-63</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RV, EA, EB, EC</td>
<td></td>
<td>4DS0-63L</td>
<td>X</td>
</tr>
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<td></td>
<td>SS7</td>
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<td>4DS0-63</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>LO, GO</td>
<td></td>
<td>4DS6-44</td>
<td></td>
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<tr>
<td></td>
<td>LO, GO</td>
<td></td>
<td>4DS6-44L</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RV, EA</td>
<td></td>
<td>4DS6-44</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RV, EA, EB, EC</td>
<td></td>
<td>4DS6-44L</td>
<td>X</td>
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<td>SS7</td>
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<td></td>
</tr>
<tr>
<td>10</td>
<td>LO, GO</td>
<td></td>
<td>4DS6-27</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LO, GO</td>
<td></td>
<td>4DS6-27L</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RV, EA</td>
<td></td>
<td>4DS6-27</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RV, EA, EB, EC</td>
<td></td>
<td>4DS6-27L</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>SS7</td>
<td></td>
<td>4DS6-27</td>
<td></td>
</tr>
</tbody>
</table>
15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.2 Standard Transmission Specifications

Descriptions of the transmission specifications available with Feature Group D, as a function of the Interface Group selected by the customer, are set forth below. Descriptions of each of these Standard Transmission Specifications and the two Data Transmission Parameters mentioned are set forth respectively in (E) through (G) and 15.1.3(A) and (B) following:

(A) Feature Group D

FGD is provided with either Type A, Type B or Type C Transmission Specifications as follows:

- When routed to the end office either Type B or C is provided.
- When routed to an access tandem only Type A is provided.
- Type A is provided on the transmission path from the access tandem to the end office.

Type C Transmission Specifications are provided with Interface Group 1. Type A and Type B Transmission Specifications are provided with Interface Groups 2 through 10.

Type DB Data Transmission Parameters are provided with FGD for the transmission path between the customer-designated premises and the end office when directly routed to the end office. Type DA Data Transmission Parameters are provided for the transmission path between the customer designated premises and the access tandem and between the access tandem and the end office when routed via an access tandem.
ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.2 Standard Transmission Specification (Cont’d)

(B) Type A Transmission Specifications

Type A Transmission Specifications is provided with the following parameters:

(1) Loss Deviation

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is 2.0 dB.

(2) Attenuation Distortion

The maximum Attenuation Distortion in the 404 to 2804 Hz frequency band relative to the loss at 1004 Hz is -1.0 dB to +3.0 dB.

(3) C-Message Noise

The maximum C-Message Noise for the transmission path at the route miles listed is less than or equal to:

<table>
<thead>
<tr>
<th>Route Miles</th>
<th>C-Message Noise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 50</td>
<td>32 dBmCO</td>
</tr>
<tr>
<td>51 to 100</td>
<td>34 dBmCO</td>
</tr>
<tr>
<td>101 to 200</td>
<td>37 dBmCO</td>
</tr>
<tr>
<td>201 to 400</td>
<td>40 dBmCO</td>
</tr>
<tr>
<td>401 to 1000</td>
<td>42 dBmCO</td>
</tr>
</tbody>
</table>

(4) C-Notch Noise

The maximum C-Notch Noise, utilizing a -16 dBmO holding tone, is less than or equal to 45 dBmCO.
15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.2 Standard Transmission Specification (Cont’d)

(B) Type A Transmission Specifications (Cont’d)

(5) Echo Control

Echo Control, identified as Equal Level Echo Path Loss, and expressed as Echo Return Loss and Singing Return Loss, is dependent on the routing, i.e., whether the service is routed directly from the customer's point of termination (POT) to the end office or via an access tandem. It is equal to or greater than the following:

<table>
<thead>
<tr>
<th>Route</th>
<th>Echo Return Loss</th>
<th>Singing Return Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>POT to Access Tandem</td>
<td>21 dB</td>
<td>14 dB</td>
</tr>
<tr>
<td>POT to End Office</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Direct</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>- Via Access Tandem</td>
<td>16 dB</td>
<td>11 dB</td>
</tr>
</tbody>
</table>

(6) Standard Return Loss

Standard Return Loss expressed as Echo Return Loss and Singing Return Loss on two-wire ports of a four-wire point of termination shall be equal to or greater than:

<table>
<thead>
<tr>
<th></th>
<th>Echo Return Loss</th>
<th>Singing Return Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5 dB</td>
<td>2.5 dB</td>
</tr>
</tbody>
</table>
15. **Access Service Interfaces and Transmission Specifications (Cont'd)**

15.1 **Switched Access Service (Cont'd)**

15.1.2 **Standard Transmission Specification (Cont'd)**

(C) **Type B Transmission Specifications**

Type B Transmission Specifications are provided with the following parameters:

1. **Loss Deviation**

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is 2.5 dB.

2. **Attenuation Distortion**

The maximum Attenuation Distortion in the 404 to 2804 Hz frequency band relative to loss at 1004 Hz is -2.0 dB to +4.0 dB.

3. **C-Message Noise**

The maximum C-Message Noise for the transmission path at the route miles listed is less than or equal to:

<table>
<thead>
<tr>
<th>Route Miles</th>
<th>Type B1</th>
<th>Type B2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 50</td>
<td>32 dBnCO</td>
<td>35 dBnCO</td>
</tr>
<tr>
<td>51 to 100</td>
<td>33 dBnCO</td>
<td>37 dBnCO</td>
</tr>
<tr>
<td>101 to 200</td>
<td>35 dBnCO</td>
<td>40 dBnCO</td>
</tr>
<tr>
<td>201 to 400</td>
<td>37 dBnCO</td>
<td>43 dBnCO</td>
</tr>
<tr>
<td>401 to 1000</td>
<td>39 dBnCO</td>
<td>45 dBnCO</td>
</tr>
</tbody>
</table>

4. **C-Notch Noise**

The maximum C-Notch Noise, utilizing a -16 dBm0 holding tone is less than or equal to 47 dBnCO.

* For Feature Group D Type B2 will be provided.
15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.2 Standard Transmission Specification (Cont’d)

(C) Type B Transmission Specifications (Cont’d)

(5) Echo Control

Echo Control, identified as Equal Level Echo Path Loss for FGD, and expressed as Echo Return Loss (ERL) and Singing Return Loss (SRL), is dependent on the routing, i.e., whether the service is routed directly from the customer's point of termination (POT) to the end office or via an access tandem. The ERL and SRL also differ by Feature Group, type of termination, and type of transmission path. They are greater than or equal to the following:

<table>
<thead>
<tr>
<th>POT to Access Tandem</th>
<th>Echo Return Loss</th>
<th>Singing Return Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terminated in 4-Wire trunk:</td>
<td>21 dB</td>
<td>14 dB</td>
</tr>
<tr>
<td>Terminated in 2-Wire trunk:</td>
<td>16 dB</td>
<td>11 dB</td>
</tr>
</tbody>
</table>
15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.2 Standard Transmission Specification (Cont’d)

(C) Type B Transmission Specifications (Cont’d)

(6) Standard Return Loss

Standard Return Loss, expressed as Echo Return Loss and Singing Return Loss, on two-wire ports of a four-wire point of termination shall be equal to or greater than:

<table>
<thead>
<tr>
<th>Echo Return Loss</th>
<th>Singing Return Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 dB</td>
<td>2.5 dB</td>
</tr>
</tbody>
</table>

(D) Type C Transmission Specifications

Type C Transmission Specifications are provided with the following parameters:

(1) Loss Deviation

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is 3.0 dB.

(2) Attenuation Distortion

The maximum Attenuation Distortion in the 404 to 2804 Hz frequency band relative to loss at 1004 Hz is -2.0 dB to +5.5 dB.
15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.2 Standard Transmission Specification (Cont’d)

(D) Type C Transmission Specifications (Cont’d)

(3) C-Message Noise

The maximum C-Message Noise for the transmission path at the route miles listed is less than or equal to:

<table>
<thead>
<tr>
<th>Route Miles</th>
<th>Type C1</th>
<th>Type C2</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 50</td>
<td>32 dBmCO</td>
<td>38 dBmCO</td>
</tr>
<tr>
<td>51 to 100</td>
<td>33 dBmCO</td>
<td>39 dBmCO</td>
</tr>
<tr>
<td>101 to 200</td>
<td>35 dBmCO</td>
<td>41 dBmCO</td>
</tr>
<tr>
<td>201 to 400</td>
<td>37 dBmCO</td>
<td>43 dBmCO</td>
</tr>
<tr>
<td>401 to 1000</td>
<td>39 dBmCO</td>
<td>45 dBmCO</td>
</tr>
</tbody>
</table>

(4) C-Notch Noise

The maximum C-Notch Noise, utilizing a -16 dBm0 holding tone is less than or equal to 47 dBmCO.

* For Feature Group D Type C2 will be provided.
15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.2 Standard Transmission Specification (Cont’d)

(D) Type C Transmission Specifications (Cont’d)

(5) Echo Control

Echo Control, identified as Return Loss and expressed as Echo Return Loss and Singing Return Loss is dependent on the routing, i.e., whether the service is routed directly from the customer's point of termination (POT) to the end office or via an access tandem. It is equal to or greater than the following:

<table>
<thead>
<tr>
<th>Echo Return Loss</th>
<th>Singing Return Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>POT to Access Tandem</td>
<td>13 dB</td>
</tr>
<tr>
<td>POT to End Office</td>
<td>- Direct</td>
</tr>
</tbody>
</table>

15.1.3 Data Transmission Parameters

Two types of Data Transmission Parameters, i.e., Type DA and Type DB, are provided for the Feature Group arrangements. Type DB is provided with Feature Group D when Feature Group D is directly routed to the end office. Type DA is only provided with Feature Group D and only when routed via an access tandem. Following are descriptions of each.

(A) Data Transmission Parameters Type DA

(1) Signal to C-Notched Noise Ratio

The Signal to C-Notched Noise Ratio is equal to or greater than 33 dB.
15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.3 Data Transmission Parameters (Cont’d)

(A) Data Transmission Parameters Type DA (Cont’d)

(2) Envelope Delay Distortion

The maximum Envelope Delay Distortion for the frequency bands and route miles specified is:

604 to 2804 Hz

Less than 50 route miles 500 microseconds

Equal to or greater than 50 route miles 900 microseconds

1004 to 2404 Hz

Less than 50 route miles 200 microseconds

Equal to or greater than 50 route miles 400 microseconds

(3) Impulse Noise Counts

The Impulse Noise Counts exceeding a 65 dBnCO threshold in 15 minutes is no more than 15 counts.

(4) Intermodulation Distortion

The Second Order (R2) and Third Order (R3) Intermodulation Distortion products are equal to or greater than:

Second Order (R2) 33 dB
Third Order (R3) 37 dB
15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.3 Data Transmission Parameters (Cont’d)

(A) Data Transmission Parameters Type DA (Cont’d)

(5) Phase Jitter

The Phase Jitter over the 4-300 Hz frequency band is less than or equal to 50 peak-to-peak.

(6) Frequency Shift

The maximum Frequency Shift does not exceed -2 to +2 Hz.

(B) Data Transmission Parameters Type DB

(1) Signal to C-Notched Noise Ratio

The Signal to C-Notched Noise Ratio is equal to or greater than 30 dB.

(2) Envelope Delay Distortion

The maximum Envelope Delay Distortion for the frequency bands and route miles specified is:

- 604 to 2804 Hz
  - Less than 50 route miles: 800 microseconds
  - Equal to or greater than 50 route miles: 1000 microseconds

- 1004 to 2404 Hz
  - Less than 50 route miles: 320 microseconds
  - Equal to or greater than 50 route miles: 500 microseconds
15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.3 Data Transmission Parameters (Cont’d)

(B) Data Transmission Parameters Type DB (Cont'd)

(3) Impulse Noise Counts

The Impulse Noise Counts exceeding a 67 dBrnCO threshold in 15 minutes is no more than 15 counts.

(4) Intermodulation Distortion

The Second Order (R2) and Third Order (R3) Intermodulation Distortion products are equal to or greater than:

- Second Order (R2) 31 dB
- Third Order (R3) 34 dB

(5) Phase Jitter

The Phase Jitter over the 4-300 Hz frequency band is less than or equal to 7 peak-to-peak.

(6) Frequency Shift

The maximum Frequency Shift does not exceed -2 to +2 Hz.
ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service

This section explains and lists the codes that the customer must specify when ordering Special Access Service, Switched Access Entrance Facilities, and Voice Grade and High Capacity Direct Trunked Transport. These codes provide a standardized means to relate the services being ordered to Switched Access Service and Special Access Service offerings contained in Sections 6 and 7, preceding.

When ordering, the type of Special Access Service or Switched Access Entrance Facility or Direct Trunked Transport is described by two code sets, the Network Channel (NC) code and the Network Channel Interface (NCI) codes.

The Network Channel (NC) code consists of two elements. Element one is a Channel Service Code (character positions 1 and 2) that describes the channel service type in an abbreviated form. Element two is an Optional Feature Code (character positions 3 and 4) that identifies option codes available for each channel service code, such as C-conditioning or Improved Return Loss.

The Network Channel Interface (NCI) is used to identify interface specifications associated with a particular channel. This code describes the total wires, protocol, impedance, protocol options and transmission level point(s) reflecting physical and electrical characteristics between the Telephone Company and the customer.

On the following 3 pages are examples which explain the specific characters of the codes and which reference matrices and charts used in developing the codes. Included in the matrices are Service Designator (SD) codes which are used to identify variations of service within service types. The SD and NC codes are displayed as components of the matrices designated as Technical Specifications packages in (A) through (G) following. Through the use of these matrices, SD codes may be converted to NC codes for service ordering purposes.

A chart is also provided in 15.2.2(A) following which contains information necessary to develop NCI codes.
ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont’d)

Comprehensive lists of allowed Network Channel (NC) and Network Channel Interface (NCI) codes are contained in Telcordia Technologies Inc.’s NC/NCI Decoder. However, not all services contained in that technical publication may be offered by the Telephone Company at this time.

Finally, 15.2.2(C) following provides a list of compatible Network Channel Interfaces inasmuch as the Network Channel Interfaces associated with a given service need not always be the same, but all must be compatible.

Example No. 1:

If the customer wishes to order a 4-wire voice grade circuit with 600 Ohms impedance, capable of data transmission, and with improved return loss, the customer might specify the following:

<table>
<thead>
<tr>
<th>NC</th>
<th>NCI</th>
<th>SECNCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>LG-R</td>
<td>04DB2</td>
<td>04DA2-S</td>
</tr>
</tbody>
</table>

NC Code:
- **LG** = Voice Grade Channel Service, VG6
- **R** = Improved Return Loss

NCI Code:
- **04** = Number of physical wires at CDP
- **DB** = Data stream in VF frequency band at the customer designated main terminal location
- **2** = 600 Ohms impedance

SECNCI (Secondary NCI Code):
- **04** = Number of physical wires at CDP
- **DA** = Data stream in VG frequency at the customer designated secondary terminal location
- **2** = 600 Ohms impedance
- **S** = Sealing current option for 4-wire transmission

In the above example the NCI (Network Channel Interface) code is the interface requested at the customer's POT (Point of Termination) and the SECNCI (Secondary Network Channel Interface) code represents the interface at the end office serving the End User.
ACCESS SERVICE

15. **Access Service Interfaces and Transmission Specifications (Cont'd)**

15.2 **Special Access Service (Cont’d)**

**Example No. 2:** If the customer wishes to order a FX circuit to a station, with 600 Ohms impedance, loop start signaling, which is 4-wire at the CDP and 2-wire at the end-user, the customer might specify:

<table>
<thead>
<tr>
<th>NC</th>
<th>NCI</th>
<th>SECNCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC--</td>
<td>04LO2</td>
<td>02LS2</td>
</tr>
</tbody>
</table>

**NC Code:**

LC = Voice Grade Channel Service, VG2
-- = No Optional Features

**NCI Code:**

04 = Number of physical wires at CDP
LO = Loop start, loop signaling - open end
2 = 600 Ohms impedance

**SECNCI (Secondary NCI Code):**

02 = Number of physical wires at CDP
LS = Loop start signaling - closed end
2 = 600 Ohms impedance

**Example No. 3:**

If the customer wishes to order a 1.544 Mbps Hi-cap facility with no channel options such as CO multiplexing, the customer might specify the following:

<table>
<thead>
<tr>
<th>NC</th>
<th>NCI</th>
<th>SECNCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>HC--</td>
<td>04DS9-15</td>
<td>04DS9-15</td>
</tr>
</tbody>
</table>

**NC Code:**

HC = High Capacity Channel Service, DS1
-- = No Optional Features

**NCI, SECNCI Code:**

04 = Number of physical wires at CDP DS
= Digital hierarchy interface
9 = 100 Ohms impedance
15 = 1.544 Mbps (DS1) format

The preceding three examples use information contained in Telcordia Technologies Inc.’s NC/NCI Decoder.
15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.1 Network Channel (NC) Codes

In order to determine the NC code appropriate for the service to be ordered, the type of Special Access Service the customer wishes must be identified. This identification is accomplished by a Service Designator (SD) code. The broad categories of Service Designator codes (e.g., VG, MT, TG, etc.) are set forth in Section 7, preceding. Variations within service type (e.g., VG1, MTC, TG2, etc.) are described in the various Technical Publications cited in (A) through (H) following.

Having determined the specific service type to be ordered and its SD code, and having used the appropriate Technical Publication, the customer should match the SD code to the NC code using the following matrices. Once the NC code has been determined, the Network Channel Interface (NCI) code may be developed using the information set forth in 15.2.2 following, and the guidelines concerning specific parameters available for each service type as set forth in the specified Technical Publication.

(A) Technical Specifications Packages Metallic Service

<table>
<thead>
<tr>
<th>Package</th>
<th>MTC*</th>
<th>MT1</th>
<th>MT2</th>
<th>MT3</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC Code</td>
<td>MQ</td>
<td>NT</td>
<td>NU</td>
<td>NV</td>
</tr>
<tr>
<td>Parameter</td>
<td>DC Resistance Between Conductors</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Loop Resistance</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shunt Capacitance</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Optional Features and Functions

<table>
<thead>
<tr>
<th>Feature</th>
<th>Three Premises Bridging</th>
<th>Series Bridging</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

The technical specifications are described in Technical Reference TR-NPL-000336.

* All parameters are available within ranges selected by the customer where technically feasible.
15. Access Service Interfaces and Transmission Specifications (Cont’d)

15.2 Special Access Service

15.2.1 Network Channel (NC) Codes (Cont’d)

(B) [RESERVED FOR FUTURE USE]

* All parameters are available within ranges selected by the customer where technically feasible.
15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service

15.2.1 Network Channel (NC) Codes (Cont’d)

(C) [RESERVED FOR FUTURE USE]
15. **Access Service Interfaces and Transmission Specifications (Cont'd)**

15.2 **Special Access Service**

15.2.1 **Network Channel (NC) Codes (Cont’d)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>SD Code</th>
<th>APC*</th>
<th>AP1</th>
<th>AP2</th>
<th>AP3</th>
<th>AP4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Act. Measured Loss</td>
<td>PQ</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Amplitude Tracking</td>
<td>PE</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Crosstalk</td>
<td>PF</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Distortion Tracking</td>
<td>PJ</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Gain/Frequency Distortion</td>
<td>PK</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Group Delay</td>
<td>AP1</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Noise</td>
<td>AP2</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Phrase Tracking</td>
<td>AP3</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Short-Term Gain Stability</td>
<td>AP4</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Short-Term Loss</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Total Distortion</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

**Optional Features and Functions**

<table>
<thead>
<tr>
<th>Feature</th>
<th>SD Code</th>
<th>APC*</th>
<th>AP1</th>
<th>AP2</th>
<th>AP3</th>
<th>AP4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Office Bridging Capability</td>
<td>PQ</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Gain Conditioning</td>
<td>PE</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Stereo</td>
<td>PF</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

* The technical specifications are described in Technical Reference GR-337-CORE and associated Addendum.

* The desired parameters are selected by the customer from the list of available parameters.
15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service

15.2.1 Network Channel (NC) Codes (Cont’d)

(E) Technical Specifications Packages Video Service

<table>
<thead>
<tr>
<th>Package</th>
<th>SD Code:</th>
<th>TVC*</th>
<th>TV1</th>
<th>TV2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video Parameters</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insertion Gain</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Field-Time Distortion</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Line-Time Distortion</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Short-Time Distortion</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Chrominance-Luminance Gain</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Inequality</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chrominance-Luminance Delay</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inequality</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Amplitude/Frequency Characteristic</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Luminance Non-Linear Distortion</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Chrominance Non-Linear Gain Distortion</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Distortion</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Chrominance Non-Linear Phase Distortion</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Transient Synchronizing Signal (Non-Linearity)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Dynamic Gain Distortion</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Picture Signal</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Synchronizing Signal</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Differential Gain</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Differential Phase</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Chrominance-Luminance Intermodulation</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

* The desired parameters are selected by the customer from the list of available parameters.
15. Access Service Interfaces and Transmission Specifications (Cont’d)

15.2 Special Access Service

15.2.1 Network Channel (NC) Codes (Cont’d)

(E) Technical Specifications Packages Video Service (Cont’d)

<table>
<thead>
<tr>
<th></th>
<th>Package</th>
<th>SD Code</th>
<th>TVC*</th>
<th>TV1</th>
<th>TV2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio Channel Parameters Associated with Video Service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insertion Gain</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Amplitude/Frequency Characteristic</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Total Harmonic Distortion &amp; Noise</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Maximum Steady-State Test Levels</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Gain Differential Between Channels</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phase Differential Between Channels</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crosstalk</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Audio-To-Video Time Differential</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

The technical specifications are described in Technical Reference GR-338-CORE.

* The desired parameters are selected by the customer from the list of available parameters.
15. **Access Service Interfaces and Transmission Specifications (Cont'd)**

15.2 **Special Access Service**

15.2.1 **Network Channel (NC) Codes (Cont’d)**

(F) **Technical Specifications Packages Digital Data Service**

<table>
<thead>
<tr>
<th>SD Code</th>
<th>DA1</th>
<th>DA2</th>
<th>DA3</th>
<th>DA4</th>
<th>DA5</th>
<th>DA6</th>
</tr>
</thead>
<tbody>
<tr>
<td>XA</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>XB</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Parameter/Hubbed

<table>
<thead>
<tr>
<th>Error-Free Seconds</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
</tr>
<tr>
<td>X</td>
</tr>
<tr>
<td>X</td>
</tr>
<tr>
<td>X</td>
</tr>
<tr>
<td>X</td>
</tr>
<tr>
<td>X</td>
</tr>
</tbody>
</table>

Optional Features and Functions/Hubbed

<table>
<thead>
<tr>
<th>Central Office Bridging Capability</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
</tr>
<tr>
<td>X</td>
</tr>
<tr>
<td>X</td>
</tr>
<tr>
<td>X</td>
</tr>
<tr>
<td>X</td>
</tr>
<tr>
<td>X</td>
</tr>
</tbody>
</table>

PPSN Interface Transfer Arrangement

<table>
<thead>
<tr>
<th>Transfer Arrangement</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
</tr>
<tr>
<td>X</td>
</tr>
<tr>
<td>X</td>
</tr>
<tr>
<td>X</td>
</tr>
<tr>
<td>X</td>
</tr>
<tr>
<td>X</td>
</tr>
</tbody>
</table>

The Telephone Company will provide a channel capable of meeting a monthly average performance equal to or greater than 99.875% error-free seconds (if provided through a Digital Data hub) while the channel is in service, if it is measured through a CSU equivalent which is designed, manufactured, and maintained to conform with the specifications contained in Technical Reference PUB 62310 (MDP-326-726).

Optional Features and Functions/Non-Hubbed

<table>
<thead>
<tr>
<th>Public Packet Data Arrangement</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
</tr>
<tr>
<td>X</td>
</tr>
</tbody>
</table>

Voltages which are compatible with Digital Data Service are delineated in Technical Reference TR-NWT-000341.
15. **Access Service Interfaces and Transmission Specifications (Cont'd)**

15.2 **Special Access Service**

15.2.1 **Network Channel (NC) Codes (Cont’d)**

(G) **Technical Specifications Packages High Capacity Service**

<table>
<thead>
<tr>
<th>SD Code</th>
<th>DS0</th>
<th>DS1</th>
<th>DS1C</th>
<th>DS2</th>
<th>DS3</th>
<th>DS4</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC Code</td>
<td>HS</td>
<td>HC</td>
<td>HD</td>
<td>HE</td>
<td>HF</td>
<td>HG</td>
</tr>
</tbody>
</table>

**Parameters**

- **Error-Free Seconds**
  - X

**Optional Features and Functions**

- **Automatic Loop Transfer**
  - X

**Central Office Multiplexing:**

- DS4 to DS1
  - X
- DS3 to DS1
  - X
- DS2 to DS1
  - X
- DS1C to DS1
  - X
- DS1 to Voice
  - X
- DS1 to DS0
  - X
- DS0 to Subrate*
  - X

**Transfer Arrangement**

- X

**Clear Channel Capability**

- X

A channel with technical specifications package DS1 will be capable of an error-free second performance of 98.75% over a continuous 24 hour period as measured at the 1.544 Mbps rate through a CSU equivalent which is designed, manufactured, and maintained to conform with the specifications contained in Technical Reference GR-342-CORE.

* Available only on a channel of 1.544 Mbps facility to a Telephone Company Hub.
## 15. Access Service Interfaces and Transmission Specifications (Cont'd)

### 15.2 Special Access Service

#### 15.2.1 Network Channel (NC) Codes (Cont’d)

| (H) Technical Specifications Packages Synchronous Optical Channel Service |
|---------------------------------|--------------------|------------------|
| SD Code                        | Package            |
| OC3                             | OC12               |

<table>
<thead>
<tr>
<th>NC Code</th>
<th>OB</th>
<th>OD</th>
</tr>
</thead>
</table>

### Parameters

- Error-Free Seconds: X X

### Optional Features and Functions

#### Customer Premises Multiplexing:

- OC12 to OC3: X
- OC12 to OC3c: X
- OC12 to DS3: X
- OC12 to DS1: X
- OC3 to STS-1: X
- OC3 to DS3: X
- OC3 to DS1: X

#### Central Office Multiplexing:

- OC12 to OC3: X
- OC12 to OC3c: X
- OC3 to DS3: X
- OC3 to DS1: X

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service

15.2.2 Network Channel Interface (NCI) Codes

The electrical interface with the Telephone Company for Special Access Service is defined by an interface code. There are interface codes for both the customer designated premises and the point of termination. Three examples of NCI codes are found in 15.2, preceding.
15. **Access Service Interfaces and Transmission Specifications** (Cont'd)

15.2 **Special Access Service**

15.2.2 **Network Channel Interface (NCI) Codes** (Cont’d)

(A) **Parameter Codes and Options**

<table>
<thead>
<tr>
<th>Code</th>
<th>Option</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB</td>
<td>-</td>
<td>accepts 20 Hz ringing signal at customer's point of termination;</td>
</tr>
<tr>
<td>AC</td>
<td>-</td>
<td>accepts 20 Hz ringing signal at customer's end user's point of termination;</td>
</tr>
<tr>
<td>AH</td>
<td>-B</td>
<td>analog high capacity interface;</td>
</tr>
<tr>
<td></td>
<td>-C</td>
<td>60 kHz to 108 kHz (12 channels);</td>
</tr>
<tr>
<td></td>
<td>-D</td>
<td>312 kHz to 552 kHz (60 channels);</td>
</tr>
<tr>
<td></td>
<td></td>
<td>564 kHz to 3084 kHz (600 channels);</td>
</tr>
<tr>
<td>CT</td>
<td></td>
<td>Centrex Tie Trunk Termination</td>
</tr>
<tr>
<td>CS</td>
<td>-15</td>
<td>1.544 Mbps (DS1) ANSI Extended Superframe (ESF) Format and B8ZS Clear Channel Capability;</td>
</tr>
<tr>
<td></td>
<td>-15A</td>
<td>1.544 Mbps (DS1) Superframe (SF) format;</td>
</tr>
<tr>
<td></td>
<td>-15B</td>
<td>1.544 Mbps (DS1) Superframe (SF) format and B8ZS Clear Channel Capability;</td>
</tr>
<tr>
<td></td>
<td>-15K</td>
<td>1.544 Mbps (DS1) Extended Superframe (ESF);</td>
</tr>
<tr>
<td>DA</td>
<td>-10</td>
<td>data stream in VF frequency band at customer's end user's point of termination;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VF for TG1 and TG2;</td>
</tr>
<tr>
<td>DB</td>
<td>-10</td>
<td>data stream in VF frequency band at customer's point of termination;</td>
</tr>
<tr>
<td>DC</td>
<td>-1</td>
<td>direct current or voltage;</td>
</tr>
<tr>
<td></td>
<td>-2</td>
<td>monitoring interface with series RC combination (McCulloh format);</td>
</tr>
<tr>
<td></td>
<td>-3</td>
<td>Telephone Company energized alarm channel;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Metallic facilities (DC continuity) for direct current/low frequency control signals or slow speed data (30 band);</td>
</tr>
</tbody>
</table>
## 15. Access Service Interfaces and Transmission Specifications (Cont'd)

### 15.2 Special Access Service

#### 15.2.2 Network Channel Interface (NCI) Codes (Cont’d)

**Parameter Codes and Options**

<table>
<thead>
<tr>
<th>Parameter Code</th>
<th>Option</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>DD -</td>
<td>15</td>
<td>DATAPHONE Select-A-Station (and TABS) interface at customer's point of termination;</td>
</tr>
<tr>
<td>DE -</td>
<td>15E</td>
<td>8-bit PCM encoded in one 64 kbps of the DS1 signal;</td>
</tr>
<tr>
<td></td>
<td>15F</td>
<td>8-bit PCM encoded in two 64 kbps of the DS1 signal;</td>
</tr>
<tr>
<td></td>
<td>15G</td>
<td>8-bit PCM encoded in three 64 kbps of the DS1 signal;</td>
</tr>
<tr>
<td></td>
<td>15H</td>
<td>14/11-bit PCM encoded in six 64 kbps of the DS1 signal;</td>
</tr>
<tr>
<td></td>
<td>15J</td>
<td>1.544 Mbps format per GR-342-CORE;</td>
</tr>
<tr>
<td></td>
<td>15K</td>
<td>1.544 Mbps format per GR-342-CORE plus extended framing format;</td>
</tr>
<tr>
<td></td>
<td>15L</td>
<td>1.544 Mbps (DS1) with SF signaling;</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>274.176 Mbps (DS4);</td>
</tr>
<tr>
<td></td>
<td>27L</td>
<td>274.176 Mbps (DS4) with SF signaling;</td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>3.152 Mbps (DS1C);</td>
</tr>
<tr>
<td></td>
<td>31L</td>
<td>3.152 Mbps (DS1C) with SF signaling;</td>
</tr>
<tr>
<td></td>
<td>44</td>
<td>44.736 Mbps (DS3);</td>
</tr>
<tr>
<td></td>
<td>44L</td>
<td>44.736 Mbps (DS3) with SF signaling;</td>
</tr>
<tr>
<td></td>
<td>63</td>
<td>6.312 Mbps (DS2);</td>
</tr>
</tbody>
</table>
15. **Access Service Interfaces and Transmission Specifications (Cont'd)**

15.2 **Special Access Service (Cont'd)**

15.2.2 **Network Channel Interface (NCI) Codes (Cont'd)**

(A) **Parameter Codes and Options (Cont'd)**

<table>
<thead>
<tr>
<th>Parameter (Cont'd)</th>
<th>Code</th>
<th>Option</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>DU -</td>
<td>63L</td>
<td></td>
<td>6.312 Mbps (DS2) with SF signaling;</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>24</td>
<td>2.4 kbps</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>48</td>
<td>4.8 kbps</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>19</td>
<td>19.2 kbps</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>56</td>
<td>56.0 kbps</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>96</td>
<td>9.6 kbps</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>64</td>
<td>64.0 kbps</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>A</td>
<td>1.544 Mbps format per GR-342-CORE</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>B</td>
<td>1.544 Mbps format per GR-342-CORE plus D4</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>C</td>
<td>1.544 Mbps format per GR-342-CORE plus extended framing format</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>1KN</td>
<td>1.544 Mbps ANSI Extended Superframe (ESF) Format without line power</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>1SN</td>
<td>1.544 Mbps ANSI Extended Superframe (ESF) Format with B8ZS Clear Channel Capability and without line power</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>AN</td>
<td>1.544 Mbps free-framing format without line power (only avail. to U.S. Govt. agencies)</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>BN</td>
<td>1.544 Mbps Superframe (SF) Format without line power</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>DN</td>
<td>1.544 Mbps Superframe (SF) Format with B8ZS Clear Channel Capability without line power</td>
</tr>
<tr>
<td>DX -</td>
<td></td>
<td></td>
<td>duplex signaling interface at customer's point of termination</td>
</tr>
<tr>
<td>DY -</td>
<td></td>
<td></td>
<td>duplex signaling interface at customer's end user's point of termination</td>
</tr>
</tbody>
</table>
### Access Service Interfaces and Transmission Specifications (Cont'd)

#### Special Access Service (Cont'd)

**15.2.2 Network Channel Interface (NCI) Codes (Cont'd)**

**(A) Parameter Codes and Options (Cont'd)**

<table>
<thead>
<tr>
<th>Parameter (Cont'd)</th>
<th>Code</th>
<th>Option</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA - E</td>
<td>Type I E&amp;M Lead Signaling. Customer at POT or customer's end user at POT originates on E Lead.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EA - M</td>
<td>Type I E&amp;M Lead Signaling. Customer at POT or customer's end user at POT originates on M Lead.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EB - E</td>
<td>Type II E&amp;M Lead Signaling. Customer at POT or customer's end user at POT originates on E Lead.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EB - M</td>
<td>Type II E&amp;M Lead Signaling. Customer at POT or customer's end user at POT originates on M Lead.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC -</td>
<td>Type III E&amp;M signaling at customer POT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EX - A</td>
<td>tandem channel unit signaling for loop start or ground start and customer supplies open end (dial tone, etc.) functions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EX - B</td>
<td>tandem channel unit signaling for loop start or ground start and customer supplies closed end (dial pulsing, etc.) functions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FC - B</td>
<td>Fiber Optic Interface</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FC - D</td>
<td>OC3, OC3c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GO -</td>
<td>ground start loop signaling - open end function by customer or customer's end user</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GS -</td>
<td>ground start loop signaling - closed end function by customer or customer's end user</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IA - E.I.A. (25 pin RS-232)</td>
<td>end user loop start loop signaling - Type A OPS registered port open end</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IA -</td>
<td>end user loop start loop signaling - Type A OPS registered port open end</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LB -</td>
<td>end user loop start loop signaling - Type B OPS registered port open end</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC -</td>
<td>end user loop start loop signaling - Type C OPS registered port open end</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LO -</td>
<td>loop start loop signaling - open end function by customer or customer's end user</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LR -</td>
<td>20 Hz automatic ringdown interface at customer with Telephone Company provided PLAR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LS -</td>
<td>loop start loop signaling - closed end function by customer or customer's end user</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NO -</td>
<td>no signaling interface, transmission only</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(A) Parameter Codes and Options (Cont'd)

<table>
<thead>
<tr>
<th>Parameter (Cont'd)</th>
<th>Code</th>
<th>Option</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>PG</td>
<td>-</td>
<td>1</td>
<td>nominal frequency from 50 to 15000 Hz</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>nominal frequency from 200 to 3500 Hz</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>nominal frequency from 100 to 5000 Hz</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8</td>
<td>nominal frequency from 50 to 8000 Hz</td>
</tr>
<tr>
<td>PR</td>
<td>-</td>
<td></td>
<td>protective relaying*</td>
</tr>
<tr>
<td>RV</td>
<td>-</td>
<td>0</td>
<td>reverse battery signaling, one way operation, originate by customer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>T</td>
<td>reverse battery signaling, one way operation, terminate function by customer or customer's end user</td>
</tr>
<tr>
<td>SF</td>
<td>-</td>
<td></td>
<td>single frequency signaling with VF band at either customer POT or customer's end user POT</td>
</tr>
<tr>
<td>SO</td>
<td>-</td>
<td>AB</td>
<td>SONET Optical Long Range Multilongitudinal Mode (LR1-MLM) Bidirectional Ring</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AU</td>
<td>LR1-MLM Unidirectional Ring</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BB</td>
<td>Long Range Single Longitudinal Mode (LR1-SLM) Bidirectional Ring</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BU</td>
<td>LR1-SLM Unidirectional Ring</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CB</td>
<td>Intermediate Range Multilongitudinal Mode (IR1-MLM) Bidirectional Ring</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CU</td>
<td>IR1-MLM Unidirectional Ring</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DB</td>
<td>Intermediate Range Single Longitudinal Mode (IR1-SLM) Bidirectional Ring</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DU</td>
<td>IR1-SLM Unidirectional Ring</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EB</td>
<td>Short Range Multilongitudinal Mode Light Emitting Diode (SR-MLM/LED) Bidirectional Ring</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EU</td>
<td>SR-MLM/LED Unidirectional Ring</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FB</td>
<td>Short Range Multilongitudinal Mode (SR-MLM) Bidirectional Ring</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FU</td>
<td>SR-MLM Unidirectional Ring</td>
</tr>
</tbody>
</table>

* Available only for the transmission of audio tone protective relaying signals used in the protection of electric power systems during fault conditions.
15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(A) Parameter Codes and Options (Cont'd)

<table>
<thead>
<tr>
<th>Code</th>
<th>Option</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST</td>
<td>-</td>
<td>Synchronous Transmission Signal (STS)</td>
</tr>
<tr>
<td></td>
<td>- A</td>
<td>STS1</td>
</tr>
<tr>
<td>TF</td>
<td></td>
<td>telephotograph interface</td>
</tr>
<tr>
<td>TT</td>
<td>- 2</td>
<td>20.0 milliamperes</td>
</tr>
<tr>
<td></td>
<td>- 3</td>
<td>3.0 milliamperes</td>
</tr>
<tr>
<td></td>
<td>- 6</td>
<td>62.5 milliamperes</td>
</tr>
<tr>
<td>TV</td>
<td></td>
<td>television interface</td>
</tr>
<tr>
<td></td>
<td>- 1</td>
<td>combined (diplexed) video and one audio signal</td>
</tr>
<tr>
<td></td>
<td>- 2</td>
<td>combined (diplexed) video and two audio signals</td>
</tr>
<tr>
<td></td>
<td>- 5</td>
<td>video plus one (or two) audio 5 kHz signal(s) or one (or two) two wire</td>
</tr>
<tr>
<td></td>
<td>- 15</td>
<td>video plus one (or two) audio 15 kHz signal(s)</td>
</tr>
</tbody>
</table>
15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(B) Impedance

The nominal reference impedance with which the channel will be terminated for the purpose of evaluating transmission performance:

<table>
<thead>
<tr>
<th>Value (ohms)</th>
<th>Code(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>110</td>
<td>0</td>
</tr>
<tr>
<td>150</td>
<td>1</td>
</tr>
<tr>
<td>600</td>
<td>2</td>
</tr>
<tr>
<td>900</td>
<td>3+</td>
</tr>
<tr>
<td>135</td>
<td>5</td>
</tr>
<tr>
<td>75</td>
<td>6</td>
</tr>
<tr>
<td>124</td>
<td>7</td>
</tr>
<tr>
<td>Variable</td>
<td>8</td>
</tr>
<tr>
<td>100</td>
<td>9</td>
</tr>
<tr>
<td>Fiber</td>
<td>F</td>
</tr>
<tr>
<td>Radio</td>
<td>R</td>
</tr>
</tbody>
</table>

+ For those interface codes with a 4-wire transmission path at the customer designated POT, rather than a standard 900 ohm impedance the code (3) denotes a customer provided transmission equipment termination. Such terminations were provided to customers in accordance with the F.C.C. Docket No. 20099 Settlement Agreement.
15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(C) Compatible Network Channel Interfaces

The following tables show the Network Channel Interface codes (NCIs) which are compatible:

(1) **Metallic**

Compatible Cis

<table>
<thead>
<tr>
<th>2DC8-1</th>
<th>2DC8-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>2DC8-3</td>
<td>2DC8-3</td>
</tr>
<tr>
<td>4DS8-</td>
<td>2DC8-1</td>
</tr>
<tr>
<td>4DS8-</td>
<td>2DC8-2</td>
</tr>
</tbody>
</table>

(2) [RESERVED FOR FUTURE USE]

* Supplemental Channel Assignment information required.

Issued Date: July 11, 2014

Effective Date: July 26, 2014

David Stoll
Vice President/Chief Executive Officer
123 W. Orchard Street, P.O. Box 127
Delton, Michigan 49046
(269) 623-2311
dstoll@mei.net
15. **Access Service Interfaces and Transmission Specifications** (Cont'd)

15.2 **Special Access Service** (Cont'd)

15.2.2 **Network Channel Interface (NCI) Codes** (Cont'd)

(C) **Compatible Network Channel Interfaces** (Cont’d)

(3) **Voice Grade**

<table>
<thead>
<tr>
<th>Compatible CIs</th>
<th>Compatible CIs</th>
<th>Compatible CIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2AB2</td>
<td>2AC2</td>
<td>2DB2</td>
</tr>
<tr>
<td>2AB3</td>
<td>2AC2</td>
<td>2DB3</td>
</tr>
<tr>
<td>2CT3</td>
<td>2DY2</td>
<td>2DX3</td>
</tr>
<tr>
<td>4DS8</td>
<td>2DA2</td>
<td>2LR2</td>
</tr>
<tr>
<td>4DX2</td>
<td>2DA2</td>
<td>2LR3</td>
</tr>
<tr>
<td>4DX3</td>
<td>2DB2</td>
<td>2LR2</td>
</tr>
<tr>
<td>4DY2</td>
<td>2DA2</td>
<td>2LS</td>
</tr>
<tr>
<td>4EA2-E</td>
<td>2DB3</td>
<td>2LS</td>
</tr>
<tr>
<td>4EA2-M</td>
<td>2CT3</td>
<td>2LS2</td>
</tr>
<tr>
<td>4SF3</td>
<td>2DA2</td>
<td>2LA2</td>
</tr>
<tr>
<td>6DX2</td>
<td>2EA2-M</td>
<td>2LS3</td>
</tr>
<tr>
<td>6DY2</td>
<td>2EA2-E</td>
<td>2LA2</td>
</tr>
<tr>
<td>6EA2-E</td>
<td>6EA2-M</td>
<td>2GS</td>
</tr>
<tr>
<td>6EB2-E</td>
<td>6EB2-M</td>
<td>2GS</td>
</tr>
<tr>
<td>6EB3-E</td>
<td>6EB2-E</td>
<td>2GS</td>
</tr>
<tr>
<td>8EB2-E</td>
<td>8EB2-M</td>
<td>2GS</td>
</tr>
<tr>
<td>8EC2</td>
<td>9DY2</td>
<td>2GS</td>
</tr>
<tr>
<td>9DY3</td>
<td>2S03</td>
<td>2LS2</td>
</tr>
<tr>
<td>9EA2</td>
<td>2L02</td>
<td>2LS3</td>
</tr>
<tr>
<td>9EA3</td>
<td>2L03</td>
<td>2LS3</td>
</tr>
</tbody>
</table>
## ACCESS SERVICE

### 15. Access Service Interfaces and Transmission Specifications (Cont'd)

#### 15.2 Special Access Service (Cont'd)

##### 15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(C) **Compatible Network Channel Interfaces** (Cont'd)

(3) **Voice Grade** (Cont'd)

<table>
<thead>
<tr>
<th>Compatible CIs</th>
<th>Compatible CIs</th>
<th>Compatible CIs</th>
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David Stoll  
Vice President/Chief Executive Officer  
123 W. Orchard Street, P.O. Box 127  
Delton, Michigan 49046  
(269) 623-2311  
dstoll@mei.net
### 15. Access Service Interfaces and Transmission Specifications (Cont'd)

#### 15.2 Special Access Service (Cont'd)

##### 15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

**Compatible Network Channel Interfaces (Cont'd)**

**Voice Grade (Cont'd)**

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Delton, Michigan 49046  
(269) 623-2311  
dstoll@mei.net
15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(C) Compatible Network Channel Interfaces (Cont'd)

(3) Voice Grade (Cont'd)

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Vice President/Chief Executive Officer
123 W. Orchard Street, P.O. Box 127
Delton, Michigan 49046
(269) 623-2311
dstoll@mei.net
## ACCESS SERVICE

15. **Access Service Interfaces and Transmission Specifications (Cont'd)**

15.2 **Special Access Service (Cont'd)**

15.2.2 **Network Channel Interface (NCI) Codes (Cont'd)**

(C) **Compatible Network Channel Interfaces (Cont'd)**

(3) **Voice Grade (Cont'd)**

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123 W. Orchard Street, P.O. Box 127
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(269) 623-2311
dstoll@mei.net
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#### 15.2 Special Access Service (Cont'd)

##### 15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

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## ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)  

15.2 Special Access Service (Cont'd)  

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)  

(C) Compatible Network Channel Interfaces (Cont'd)  

(3) Voice Grade (Cont'd)

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## Access Service Interfaces and Transmission Specifications (Cont'd)

### Special Access Service (Cont'd)

#### Network Channel Interface (NCI) Codes (Cont'd)

##### Compatible Network Channel Interfaces (Cont'd)

#### Voice Grade (Cont'd)

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David Stoll
Vice President/Chief Executive Officer
123 W. Orchard Street, P.O. Box 127
Delton, Michigan 49046
(269) 623-2311
dstoll@mei.net
ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(C) Compatible Network Channel Interfaces (Cont'd)

(3) Voice Grade (Cont'd)

<table>
<thead>
<tr>
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<tr>
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<tr>
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### ACCESS SERVICE

15. **Access Service Interfaces and Transmission Specifications (Cont'd)**

#### 15.2 Special Access Service (Cont'd)

15.2.2 **Network Channel Interface (NCI) Codes (Cont'd)**

(C) **Compatible Network Channel Interfaces (Cont'd)**

(4) **Program Audio**

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<td>2PG2-1</td>
<td>2PG2-1</td>
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<td>2PG1-3</td>
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<tr>
<td>2PG2-3</td>
<td>2PG1-3</td>
</tr>
<tr>
<td>2PG2-3</td>
<td>2PG2-3</td>
</tr>
<tr>
<td>4DS8-15F</td>
<td>2PG1-5</td>
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<td>2PG2-5</td>
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<td>2PG2-5</td>
<td>2PG2-5</td>
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<td>4DS8-15G</td>
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<tr>
<td>2PG2-8</td>
<td>2PG1-8</td>
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<td>2PG2-8</td>
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<td>2PG1-1</td>
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<tr>
<td>2PG2-1</td>
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ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(C) Compatible Network Channel Interfaces (Cont'd)

(5) Video

<table>
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<td>6TV6-15</td>
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<td>6TV7-15</td>
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<td>4TV6-15</td>
<td>4TV7-15</td>
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<tr>
<td>2TV7-1</td>
<td>4TV6-15</td>
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<tr>
<td>4TV7-15</td>
<td>6TV6-5</td>
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<td>2TV7-2</td>
<td>6TV6-15</td>
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<tr>
<td>6TV7-15</td>
<td>6TV6-15</td>
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<td>4TV6-5</td>
<td>4TV6-5</td>
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<td>4TV7-5</td>
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<td>4TV6-15</td>
<td>4TV6-15</td>
</tr>
<tr>
<td>4TV7-15</td>
<td>6TV7-15</td>
</tr>
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</table>
## ACCESS SERVICE

15. **Access Service Interfaces and Transmission Specifications** (Cont'd)

15.2 **Special Access Service** (Cont'd)

15.2.2 **Network Channel Interface (NCI) Codes** (Cont'd)

<table>
<thead>
<tr>
<th>Compatible CIs</th>
<th>Compatible CIs</th>
<th>Compatible CIs</th>
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<tbody>
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<td>4DU5-24 4DU5-24</td>
<td>6DU5-24 6DU5-24</td>
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<td>6DU5-48 6DU5-48</td>
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<td>4DU5-56</td>
<td>4DU5-96 4DU5-96</td>
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<td>6DU5-24</td>
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<td>6DU5-96 6DU5-96</td>
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<td>6DU5-48</td>
<td>6DU5-96</td>
<td>6DU5-96</td>
</tr>
</tbody>
</table>

+ Available only as a cross connect of two digital channels at appropriate digital speeds at a Telephone Company hub.
15. **Access Service Interfaces and Transmission Specifications (Cont'd)**

15.2 **Special Access Service (Cont'd)**

15.2.2 **Network Channel Interface (NCI) Codes (Cont'd)**

(C) **Compatible Network Channel Interfaces (Cont'd)**

(7) **High Capacity**

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<thead>
<tr>
<th>Compatible CIs</th>
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<tbody>
<tr>
<td>4DS0-63</td>
<td>4DS8-15J</td>
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<tr>
<td>4DU8-A,B or C</td>
<td>4DU8-A</td>
</tr>
<tr>
<td>6DU8-A, B, or C</td>
<td>6DU8-A</td>
</tr>
<tr>
<td>4DS6-27</td>
<td>4DS8-15K</td>
</tr>
<tr>
<td>4DU8-A,B or C</td>
<td>4DU8-B</td>
</tr>
<tr>
<td>6DU8-A,B or C</td>
<td>6DU8-C</td>
</tr>
<tr>
<td>4DS6-44</td>
<td>4DS8-31</td>
</tr>
<tr>
<td>4DU8-A,B or C</td>
<td>4DU8-A,B or C</td>
</tr>
<tr>
<td>6DU8-A,B or C</td>
<td>6DU8-A,B or C</td>
</tr>
<tr>
<td>4DS8-15</td>
<td>4DU8-A,B</td>
</tr>
<tr>
<td>4DU8-B</td>
<td>4DU8-A,B or C</td>
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<tr>
<td>6DU8-8</td>
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(8) **Synchronous Optical Channel Service**

<table>
<thead>
<tr>
<th>Compatible CIs</th>
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<tbody>
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<tr>
<td>4DU9-1S</td>
<td>2SOF-A</td>
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<tr>
<td>4DS9-1K</td>
<td>2SOF-B</td>
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<tr>
<td>4DU9-1K</td>
<td>2SOF-B</td>
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<tr>
<td>2SOF-F</td>
<td>2SOF-F</td>
</tr>
</tbody>
</table>

+ Available only as a cross connect of two individual channels of 1.544 Mbps facilities at a Telephone Company hub.
15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.3 Directory Access Service

15.3.1 Interface Group and Premise Interface Codes

When Directory Access Service is combined with Feature Group D Switched Access Service, the Premises Interface Code for the combination will be the available Premises Interface Code provided for the Feature Group D Switched Access Service ordered by the customer. Premises Interface Codes are described in 15.1.1(G) preceding.

When Directory Access Service is provided as a separate trunk group (not in combination with Switched Access Service) Interface Groups 2 through 10 as set forth in 15.1.1 preceding are available. Only the following Premises Interface Codes are available when Directory Access Service is provided as a separate trunk group:

- 4DS9-15 6EA2-E 4RV2-0
- 4DS9-31 6EA2-M 4AH5-B
- 4DS0-63 4SF3 4AH6-C
- 4DS6-44 4AH6-D
- 4DS6-27
ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.3 Directory Access Service (Cont'd)

15.3.2 Standard Transmission Specifications

Following is a matrix illustrating the transmission specifications available with Directory Access Service. Descriptions of the Standard Transmission Specifications, Type A and B, are set forth respectively in 15.1.2(E) and (F) preceding.

<table>
<thead>
<tr>
<th>Directory Access Service Provided in Combination with Switched Access Service</th>
<th>Transmission Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Type A</td>
</tr>
<tr>
<td>- Feature Group D</td>
<td></td>
</tr>
</tbody>
</table>

Directory Access Service Not Combined with Switched Access Service

- Routed Direct to DA location  
  (Interface Groups 2 through 10)  
  X

- Routed via an access tandem  
  (Interface Groups 2 through 10)  
  X
16. Public Packet Data Network

Public Packet Data Networks utilize separate data networks, comprised of switching, routing and transmission facilities. The networks provide for the transfer of data provided by a customer in a frame or cell format. The data is separated into discrete segments for transmission through the public packet data network.

16.1 Frame Relay Access Service

16.1.1 General

(A) General

Frame Relay Access Service (FRAS) is a medium-speed, connection-oriented packet-switched data service that allows for the interconnection of Local Area Networks (LANs) or other compatible customer premises equipment for the purpose of connecting to an interstate frame relay network. FRAS also allows for the interconnection of a customer designated premises to a DSL Access Service Connection Point as described in Section 8, preceding. The terminal equipment accumulates the customer data and puts it into a frame relay format suitable for transmission over the FRAS network. This terminal equipment must conform to the requirements specified in the following Technical References:

- ITU-CCITT I.233.1,
- ITU-CCITT I.233.2,
- ITU-CCITT I.370, and
- ITU-T Q.933

FRAS permits customers to share network bandwidth for data transmissions.
16.  Public Packet Data Network

16.1  Frame Relay Access Service

16.1.1  General (Con’d)

(A)  General (Cont’d)

Rates and charges for FRAS are set forth in Section 17.4.8.1, following. The Telephone Company specific rate band assignment for the FRAS rate elements is specified in the Special Access(SPA) column in Section 17.5.1, following. The application of rates for FRAS is described in Section 16.1.2, following.

In addition to the regulations and charges specified in this section, the general regulations and charges specified in other sections of this tariff apply as appropriate.

(B)  Service Description

FRAS is a transport service that facilitates the exchange of variable length information units (frames) between customer connections. Frames travel a fixed path through the network with an address that specifies the permanent virtual connection. Addresses are read by the network processor and the frames are relayed to the preassigned destination.
16. **Public Packet Data Network (Cont'd)**

16.1 **Frame Relay Access Service (Cont'd)**

16.1.1 **General (Cont'd)**

(B) **Service Description (Cont'd)**

FRAS service includes: the Frame Relay Access Connection, the Frame Relay Inter-network connection, and Permanent Virtual Connections (PVC) which have associated Committed Information Rates (CIRs).

The Frame Relay Access Connection and the Frame Relay Inter-network Connection elements provide access to a Telephone Company wire center equipped with a frame relay switch. A generic view of FRAS access is shown in 16.1.2(A) following. Frame Relay Access Service connections are available from the wire centers as identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. No. 4.

The Frame Relay Access Connection combines a frame relay compatible 56.0 kbps, 64.0 kbps, 1.544 Mbps or 44.736 Mbps digital transport facility with a port on a frame relay switch. The Frame Relay access Connection includes the Telephone Company facility between the customer designated premises and the customer's serving wire center, the interoffice transport (if applicable) between the customer's serving wire center and a wire center equipped with a frame relay switch, and the end user port.

The end user port is a user-to-network interface which provides the lineside physical entry point into the Telephone Company frame relay network and permits FRAS compatible end user customer premises equipment (CPE) to originate or terminate an interstate access service. Connections between end user customer premises equipment and the Telephone Company frame relay switch are available at speeds of 56.0 kbps, 64.0 kbps, 1.544 Mbps or 44.736 Mbps. Each end user port requires the identification of a corresponding terminating port. All end user ports must be in conformance with the Technical References specified in (A), above.
16. **Public Packet Data Network (Cont'd)**

16.1 **Frame Relay Access Service (Cont'd)**

16.1.1 **General (Cont'd)**

(B) **Service Description (Cont'd)**

The Frame Relay Inter-network Connection combines a frame relay compatible 1.544 Mbps or 44.736 Mbps digital transport facility with a port on a frame relay switch. The Frame Relay Inter-network Connection includes the Telephone Company facility between the customer designated premises and the customer's serving wire center, the interoffice transport (if applicable) between the customer's serving wire center and a wire center equipped with a frame relay switch, and the inter-network customer port. The inter-network customer port is a network-to-network interface which provides the trunkside physical entry point into the Telephone Company frame relay network.

The inter-network customer port connects the Telephone Company frame relay switch and the access customer’s network. The inter-network customer port is offered at speeds of 1.544 Mbps or 44.736 Mbps. All inter-network customer ports must be in conformance with Telcordia Technologies, Inc. Technical Reference TR-TSV-001370, Issued May 1993.

The Telephone Company will provide the logical circuits required within its frame relay network to connect the ports or to connect a port with a DSL Access Service Connection Point. These logical circuits, or Permanent Virtual Connections (PVC), are software defined, end-to-end, bi-directional communications paths that are established and dis-established via the access service order process. While no physical circuits are dedicated, the two network addresses (one from each port) are connected electronically to form a PVC.

There are two types of PVCs available. The standard PVC establishes a communications path within the Telephone Company’s frame relay network between two ports or between a port and a DSL Access Service Connection Point. The extended PVC establishes a communications path on two interconnected telephone companies’ frame relay networks located in adjacent serving territories between two ports or between a port and a DSL Access Service Connection Point.
16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.1 General (Cont'd)

(B) Service Description (Cont'd)

At the time service is ordered the number of PVCs will be identified along with their Committed Information Rates. CIR is the bit rate at which the FRAS network commits to transfer data. Committed Information Rates provide for frame relay switch throughput at designated speeds (See Section 16.1.2(A)(3), following). This information is required for network routing purposes.

(C) Service Provided by More than One Telephone Company

There are two types of arrangements available for Frame Relay Access Service (FRAS) when the service is provided by more than one Telephone Company, i.e., Jointly-Provided FRAS and Interconnected FRAS as described below.

(1) Jointly-Provided FRAS

When the transport facility between the customer designated premises and a wire center equipped with a frame relay switch is provided by more than one Telephone Company, the Telephone Companies involved will provide a Special Access Service facility as set forth in Section 7 preceding, and in accordance with Sections 2.4.7 and 5.3, preceding.

Jointly-Provided FRAS service includes: the End User Port, the Inter-network Customer Port, and Permanent Virtual Connections (PVC) which have associated Committed Information Rates (CIRs). A Special Access Service facility is used to connect to the frame relay switch.

Connections are provided via Channel Termination(s) and Channel Mileage (See Section 7 Special Access Digital Data and High Capacity Services preceding).
16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.1 General (Cont'd)

(C) Service Provided by More than One Telephone Company (Cont'd)

(1) Jointly-Provided FRAS (Cont'd)

All regulations, rates and charges as specified in Section 7 will apply in addition to the rates and charges associated with FRAS. A generic view of jointly-provided FRAS is shown in Section 16.1.2(A), following.

The Telephone Company that provides the frame relay switch will bill an End User Port charge for the end user port connection and/or an Inter-network Customer Port charge for the inter-network customer port connection. The Special Access Service, End User Port and/or Inter-network Customer Port charge(s) will apply in lieu of the Frame Relay Access Connection or Frame Relay Inter-network Connection.

(2) Interconnected FRAS

Interconnected FRAS allows the Telephone Company to interconnect its frame relay network with another telephone company’s frame relay network. Interconnected FRAS provides connections between telephone companies in adjacent serving territories and in non-adjacent serving territories.
16. **Public Packet Data Network (Cont'd)**

16.1 **Frame Relay Access Service (Cont'd)**

16.1.1 **General (Cont'd)**

(C) **Service Provided by More than One Telephone Company (Cont'd)**

(2) **Interconnected FRAS (Cont'd)**

(a) **Adjacent Serving Territories**

In order to connect the Telephone Company’s frame relay switch to a frame relay switch of another telephone company that is located in an adjacent serving territory, the customer must order Extended Permanent Virtual Connections (EPVCs), which have associated CIRs. The EPVCs are in addition to the Frame Relay Access Connection (FRAC) and/or Frame Relay Inter-network Connection (FRIC) that are required to complete the connection from the Customer’s Designated Premises (CDP) to the Telephone Company’s frame relay switch. A generic view of Interconnected FRAS between adjacent serving territories is shown in Section 16.1.2 (A), following.

(b) **Non-Adjacent Serving Territories**

In order to connect the Telephone Company’s frame relay switch to a frame relay switch of another telephone company that is located in a non-adjacent serving territory, the customer must order Inter-network Customer Ports (ICPs) and a High Capacity Special Access Channel Mileage Facility to connect the two networks. These elements are in addition to the FRAC and/or the FRIC and the Standard Permanent Virtual Connections (SPVCs), which have associated CIRS that are required to complete the connection from the CDP to the Telephone Company’s ICP.
16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.1 General (Cont'd)

(C) Service Provided by More than One Telephone Company (Cont'd)

(2) Interconnected FRAS (Cont'd)

(b) Non-Adjacent Serving Territories (Cont’d)

Connections between the two Telephone Companies’ ICPs are provided using 1.544 Mbps and/or 44.736 Mbps High Capacity Channel Mileage Facility (See Section 7.10 High Capacity Special Access Services preceding). Channel Mileage Termination(s) do not apply. A generic view of Interconnected FRAS between non-adjacent serving territories is shown in Section 16.1.2(A), following.

(D) Ordering Options and Conditions

Frame Relay Access Service is ordered under the Access Order provisions set forth in Section 5 preceding. Also included in that section are other charges which may be associated with ordering FRAS (e.g., Service Date Change Charges, Cancellation Charges, etc.)

A minimum of two FRAS connections are required for data to be transported between customer-designated premises.

(E) Acceptance Testing

At no additional charge, the Telephone Company will, at the customer's request, cooperatively test at the time of installation.
16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.2 Rate Regulations

This section contains the specific regulations governing the rates and charges that apply for Frame Relay Access Service.

Frame Relay Access Service is available at the wire centers as identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4. In the case of Interconnected Frame Relay Access Service, NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4 also identifies the intermediate and super intermediate wire centers.

(A) Rate Categories

The following diagrams depict a generic view of the components of Frame Relay Access Service and the manner in which the components are combined to provide FRAS, Interconnected FRAS, and Jointly-Provided FRAS.

- **Frame Relay Access Service: Customer's Serving Wire Center is equipped with a frame relay switch**
16. **Public Packet Data Network (Cont'd)**

16.1 **Frame Relay Access Service (Cont'd)**

16.1.2 **Rate Regulations (Cont'd)**

(A) **Rate Categories (Cont'd)**

**RATE ELEMENTS**

- FRAC  Frame Relay Access Connection;
- SPVC  Standard Permanent Virtual Connection;
- FRIC  Frame Relay Inter-network Connection

- **Frame Relay Access Service: Customer’s Serving Wire Center is not equipped with a frame relay switch**

```
       Customer Designated Premises                      End User Serving Wire Center                      Access Customer Serving Wire Center                      Customer Designated Premises
       CDP                                              SWC                                              SWC                                              CDP
       FRAC                                             SPVC                                             FRIC

Interconnected FRAS Between Adjacent Serving Territories
```

```
       Customer Designated Premises                      End User Serving Wire Center                      Access Customer Serving Wire Center                      Customer Designated Premises
       CDP                                              SWC                                              SWC                                              CDP
       FRAC                                             EPVC                                             EPVC                                             FRIC
```

David Stoll  
Vice President/Chief Executive Officer  
123 W. Orchard Street, P.O. Box 127  
Delton, Michigan 49046  
(269) 623-2311  
dstoll@mei.net
16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.2 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

RATE ELEMENTS

- FRAC = Frame Relay Access Connection
- EPVC = Extended Permanent Virtual Connection
- FRIC = Frame Relay Inter-network Connection

* If EC A or EC B is a non-NECA company, the application of their charges will depend upon EC A or EC B's access tariff.

Jointly-Provided Frame Relay Access Service
16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.2 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

RATE ELEMENTS

(Special Access Service)

EC "A" • CT = Channel Termination
  • CMT = Channel Mileage Termination
  • CMF = Channel Mileage Facility

EC "B" • CMF = Channel Mileage Facility
  • CMF = Channel Mileage Facility

EC "C" • CT = Channel Termination
  • CMT = Channel Mileage Termination
  • CMF = Channel Mileage Facility

* If EC A, EC B or EC C is a non-NECA company, the application of their charges will depend upon EC A, EC B or EC C's access tariff.

Interconnected FRAS Between Non-Adjacent Serving Territories

![Diagram of interconnected FRAS between non-adjacent serving territories]

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16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.2 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

RATE ELEMENTS

(Special Access Service) (Frame Relay Access Service)

EC “A”-

-CMF = Channel Mileage Facility

FRAC = Frame Relay Access Connection
SPVC = Standard Permanent Virtual Connection
ICP = Inter-network Customer Port

EC “B”

-CMF = Channel Mileage Facility

FRIC = Frame Relay Inter-network Connection
SPVC = Standard Permanent Virtual Connection
ICP = Inter-network Customer Port

* If EC A or EC B is a non-NECA company, the application of their charges will depend upon EC A or EC B's access tariff.

(1) Frame Relay Access Connection

The Frame Relay Access Connection (FRAC) rate element recovers the costs associated with the communication path between the end user's premises and the Telephone Company wire center equipped with a frame relay switch. The FRAC includes the physical transmission facility between the customer designated premises and the customer's serving wire center, the interoffice transport (if applicable) between the customer's serving wire center and a wire center equipped with a frame relay switch, and the end user port on the Telephone Company's frame relay switch.
16. **Public Packet Data Network (Cont'd)**

16.1 **Frame Relay Access Service (Cont'd)**

16.1.2 **Rate Regulations (Cont'd)**

(A) **Rate Categories (Cont'd)**

1. **Frame Relay Access Connection (Cont’d)**

   One FRAC charge applies per customer designated premises at which the FRAS connection is terminated. This applies even if the customer designated premises and the frame relay switch are collocated in a Telephone Company building.

2. **Frame Relay Inter-network Connection**

   The Frame Relay Inter-network Connection (FRIC) rate element recovers the costs associated with the communication path between the access customer's premises and the Telephone Company wire center equipped with a frame relay switch. The FRIC includes the physical transmission facility between the customer designated premises and the customer's serving wire center, the interoffice transport (if applicable) between the customer's serving wire center and a wire center equipped with a frame relay switch, and the inter-network customer port on the Telephone Company's frame relay switch.

   One FRIC charge applies per customer designated premises at which the FRAS connection is terminated. This applies even if the customer designated premises and the frame relay switch are collocated in a Telephone Company building.
16. **Public Packet Data Network (Cont'd)**

16.1 **Frame Relay Access Service (Cont'd)**

16.1.2 **Rate Regulations (Cont'd)**

(A) **Rate Categories (Cont'd)**

(3) **End User Port**

An End User Port charge is applied as a discrete rate element in conjunction with jointly-provided Special Access Service. Refer to 7.9 and 7.10, preceding, for additional applicable rates and charges.

The End User Port is the physical location in the Telephone Company switching office where the transport facility of the customer connects to the FRAS Network. It specifies how a frame relay switch sends and receives data from a frame relay end user customer's LAN or other compatible CPE devices.

The End User Port consists of either a 56.0 kbps, 64.0 kbps, 1.544 Mbps or 44.736 Mbps interface. The port connecting the transport facility to the Telephone Company frame relay switch must be ordered and provided at the same speed as the associated transport facility.
16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.2 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(4) Inter-network Customer Port

An Inter-network Customer Port Charge is applied in conjunction with Jointly-Provided FRAS and Interconnected FRAS between non-adjacent serving territories. Refer to Section 7.10, preceding for additional applicable rates and charges for the High Capacity Special Access Service used in conjunction with these services.

The Inter-network Customer Port is the physical location in the Telephone Company switching office where the access customer's transport facility connects to the Telephone Company's FRAS network. It specifies how a frame relay switch sends and receives data from a frame relay access customer's network.

The Inter-network Customer Port is offered at speeds of 1.544 Mbps or 44.736 Mbps. The port connecting the transport facility to the Telephone Company frame relay switch must be ordered and provided at the same speed as the associated transport facility.
16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.2 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(5) Permanent Virtual Connection (PVC)

A PVC is a software defined communications path between two port connections or between a port connection and a DSL Access Service Connection Point. Each PVC is provisioned with a customer selected Committed Information Rate. The CIR is a transmission speed specified by the customer. CIRs range from 8 kbps to 768 kbps. The Telephone Company will provide switch capacity to permit the customer to transmit information with guaranteed delivery at the specified CIR.

The Telephone Company will permit customers to attempt to transmit beyond the specified CIR up to the actual throughput speed of the port with no guarantee of completion. Attempted transmissions above the actual throughput speed of the port will not be permitted. Customers will be permitted to order multiple PVCs on a given port subject to switch limitations. Customers anticipating non-simultaneous transmission may order CIRs assigned to these multiple PVCs, the sum of which may theoretically exceed the actual throughput of the port. However, when simultaneous transmission of multiple PVCs occurs, the total of the transmission rate (CIRs) may not exceed the actual throughput of the port.

There are two types of PVCs available. The standard PVC establishes a communications path within the Telephone Company’s frame relay network between two ports or between a port and a DSL Access Service Connection Point. The extended PVC establishes a communications path on two interconnected telephone companies’ frame relay networks located in adjacent serving territories between two ports or between a port and a DSL Access Service Connection Point.
16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.2 Rate Regulations (Cont'd)

(B) Types of Rates and Charges

There are two types of rates and charges. They are monthly rates and nonrecurring charges. The rates and charges are described as follows:

(1) Monthly Rates

Monthly rates are recurring rates that apply each month or fraction thereof that a FRAS is provided. For billing purposes, each month is considered to have 30 days.

(2) Nonrecurring Charges

Nonrecurring charges are one-time charges that apply for specific work activity (i.e., installation or change to an existing service). The types of nonrecurring charges that apply for FRAS are: installation of service and service rearrangements. These charges are in addition to the Access Order Charge as specified in 17.4.1 following:

(a) Installation of Service

Nonrecurring charges apply for the installation of Frame Relay Access Connections (FRAC), Frame Relay Inter-network Connections (FRIC), and Permanent Virtual Connections (PVC).

A nonrecurring charge applies per FRAC or FRIC installed and is based on the speed of the connection.

A nonrecurring charge applies per PVC installed.
16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.2 Rate Regulations (Cont'd)

(B) Types of Rates and Charges (Cont'd)

(2) Nonrecurring Charges (Cont'd)

(b) Service Rearrangements

Service Rearrangements are changes to existing (installed) services.

A PVC Rearrangement Charge will be applied whenever a change is made to the CIR of existing PVC after initial port installation and/or a change is made to the terminating port destination of the PVC.

Administrative changes will be made without charge(s) to the customer. Administrative changes are as follows:

- Change of customer name,
- Change of customer or customer's end user premises address when the change of address is not a result of physical relocation of equipment,
- Change in billing data (name, address, or contact name or telephone number),
- Change of agency authorization,
- Change of customer circuit identification,
- Change of billing account number,
- Change of customer or customer's end user contact name or telephone number, and
- Change of jurisdiction.

(c) Moves

A move involves a change in the physical location of one of the following:

- The Point of Termination at the customer's premises
- The customer's premises
16. **Public Packet Data Network (Cont'd)**

16.1 **Frame Relay Access Service (Cont'd)**

16.1.2 **Rate Regulations (Cont'd)**

(B) **Types of Rates and Charges (Cont'd)**

(2) **Nonrecurring Charges (Cont'd)**

(c) **Moves (Cont'd)**

The charges for the move are dependent on whether the move is to a new location within the same building or to a different building.

(i) **Moves Within the Same Building**

When the move is to a new location within the same building, the charge for the move will be an amount equal to one half of the nonrecurring (i.e., installation) charge for the service termination affected. There will be no change in the minimum period requirements. This charge is in addition to the Access Order Charge as specified in 17.4.1 following.

(ii) **Moves To a Different Building**

Moves to a different building will be treated as a discontinuance and start of service and all associated nonrecurring charges will apply. New minimum period requirements will be established for the new services. The customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued service.

(C) **Minimum Period**

The minimum period for FRAS is one month and the full monthly rate will apply to the first month. Adjustments for quantities of services established or discontinued in any billing period beyond the minimum period are as set forth in 2.4.1(F) preceding. The minimum period for discounted FRAS is twelve months as set forth in 2.4.2 and 5.5.1 preceding.
16. Public Packet Data Network (Cont’d)

16.1 Frame Relay Access Service (Cont’d)

16.1.3 Optional Rate Plans

A Term Discount plan is available for Frame Relay Access Service (FRAS). The Term Discount applies to the Frame Relay Access Connection and Frame Relay Inter-network Connection charges. The End User Port and Inter-network Customer Port charges are eligible for term discounts where the associated Special Access Service facility is eligible for a Special Access Service Term Discount.

The conditions under which End User Port and Inter-network Customer Port Term Discounts apply are specified in 7.2.8(A)(1) preceding while the Term Discount percentage is as set forth in 17.4.8(A)(5) following. The Permanent Virtual Connections (PVC) are not eligible for a Term Discount. Under the Term Discount plan, the current monthly rates for eligible services are reduced by a fixed percentage. The amount of the discount percentage differs based on the length of the service commitment period selected by the customer. The Term Discount percentages for FRAS are as set forth in 17.4.8(A)(5) following.

Discounts for the Term Discount plan are only applied to FRAS provided to a customer within the same state and LATA by the same Telephone Company.

The Term Discount Optional Rate Plan is only available from those Telephone Companies listed in 17.3.10(A)(1), following.

The minimum service period on a month-to-month basis is one month. Under an Optional Rate Plan, the minimum service period is twelve months.
16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.3 Optional Rate Plans (Cont'd)

(A) Term Discounts

FRAS may be ordered at the customer's option on a month-to-month basis or for Term Discount periods of 36 months (3 years) or 60 months (5 years).

The minimum service period for all Term Discount plans is twelve months. The customer must specify the length of the service commitment period at the time the service is ordered.

For customers that subscribe to the Term Discount plan for 36 or 60 months, the Term Discount percentage as set forth in 17.4.8(A)(5) following will be frozen from Company initiated decreases for the entire discount period at the percent in effect at the beginning of the Term Discount period.
16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.3 Optional Rate Plans (Cont'd)

(A) Term Discounts (Cont'd)

If a Term Discount Percentage increase occurs during the term of an existing Term Discount plan, the increased percentage will be applied automatically to the remainder of the current Term Discount period.

At the end of the Term Discount period, the customer may convert to month-to-month service or subscribe to a new Term Discount plan. If the customer does not make a choice by the end of the discount period, the rates will automatically convert to month-to-month service rates.

To be included in a Term Discount plan, all eligible FRAS rate elements must be ordered for the same commitment term (i.e., all 36 months or all 60 months) and with the same service date. When additional capacity is subsequently added, it will be available only on a month-to-month basis unless the discount period of the entire service is upgraded.

Eligible FRAS rate elements are those provided to a customer within the same state and LATA by the same Telephone Company. As long as the number of FRAS connections included in a Term Discount plan remains constant, customer requests to install and disconnect FRAS connections, including changes affecting different wire centers and/or customer designated premises, will not change the current Term Discount period or the minimum service period, and Discontinuance of Service charges as set forth in (3) following will not apply.
16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.3 Optional Rate Plans (Cont'd)

(A) Term Discounts (Cont'd)

(1) Upgrades in Term Discounts

Services provided under month-to-month rates or Term Discount rates may be upgraded to a Term Discount plan at any time without incurring FRAS nonrecurring charges or discontinuance charges for existing services. The new Term Discount plan must meet or exceed the service term of the plan being upgraded. For example, a service with a 36 month commitment period may be upgraded to a new 36 month or 60 month service period. The monthly rates will be those that are in effect at the time the service is upgraded. A new minimum service period applies to all FRAS that is upgraded.
16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.3 Optional Rate Plans (Cont'd)

(A) Term Discounts (Cont'd)

(2) Upgrades in Capacity

If the customer chooses to upgrade a service under the Term Discount plan to a higher capacity (e.g., from 56.0 kbps to 64.0 kbps or from 56.0 kbps or 64.0 kbps to 1.544 Mbps), discontinuance charges will not apply, provided all the following conditions are met:

- the customer's order for the disconnect of the existing service and the installation of the new service are received at the same time and specifically reference the application of upgrade in capacity,

- the customer's disconnect order for the existing service must reference the service installation order,

- the new service has a total capacity greater than the total capacity of the service being discontinued and,

- the new Term Discount period meets or exceeds the Term Discount period being discontinued.

A new minimum service period applies to all upgrades. A Frame Relay Access Connection nonrecurring charge for an equivalent capacity of the existing services being upgraded to the higher speed service will not be assessed. FRAC nonrecurring charges will not apply to the upgraded lower speed services placed on the higher speed service if requested at the same time as the upgrade request. Nonrecurring charges will apply for capacity that exceeds the existing equivalent capacity.
16. Public Packet Data Network (Cont'd)

16.1 Frame Relay Access Service (Cont'd)

16.1.3 Optional Rate Plans (Cont'd)

(A) Term Discounts (Cont'd)

(2) Upgrades in Capacity (Cont'd)

Discontinuance charges will not apply should the customer choose to upgrade either a portion of or the entire FRAS under the Term Discount plan and move the service to a new customer location(s) within the same state and LATA where service is provided by the same Telephone Company.

(3) Discontinuance of Service

If the customer chooses to disconnect all or a portion of the service prior to the expiration of the Term Discount period, discontinuance charges will apply to the portion of the service being discontinued.

Should the customer choose to discontinue a Term Discount plan prior to the completion of the minimum service period, discontinuance charges will apply. Discontinuance charges equal to one-hundred percent of the total undiscounted monthly rates, less any amounts previously paid, will apply for the minimum service period. Additionally, discontinuance charges of fifteen percent of the total undiscounted monthly charges will apply to the remaining portion of the discount service term.

Should the customer choose to discontinue service ordered under a Term Discount plan after the minimum service period but before the completion of the discount period, discontinuance charges will apply. Discontinuance charges of fifteen percent of the total undiscounted monthly charges will apply to the remaining portion of the discount period. For example, a customer has a 1.544 Mbps Frame Relay Access Connection which it chooses to discontinue after 33 months into a 60-month service term. The discontinuance charge would be $0.15 \times 27$ months times the undiscounted monthly rates for that service.
16. Public Packet Data Network (Cont'd)

16.2 Asynchronous Transfer Mode Cell Relay Access Service

16.2.1 General

Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS) is a connection-oriented transport service that is based on Asynchronous Transfer Mode (ATM) technology using fixed length, 53-byte cells. ATM cells generated by ATM-compatible customer premises equipment (CPE) are transmitted through the Telephone Company’s ATM-CRS network to a pre-specified destination.

ATM-CRS provides customers requiring high-speed data transport for bandwidth intensive data, voice or video applications with the ability to interconnect multiple locations using the Telephone Company’s ATM-CRS network. The customer may use ATM-CRS to interconnect its customer designated premises (CDPs) served by the Telephone Company’s ATM-CRS network, to interconnect its local area network (LAN) to the Telephone Company’s ATM-CRS network and/or to interconnect its CDPs to an ATM network located outside of the Telephone Company’s serving territory.

16.2.2 Service Description

ATM-CRS is provided using a combination of Ports, Virtual Paths and Virtual Circuit Channels. An ATM-CRS Port is required to provide the interface into the Telephone Company’s ATM-CRS network. A Virtual Path (VP) is required to establish a transmission path between any two ATM-CRS Ports. Virtual Circuit Channels (VCCs) may be ordered from the Telephone Company to establish a communications path between any two CDPs or established by the customer using its own equipment.

Service is provided, where available, between CDPs and designated Telephone Company Serving Wire Centers (SWCs). ATM-CRS will be furnished where suitable facilities exist as determined by the Telephone Company. The Telephone Company will identify its ATM-CRS equipped Serving Wire Centers in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. Tariff F.C.C. No. 4.
16. Public Packet Data Network (Cont'd)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)

16.2.2 Service Description (Cont'd)

Rates and charges for ATM-CRS are specified in Section 17.4.8(B), following. The Telephone Company specific rate band assignment for the ATM-CRS rate elements is specified in the Special Access (SPA) column in Section 17.5.1, following. The application of rates and charges for ATM-CRS is described later in this section.

16.2.3 Obligations of the Customer

In addition to the regulations described in other sections of this tariff, the following provisions apply to ATM-CRS:

(A) The customer is responsible for providing the Telephone Company with the necessary information to provision ATM-CRS as specified in Section 5.2 Ordering Requirements, preceding.

(B) The customer is responsible for providing and maintaining all required customer premises equipment (CPE), which is compatible with ATM-CRS and complies with the standards specified in the following publications: The ATM Forum Technical Committee ATM User-Network Interface (UNI) Signalling Specification (Version 4.0), Private Network-Network Interface Specification (Version 1.0) and BISDN Inter Carrier Interface (B-ICI) Specification (Version 2.0). A customer ordering Ethernet-based ATM-CRS Ports is also responsible for ensuring that its CPE complies with the standards specified in Technical Reference IEEE Std. 802.3-2008, Part 3, Section 1, Clause 15 for 10BASE-F, Section 2, Clause 26 for 100BASE-F, and Section 3, Clauses 34 through 38 for 1000BASE-X connections.

A customer ordering the ATM-CRS Port Internet Protocol (IP) Function is also responsible for ensuring that its CPE hands off IP packets to the Telephone Company’s ATM-CRS network in a format that complies with the standards specified in the Internet Engineering Task Force Request For Comments (RFC) 791 entitled “INTERNET PROTOCOL, DARPA Internet Program Protocol Specification” (September 1981) and RFC 1483 entitled “Multiprotocol Encapsulation over ATM Adaptation Layer 5” (July 1993).
16. **Public Packet Data Network (Cont'd)**

16.2 **Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)**

16.2.4 **Rate Regulations**

This section contains the regulations governing the rates and charges that apply for ATM-CRS. Regulations governing the rates and charges for Special, ADSL and/or SDSL Access Services provided under this tariff used in conjunction with ATM-CRS are as specified in Sections 7 and 8, preceding.

The following diagrams depict generic views of the components of ATM-CRS. In the first figure, all of the customer’s CDPs are served by ATM-CRS equipped SWCs. The ATM-CRS customer orders the applicable ATM-CRS components pursuant to the provisions specified in this section and the applicable Special Access Service components pursuant to the provisions specified in Section 7, preceding.
16. **Public Packet Data Network (Cont'd)**

   16.2 **Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)**

   16.2.4 **Rate Regulations (Cont’d)**

**Figure 1**
16. Public Packet Data Network (Cont'd)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)

16.2.4 Rate Regulations (Cont'd)

In the second figure, one of the customer’s CDPs is not served by an ATM-CRS equipped SWC. The ATM-CRS customer orders the applicable ATM-CRS components pursuant to the provisions specified in this section and the applicable Special Access Service components pursuant to the provisions specified in Section 7, preceding.

Figure 2
16. Public Packet Data Network (Cont'd)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)

16.2.4 Rate Regulations (Cont'd)

In the third figure, one of the customer's CDPs is served by another telephone company's ATM network. The ATM-CRS customer orders the applicable ATM-CRS components from the Telephone Company pursuant to the provisions specified in this section and the applicable Special Access Service components pursuant to the provisions specified in Section 7, preceding. In addition, the customer will order the applicable ATM and special access services components from the distant telephone company.

Figure 3

*If EC B is a non-NECA company, the application of charges will depend on its access tariff.
16. Public Packet Data Network (Cont'd)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)

16.2.4 Rate Regulations (Cont'd)

(A) Rate Categories

The various ATM-CRS service components are described below.

(1) ATM-CRS Ports

An ATM-CRS Port receives ATM cells from the customer’s ATM-compatible CPE, validates the addressing parameters contained in the cell headers, and transmits the cells into the ATM-CRS network. The ATM-CRS Port also receives ATM cells from the Telephone Company’s ATM-CRS network or from an ATM network located outside of the Telephone Company’s serving territory, validates the addressing parameters contained in the cell headers, and transmits the cells to the pre-designated CDP. ATM-CRS Ports are available with a User Network Interface (UNI) or a Network to Network Interface (NNI) as described below. Each ATM-CRS Port must be associated with a minimum of one ATM-CRS Virtual Path or DSL Access Service Connection optional function.

Interconnection of the Telephone Company’s ATM-CRS network to another ATM network located outside of the Telephone Company’s serving territory is provided using ATM-CRS Basic NNI ports and Telephone Company provided Special Access Services.

(a) Basic User Network Interface (UNI) Port

Basic UNI Ports provide a port only interface to the Telephone Company’s ATM-CRS network and do not include the required transport facility between the CDP and the Telephone Company’s SWC at which the basic UNI Port is located. Transport to connect the CDP with the basic UNI Port is provided using Telephone Company provided DS1 or DS3 High Capacity and/or OC3 or OC12 Synchronous Optical Channel Special Access Services as described in Sections 7.10 and 7.11, preceding. Basic UNI Ports are available at bandwidth speeds of 1.544 Mbps, 44.736 Mbps, 155.52 Mbps and 622.08 Mbps.
16. Public Packet Data Network (Cont'd)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)

16.2.4 Rate Regulations (Cont’d)

(A) Rate Categories (Cont'd)

(1) ATM-CRS Ports (Cont'd)

(b) Ethernet-based User Network Interface (UNI) Port

Ethernet-based UNI Ports are used to interconnect the customer’s Ethernet-compatible CPE with the Telephone Company’s ATM-CRS network and include the transport facility between the CDP and the Telephone Company’s SWC, provided that the CDP is served by the SWC in which the Ethernet-based UNI Port is located. Ethernet-based UNI Ports are available at bandwidth speeds of up to 10 Mbps (i.e., 10BASE-F), up to 100 Mbps (i.e., 100BASE-F) and up to 1 Gbps (i.e., 1000BASE-X).

(c) Basic Network to Network Interface (NNI) Port

Basic NNI Ports provide a port only interface to the Telephone Company’s ATM-CRS network and do not include the required transport facility between the CDP and the Telephone Company’s SWC at which the basic NNI Port is located. Transport to connect the CDP with the basic NNI Port is provided using Telephone Company provided DS1 or DS3 High Capacity and/or OC3 or OC12 Synchronous Optical Channel Special Access Services as described in Sections 7.10 and 7.11, preceding. Basic NNI Ports are available at bandwidth speeds of 1.544 Mbps, 44.736 Mbps, 155.52 Mbps and 622.08 Mbps.
16. **Public Packet Data Network** (Cont’d)

16.2 **Asynchronous Transfer Mode Cell Relay Access Service** (Cont’d)

16.2.4 **Rate Regulations** (Cont’d)

(A) **Rate Categories** (Cont’d)

(1) **ATM-CRS Ports** (Cont’d)

(d) **Ethernet-based Network to Network Interface (NNI) Port**

Ethernet-based NNI Ports are used to interconnect the customer’s Ethernet-compatible CPE with the Telephone Company’s ATM-CRS network and include a fiber only connection between the CDP and the Telephone Company’s SWC, provided that the CDP is served by the SWC in which the Ethernet-based NNI Port is located. Ethernet-based NNI Ports are available at bandwidth speeds of up to 10 Mbps (i.e., 10BASE-F), up to 100 Mbps (i.e., 100BASE-F) and up to 1 Gbps (i.e., 1000BASE-X).

Monthly and nonrecurring charges apply for each ATM-CRS Port ordered.
16. Public Packet Data Network (Cont'd)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)

16.2.4 Rate Regulations (Cont’d)

(A) Rate Categories (Cont'd)

(2) ATM-CRS Virtual Paths

An ATM-CRS Virtual Path (VP) is a pre-defined, logical circuit established by the Telephone Company that is required to route ATM cells between any two ATM-CRS Ports located within the Telephone Company’s ATM-CRS network. VPs may be established between two ATM-CRS UNI Ports, between an ATM-CRS UNI Port and an ATM-CRS NNI Port, or between two ATM–CRS NNI Ports. VPs are available in increments of 1 Mbps. The bandwidth capacity on a VP may not exceed the maximum bandwidth of the associated ATM-CRS Ports. In addition to specifying the bandwidth capacity required on its order, the customer must specify one of the following traffic routing prioritization parameters for each VP ordered.

(a) Constant Bit Rate (CBR)

CBR supports applications that require special network timing and minimal delay to ensure steady data flow of user information through the ATM-CRS network. Examples of applications requiring CBR include voice, some types of video and circuit emulation for higher speed special access services. CBR is the highest priority traffic on the network.

(b) Variable Bit Rate – real time (VBR-rt)

VBR-rt supports applications for which the data flow is bursty and requires low delay variance in ATM cell transmissions. Examples of applications requiring VBR-rt include voice and video.
16. Public Packet Data Network (Cont'd)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)

16.2.4 Rate Regulations (Cont’d)

(A) Rate Categories (Cont'd)

(2) ATM-CRS Virtual Paths (Cont'd)

(c) Variable Bit Rate – non real time (V BR-nrt)

VBR-nrt supports applications for which the data flow is bursty and variable delays in ATM cell transmissions can be tolerated. Examples of applications requiring VBR-nrt include file transfer, multimedia and computer aided design/computer aided manufacturing (CAD/CAM).

(d) Unspecified Bit Rate (UBR)

UBR supports applications for which the data flow is bursty and delay tolerant using "best effort" engineering. The Telephone Company will attempt to deliver all ATM cells received on a UBR VP, however, network congestion may result in a loss of ATM cells. Examples of applications requiring UBR include interactive data sessions, file transfers, monitoring and signaling.

Monthly and nonrecurring charges apply for each VP ordered. The monthly recurring charge is comprised of a fixed path charge and a variable bandwidth capacity charge, which is calculated based on the total bandwidth of the VP. For example assuming a Special Access (SPA) rate band assignment of 3, the monthly charge for a single 145 Mbps VBR-rt path would equal $1,715.83 ($3.38 fixed plus $11.81 per Megabit).
16. Public Packet Data Network (Cont'd)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)

16.2.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(3) ATM-CRS Virtual Circuit Channels (VCCs)

An ATM-CRS Virtual Circuit Channel (VCC) is a pre-defined logical circuit used to route ATM cells between any two CDPs served by the telephone Company's ATM-CRS network. VCCs may be established by the customer using its CPE or by the Telephone Company in its ATM-CRS network via the service order process.

Monthly and nonrecurring charges apply for each VCC ordered by the customer. Rates and charges specified in Section 17.4.8(B)(3), following, do not apply to VCCs established by the customer.

(4) Optional Features and Functions

(a) DSL Access Service Connection

Where available, ATM-CRS UNI and/or NNI Ports may be equipped with the DSL Access Service Connection function. This function provides for ADSL Access Service as described in Section 8.1, preceding, and with SDSL Access Service as described in Section 8.2, preceding, provided by the Telephone Company under this the interconnection of ATM-CRS with this Tariff.

The function also provides for the interconnection of ATM-CRS with a wireline broadband Internet transmission service provided on a non-tariffed, common carrier basis. This optional function allows the ATM-CRS customer to receive ADSL, SDSL, and/or wireline broadband Internet transmission service data traffic from and transmit ADSL, SDSL, and/or wireline broadband Internet transmission service data traffic to its end user customers using a UBR traffic routing prioritization parameter.
16. Public Packet Data Network (Cont'd)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)

16.2.4 Rate Regulations (Cont’d)

(A) Rate Categories (Cont’d)

(4) Optional Features and Functions (Cont’d)

(a) DSL Access Service Connection (Cont’d)

It is available only at Telephone Company designated DSL Access Service Connection Point SWCs located within the Telephone Company’s serving territory. The speed of the DSL Access Service Connection function ordered by the customer may not exceed the speed of the associated ATM-CRS Port.
16. Public Packet Data Network (Cont'd)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)

16.2.4 Rate Regulations (Cont’d)

(A) Rate Categories (Cont'd)

(4) Optional Features and Functions (Cont'd)

(a) DSL Access Service Connection (Cont'd)

A nonrecurring charge applies per port to equip the ATM-CRS UNI or NNI Port with the DSL Access Service Connection function.

(i) A customer that requires a VBR-nrt traffic routing prioritization parameter may also order a DSL VCC between its CDP and the premises of its end user customer, provided such end user customer’s premises is equipped with ADSL and/or SDSL Access Service provided by the Telephone Company under this tariff as described in Sections 8.1 and 8.2, preceding.

Each DSL VCC is available with a maximum bandwidth capacity of 1 Mbps, however, the maximum speed to or from the ADSL and/or SDSL Access Service customer will not exceed the maximum peak speeds for the services as specified in Sections 8.1 and is responsible for specifying in its order the premises locations and number of DSL VCCs it wants established to each of its end user customers. Monthly and nonrecurring charges apply to each DSL VCC established by the Telephone Company. The DSL VCC charges apply in addition to the nonrecurring charge for equipping the ATM-CRS UNI or NNI Port with the DSL Access Service Connection function.
ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)

16.2.4 Rate Regulations (Cont’d)

(A) Rate Categories (Cont'd)

(4) Optional Features and Functions (Cont'd)

(a) DSL Access Service Connection (Cont'd)

(ii) Where suitable facilities exist, a customer that requires the ability to send high speed multimedia transmissions may also order a MultiMedia VCC (MM-VCC) between its CDP and the premises of its end user customer, provided such end user customer’s premises is equipped with ADSL Access Service provided by the Telephone Company under this tariff as described in Section 8.1, preceding. The MM-VCC is available in increments of 1 Mbps, or 4 Mbps.

The customer is responsible for specifying in its order the premises locations and the capacity of each MM-VCC. Transmission speed across the MM-VCC is not guaranteed and may be affected by factors that affect the actual speeds delivered, including the ADSL Access Service customer’s distance from the Telephone Company Serving Wire Center, condition of the facilities, and any capacity limitations in the ATM-CRS customer’s network design. Monthly and nonrecurring charges apply to each MM-VCC established by the Telephone Company. The MM-VCC charges apply in addition to the nonrecurring charge for equipping the ATM-CRS UNI or NNI Port with the DSL Access Service Connection function.
16. Public Packet Data Network (Cont’d)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont’d)

16.2.4 Rate Regulations (Cont’d)

(A) Rate Categories (Cont’d)

(4) Optional Features and Functions (Cont’d)

(a) DSL Access Service Connection (Cont’d)

(ii) (Cont’d)

When a customer elects to change the bandwidth capacity of an existing MM-VCC or to remove an existing MM-VCC from an associated ADSL Access Service line, the MM-VCC nonrecurring charge specified in Section 17.4.8(B)(4)(a)(iv), will not apply. In lieu of such charge, the MM-VCC Design Change Charge will apply, as specified in Section 16.2.4 (B)(2)(d), following.

When a customer disconnects a MM-VCC and the associated ADSL Access Service line at the same time, neither the MM-VCC nonrecurring charge or MM-VCC Design Change Charge will apply.
16. Public Packet Data Network (Cont'd)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)

16.2.4 Rate Regulations (Cont’d)

(A) Rate Categories (Cont'd)

(4) Optional Features and Functions (Cont'd)

(b) ATM-CRS Port Internet Protocol (IP) Function

Where available, ATM-CRS UNI and/or NNI Ports may be equipped with the ATM-CRS Port Internet Protocol (IP) Function. This non-chargeable optional function allows the customer to transmit IP packets, which were formatted by the customer’s CPE in conformance with the standards specified in the Internet Engineering Task Force Request For Comments (RFC) 791 entitled “INTERNET PROTOCOL, DARPA Internet Program Protocol Specification” (September 1981) and RFC 1483 entitled “Multiprotocol Encapsulation over ATM Adaptation Layer 5” (July 1993), through the Telephone Company’s ATM-CRS network. Monthly and nonrecurring charges do not apply to the ATM-CRS Port IP Function. When this function is installed subsequent to the installation of the ATM-CRS Port or removed from an existing ATM-CRS Port, an Access Order Charge as specified in Section 17.4.1, following, will apply per order.
16. Public Packet Data Network (Cont’d)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont’d)

16.2.4 Rate Regulations (Cont’d)

(B) Types of Rates and Charges

There are two types of rates and charges. They are monthly rates and nonrecurring charges. The rates and charges are described below:

(1) Monthly Rates

Monthly rates are recurring rates that apply each month or fraction thereof that an ATM-CRS service component is provided. For billing purposes, each month is considered to have 30 days.
16. **Public Packet Data Network (Cont'd)**

16.2 **Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)**

16.2.4 **Rate Regulations (Cont’d)**

(B) **Types of Rates and Charges (Cont'd)**

(2) **Nonrecurring Charges**

Nonrecurring charges are one-time charges that apply for specific work activity (i.e., installation or change to an existing service). The types of nonrecurring charges that apply for ATM-CRS are installation of service, service rearrangements, moves and MM-VCC Design Changes. Except as specified below, these charges are in addition to the Access Order Charge as specified in Section 17.4.1, following.

(a) **Installation of Service**

Nonrecurring charges apply for installation of Ports, VPs, VCCs, and Optional Features and Functions ordered by the customer.

(b) **Service Rearrangements**

Service rearrangements are changes to existing (i.e., installed) services, which may be administrative only in nature as set forth below or, that involve an actual physical change to the service.

The VP nonrecurring charge will apply per VP to change the bandwidth capacity and/or to change the traffic routing prioritization parameter on an existing VP.
16. Public Packet Data Network (Cont'd)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)

16.2.4 Rate Regulations (Cont’d)

(B) Types of Rates and Charges (Cont'd)

(2) Nonrecurring Charges (Cont’d)

(b) Service Rearrangements (Cont'd)

Administrative changes will be made without charge(s) to the customer. Administrative changes are as follows:

- Change of customer name;
- Change of customer or customer’s end user premises address when the change of address is not a result of physical relocation of equipment;
- Change in billing data (name, address, or contact name or telephone number);
- Change of agency authorization;
- Change of customer circuit identification;
- Change of billing account number;
- Change of customer or customer’s end user contact name or telephone number; and
- Change of jurisdiction

(c) Moves

A move involves a change in the physical location of one of the following:

- The Point of Termination at the customer’s premises;
- The customer’s premises

David Stoll
Vice President/Chief Executive Officer
123 W. Orchard Street, P.O. Box 127
Delton, Michigan 49046
(269) 623-2311
dstoll@mei.net
16. Public Packet Data Network (Cont'd)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)

16.2.4 Rate Regulations (Cont’d)

(B) Types of Rates and Charges (Cont’d)

(2) Nonrecurring Charges (Cont’d)

(c) Moves (Cont’d)

The charges for moving ATM-CRS service components are dependent on whether the move is to a different location within the same building, to a different building within the same SWC, or to a different building in a different SWC. The charges specified below apply in addition to any applicable charges for moving the associated Special Access Services as specified in Section 7.2.3, preceding.

(i) Moves Within the Same Building

Port only interfaces (i.e., Basic UNI/NNI Ports), VPs and VCCs are not impacted when a customer moves its Point of Termination to a different location within the same building. The charge for moving an Ethernet-based UNI or Ethernet-based NNI Port within the same building will be an amount equal to one half of the nonrecurring (i.e., installation) charge for the port. There will be no change in the minimum period requirements.

(ii) Moves To a Different Building Within the Same SWC

Port only interfaces (i.e., Basic UNI/NNI Ports), VPs and VCCs are not impacted when a customer moves its Point of Termination to a different building within the same SWC. The move of an Ethernet-based UNI or Ethernet-based NNI Port within the same SWC will be treated as a Port discontinuance and start of service. Associated nonrecurring (i.e., installation) charges will apply.
16. Public Packet Data Network (Cont'd)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)

16.2.4 Rate Regulations (Cont’d)

(B) Types of Rates and Charges (Cont’d)

(2) Nonrecurring Charges (Cont’d)

(c) Moves (Cont’d)

(ii) Moves To a Different Building Within the Same SWC (Cont'd)

New minimum period requirements will be established for the new services. The customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued service.

(iii) Moves to a Different Building in a Different SWC

A move to a different building in a different SWC will be treated as a discontinuance and start of service of all associated ATM-CRS service components. Associated nonrecurring (i.e., installation) charges will apply. New minimum period requirements will be established for the new services. The customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued service.
16. Public Packet Data Network (Cont'd)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)

16.2.4 Rate Regulations (Cont’d)

(B) Types of Rates and Charges (Cont'd)

(2) Nonrecurring Charges (Cont'd)

(d) MM-VCC Design Changes

The MM-VCC Design Change Charge specified in Section 17.4.8(B)(4)(a)(v), following, will apply per MM-VCC, when the customer elects to change the bandwidth capacity of an existing MM-VCC or to remove an existing MM-VCC from an associated ADSL Access Service line. Access Order Charges will not apply when MM-VCC Design Change Charges are applicable.

(C) Minimum Periods

The minimum period for ATM-CRS service components provided to a customer and for which charges are applicable are:

- Twelve months for ATM-CRS Ports;
- One month for ATM-CRS Virtual Paths and Virtual Circuit Channels

When a customer replaces its existing ATM-CRS service with a new Ethernet Transport Service provided pursuant to Section 16.3, following, the Telephone Company will waive any unsatisfied minimum period charges that may otherwise be applicable.
16. Public Packet Data Network (Cont'd)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)

16.2.5 ATM-CRS Term Discount Plan

An optional term discount plan is available for Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS). Under the ATM-CRS Term Discount Plan, the monthly rates for eligible ATM-CRS service elements are reduced by a fixed percentage. The amount of the discount percentage differs based on the length of the term commitment period selected by the ATM-CRS customer.

ATM-CRS may be ordered at the customer’s option on a month-to-month basis or, under a single term commitment period of either 36 months or 60 months. The customer must notify the Telephone Company in writing of the length of its selected term commitment period. For purposes of this plan, all ATM-CRS Basic User Network Interface (UNI), ATM-CRS Basic Network to Network Interface (NNI), ATM-CRS Ethernet-based UNI and ATM-CRS Ethernet-based NNI Ports included in a customer’s ATM-CRS Term Discount Plan are referred to as committed ATM-CRS Ports.

To be included in an ATM-CRS Term Discount Plan, all committed ATM-CRS Ports must be ordered for the same term commitment period (i.e., all 36 months or all 60 months) and remain in-service at the same bandwidth capacity throughout the entire term commitment period. ATM-CRS Ports installed after the establishment of the customer’s ATM-CRS Term Discount Plan may be ordered on a month-to-month basis or added as additional committed ATM-CRS Ports to a customer’s existing term commitment period as described in (A), below.

Access Order Charges as described in Section 5.4.1, preceding, do not apply to establish a new or make any changes to an existing ATM-CRS Term Discount Plan.
16. Public Packet Data Network (Cont'd)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)

16.2.5 ATM-CRS Term Discount Plan (Cont’d)

The monthly rates for ATM-CRS service elements are set forth in Section 17.4.8(B), following. The term discount percentages for the ATM-CRS Term Discount Plan are set forth in Section 17.4.8(B)(5), following. The ATM-CRS Term Discount Plan is only available from those Telephone Companies listed in Section 17.3.10(A)(1), following.

The term discount percentage for the customer’s selected term commitment period applies to all committed ATM-CRS Ports provided within the Telephone Company’s operating territory. The term discount percentage also applies to the following eligible ATM-CRS elements when these elements are provided within the Telephone Company’s operating territory and associated with a committed ATM-CRS Port: 1) ATM-CRS Virtual Paths (VPs); 2) ATM-CRS Virtual Circuit Channels (VCCs); 3) ATM-CRS Digital Subscriber Line VCCs (DSL VCCs); and 4) ATM-CRS MultiMedia VCCs (MM-VCCs). Since there are no bandwidth or in-service requirements for ATM-CRS VPs, ATM-CRS VCCs, ATM-CRS DSL VCCs and ATM-CRS MM-VCCs associated with committed ATM-CRS Ports under the ATM-CRS Term Discount Plan, customer ordered disconnects of or changes to the number or bandwidth capacities for these elements do not affect the customer’s ATM-CRS Term Discount Plan.

The term discount percentage does not apply to: 1) ATM-CRS Ports ordered on a month-to-month basis; 2) ATM-CRS VPs, ATM-CRS VCCs, ATM-CRS DSL VCCs and ATM-CRS MM-VCCs that are not associated with a committed ATM-CRS Port; 3) ATM-CRS nonrecurring charges; and 4) special access services connected to an ATM-CRS Port.
16. Public Packet Data Network (Cont'd)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)

16.2.5 ATM-CRS Term Discount Plan (Cont’d)

Except as specified in (A)-(C), below, discontinuance charges will apply when the customer fails to satisfy the term commitment period or the in-service requirements for its committed ATM-CRS Ports.

The term discount percentage set forth in Section 17.4.8(B)(5), following, will not be subject to Telephone Company initiated decreases during the customer’s selected term commitment period.

If a term discount percentage increase occurs during the term of an existing ATM-CRS Term Discount Plan, the increased percentage will be applied automatically for the remainder of the customer’s existing term commitment period.

At the end of the term commitment period, the customer may subscribe to a new ATM-CRS Term Discount Plan commitment period or revert to month-to-month rates.

If the customer does not notify the Telephone Company in writing of its choice by the end of its existing term commitment period, the Telephone Company will automatically convert the customer’s ATM-CRS billing to month-to-month rates. An Access Order Charge will not apply when a customer at the end of its existing term commitment period subscribes to a replacement ATM-CRS Term Discount Plan or reverts to month-to-month rates.
16. Public Packet Data Network (Cont'd)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)

16.2.5 ATM-CRS Term Discount Plan (Cont’d)

(A) ATM-CRS Port Additions

An ATM-CRS Term Discount Plan customer will choose one of the following options when ordering a new ATM-CRS Port during its existing term commitment period:

(1) Add the new ATM-CRS Port to its existing ATM-CRS Term Discount Plan provided: 1) the customer commits to retain the newly installed ATM-CRS Port in-service at the same bandwidth capacity for the remainder of the existing term commitment period and 2) the ATM-CRS Port is being added before the last year of an existing term commitment period. The term commitment period of the customer’s existing ATM-CRS Term Discount Plan will continue uninterrupted. During the last year of the commitment period, ATM-CRS Ports may not be added to an existing term commitment period.

(2) Order the new ATM-CRS Port on a month-to-month basis. No term discount percentage would apply to the newly installed ATM-CRS Port. The term commitment period of the customer’s existing ATM-CRS Term Discount Plan will continue uninterrupted.

(3) Replace the existing ATM-CRS Term Discount Plan in its entirety with a new ATM-CRS Term Discount Plan as described in (C), below.
16. **Public Packet Data Network (Cont'd)**

16.2 **Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)**

16.2.5 **ATM-CRS Term Discount Plan (Cont’d)**

**(B) Committed ATM-CRS Port Replacements**

1) An ATM-CRS Term Discount Plan customer may disconnect a committed ATM-CRS Port before the end of its existing term commitment period and replace it with one or more newly installed committed ATM-CRS Port(s) without the application of a discontinuance charge as described in (D), below, provided:

1) the bandwidth capacity of the replacement committed ATM-CRS Port(s) is equal to or greater than the bandwidth capacity of the disconnected committed ATM-CRS Port;

2) the customer commits to retain the replacement committed ATM-CRS Port(s) in-service at the same bandwidth capacity for the remainder of the existing term commitment period;

3) the replacement committed ATM-CRS Port(s) is added to the existing term commitment before the last year of an existing term commitment period; and

4) the customer’s orders for the disconnection of the originally committed ATM-CRS Port and installation of the replacement committed ATM-CRS Port(s) are submitted to the Telephone Company at the same time and include cross references as described in Section 5.2.7, preceding.
16. Public Packet Data Network (Cont'd)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)

16.2.5 ATM-CRS Term Discount Plan (Cont’d)

(B) Committed ATM-CRS Port Replacements (Cont’d)

(2) If the bandwidth capacity of the newly installed committed ATM-CRS Port(s) is less than the bandwidth capacity of the disconnected committed ATM-CRS Port, the disconnected committed ATM-CRS Port will be subject to a discontinuance charge as described in (D), below. The newly installed port(s) can be added as a committed ATM-CRS Port to the existing term commitment period or ordered on a month-to-month basis as described in (A), above.

(3) Since newly installed ATM-CRS Ports cannot be added to an existing term commitment period during the last year of the commitment period, an existing committed ATM-CRS Port disconnected during the last year of the commitment period cannot be replaced as described in (B)(1), above.

The disconnected committed ATM-CRS Port will be subject to a discontinuance charge as described in (D), below. During the last year of the term commitment period, newly installed ATM-CRS Ports can be ordered as described in (A), above.
16. **Public Packet Data Network** (Cont'd)

16.2 **Asynchronous Transfer Mode Cell Relay Access Service** (Cont'd)

16.2.5 **ATM-CRS Term Discount Plan** (Cont'd)

(B) **Committed ATM-CRS Port Replacements** (Cont’d)

(4) An ATM-CRS Term Discount Plan customer may disconnect a committed ATM-CRS Port before the end of its existing term commitment period and replace it with one or more newly installed committed ETS Port(s) added to the customer’s existing ETS Term Discount Plan without the application of a discontinuance charge as described in (D), below, provided:

(a) the bandwidth capacity of the replacement committed ETS Port(s) is equal to or greater than the bandwidth capacity of the disconnected committed ATM-CRS Port;

(b) the term commitment period remaining in the customer’s existing ETS Term Discount Plan meets or exceeds the number of months remaining in the customer’s existing ATM-CRS Term Discount Plan;

(c) the customer commits to retain the replacement committed ETS Port(s) in-service at the same bandwidth capacity for the remainder of the customer’s existing ETS Term Discount Plan term commitment period;

(d) the replacement committed ETS Port(s) is added to the customer’s existing ETS Term Discount Plan term commitment before the last year of an existing term commitment period; and

(e) the customer’s orders for the disconnection of the originally committed ATM-CRS Port and installation of the replacement committed ETS Port(s) are submitted to the Telephone Company at the same time and include cross references as described in Section 5.2.7, preceding.

Terms and conditions for the ETS Term Discount Plan are specified in Section 16.3.5, following.
16. Public Packet Data Network (Cont’d)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont’d)

16.2.5 ATM-CRS Term Discount Plan (Cont’d)

(C) ATM-CRS Term Discount Plan Replacements

(1) The customer may replace an existing ATM-CRS Term Discount Plan in its entirety with a new ATM-CRS Term Discount Plan without the application of a discontinuance charge as described in (D), below, provided:

(a) the term commitment period of the new ATM-CRS Term Discount Plan meets or exceeds the number of months remaining in the customer’s existing ATM-CRS term commitment period and;

(b) the bandwidth capacity of the committed ATM-CRS Ports under the new ATM-CRS Term Discount Plan meets or exceeds the bandwidth capacity of the committed ATM-CRS Ports in the customer’s existing ATM-CRS term commitment period.

The term discount percentage applicable for the new ATM-CRS Term Discount Plan will apply on a going forward basis based on the customer’s written request to establish a new ATM-CRS Term Discount Plan commitment period under this provision.
16. Public Packet Data Network (Cont’d)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont’d)

16.2.5 ATM-CRS Term Discount Plan (Cont’d)

(C) ATM-CRS Term Discount Plan Replacements (Cont’d)

(1) (Cont’d)

For example, a customer with an existing 36 month term commitment period and 30 Mbps of bandwidth capacity for its committed ATM-CRS Ports can replace that term commitment in its entirety with a new 36 month or 60 month term commitment period at any time during the existing term commitment period without the application of a discontinuance charge provided the bandwidth capacity of the customer’s committed ATM-CRS Ports under the new term commitment period is at least 30 Mbps.

(2) When the term commitment period of a replacement ATM-CRS Term Discount Plan does not meet or exceed the number of months remaining in the customer’s existing ATM-CRS Term Discount Plan commitment period, a discontinuance charge as described in (D), below, will apply.
16. Public Packet Data Network (Cont’d)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont’d)

16.2.5 ATM-CRS Term Discount Plan (Cont’d)

(C) ATM-CRS Term Discount Plan Replacements (Cont’d)

(3) When the term commitment period of the new ATM-CRS Term Discount Plan meets or exceeds the number of months remaining in the customer’s existing ATM-CRS term commitment period, but the bandwidth capacity of the customer’s committed ATM-CRS Ports under the new term commitment period is less than the bandwidth capacity of the committed ATM-CRS Ports under the customer’s existing term commitment period, the following provisions will apply.

(a) When the total monthly undiscounted charges for the number and type of committed ATM-CRS Ports to be included in the customer’s replacement ATM-CRS Term Discount Plan is equal to or greater than the total monthly undiscounted charges for the number and type of committed ATM-CRS Ports included in the customer’s existing ATM-CRS Term Discount Plan, the customer will be permitted to replace its existing ATM-CRS Term Discount Plan without the application of either a discontinuance charge as described in (D), below, or a commitment shortfall charge as described in (b), below.
16. Public Packet Data Network (Cont’d)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont’d)

16.2.5 ATM-CRS Term Discount Plan (Cont’d)

(C) ATM-CRS Term Discount Plan Replacements (Cont’d)

(3) (Cont’d)

(b) When the total monthly undiscounted charges for the number and type of committed ATM-CRS Ports to be included in the customer’s replacement ATM-CRS Term Discount Plan is less than the total monthly undiscounted charges for the number and type of committed ATM-CRS Ports included in the customer’s existing ATM-CRS Term Discount Plan, the customer will be permitted to replace its existing ATM-CRS Term Discount Plan under this provision, however, a commitment shortfall charge will apply.

The commitment shortfall charge will apply in lieu of a discontinuance charge as described in (D), below, and will be calculated as follows:

Step 1: Determine the difference between the total monthly undiscounted charges for the number and type of committed ATM-CRS Ports included in the customer’s existing ATM-CRS Term Discount Plan and the total monthly undiscounted charges for the number and type of committed ATM-CRS Ports to be included in the customer’s replacement ATM-CRS Term Discount Plan.
16. Public Packet Data Network (Cont’d)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont’d)

16.2.5 ATM-CRS Term Discount Plan (Cont’d)

(C) ATM-CRS Term Discount Plan Replacements (Cont’d)

(3)(b) (Cont’d)

Step 2: Multiply the result from Step 1 by 35%.

Step 3: Multiply the result from Step 2 times the number of months remaining in the existing term commitment period.

For example, a customer elects to replace its existing 36 month ATM-CRS Term Discount Plan in its entirety in the 30th month of the existing term commitment period with a new 36 month ATM-CRS Term Discount Plan.

The existing term plan commitment includes a total bandwidth capacity requirement of 134.208 Mbps for the customer’s three 44.736 Mbps committed ATM-CRS Basic UNI Ports. In the replacement ATM-CRS Term Discount Plan, the customer will only be including one 100 Mbps committed ATM-CRS Ethernet-based UNI Port. Although the customer satisfies the term commitment length replacement requirement with the new ATM-CRS Term Discount Plan, it does not satisfy the bandwidth capacity replacement requirement and the total monthly undiscounted charges under the new term commitment period are less than the total monthly undiscounted charges under the existing term commitment period.
16. Public Packet Data Network (Cont’d)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont’d)

16.2.5 ATM-CRS Term Discount Plan (Cont’d)

(C) ATM-CRS Term Discount Plan Replacements (Cont’d)

(3)(b) (Cont’d)

Using illustrative undiscounted monthly rates of $2,485.16 for a 44.736 Mbps ATM-CRS Basic UNI Port and $982.38 for a 100 Mbps ATM-CRS Ethernet-based UNI Port, the Telephone Company would bill the customer a commitment shortfall charge totaling $13,593.54 based on:

Step 1: $7,455.48 (i.e., $2,485.16 x 3 ports) - $982.38 = $6,473.10

Step 2: $6,473.10 x 35% = $2,265.59

Step 3: $2,265.59 x 6 months = $13,593.54

(4) The customer may replace an existing ATM-CRS Term Discount Plan in its entirety with a new ETS Term Discount Plan without the application of a discontinuance charge as described in (D), below, provided: 1) the term commitment period of the new ETS Term Discount Plan meets or exceeds the number of months remaining in the customer’s existing ATM-CRS term commitment period and 2) the bandwidth capacity of the committed ETS Ports under the new ETS Term Discount Plan meets or exceeds the bandwidth capacity of the committed ATM-CRS Ports in the customer’s existing ATM-CRS term commitment period. The term discount percentage applicable for the new ETS Term Discount Plan will apply on a going forward basis based on the customer’s written request to establish a new ETS Term Discount Plan commitment period under this provision.
16. Public Packet Data Network (Cont’d)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont’d)

16.2.5 ATM-CRS Term Discount Plan (Cont’d)

(C) ATM-CRS Term Discount Plan Replacements (Cont’d)

(4) (Cont’d)

When the term commitment period of a replacement ETS Term Discount Plan does not meet or exceed the number of months remaining in the customer’s existing ATM-CRS Term Discount Plan commitment period, a discontinuance charge as described in (D), below, will apply.

Terms and conditions for the ETS Term Discount Plan are specified in Section 16.3.5, following.

(D) Discontinuance Charges

Except as provided for in (B) and (C), above, discontinuance charges will apply when:

1) the customer disconnects a committed ATM-CRS Port prior to the end of the term commitment period;

2) the customer disconnects a committed ATM-CRS Port prior to the end of the term commitment period and the replacement committed ATM-CRS or ETS Port(s) does not satisfy the requirements specified in (B), above;

3) the customer discontinues an existing ATM-CRS Term Discount Plan in its entirety prior to the end of the term commitment period; or

4) the customer replaces an existing ATM-CRS Term Discount Plan with a new ATM-CRS Term Discount Plan or new ETS Term Discount Plan that does not satisfy the requirements specified in (C), above.
16. **Public Packet Data Network (Cont’d)**

16.2 **Asynchronous Transfer Mode Cell Relay Access Service (Cont’d)**

16.2.5 **ATM-CRS Term Discount Plan (Cont’d)**

(D) **Discontinuance Charges (Cont’d)**

The discontinuance charge will be equal to 35% of the total undiscounted monthly rate for each committed ATM-CRS Port included in the customer’s ATM-CRS Term Discount Plan for each month remaining in the unsatisfied term commitment period. Minimum service period charges as specified in Section 16.2.4(C), preceding, would also apply, if applicable.

The following examples illustrate how the Telephone Company will calculate the applicable discontinuance charge.

**Example 1**

A customer discontinues its existing ATM-CRS Term Discount Plan in its entirety in the 20th month of a 36 month term commitment period. The customer included three 100 Mbps committed ATM-CRS Ethernet-based UNI Ports when it established its initial term plan commitment.

Using an illustrative undiscounted monthly rate of $982.38 for a 100 Mbps ATM-CRS Ethernet-based UNI Port, the Telephone Company would bill the customer a term plan discontinuance charge totaling $16,503.84 (i.e., $982.38 x 35% x 3 ports x 16 months).
16. Public Packet Data Network (Cont’d)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont’d)

16.2.5 ATM-CRS Term Discount Plan (Cont’d)

(D) Discontinuance Charges (Cont’d)

Example 2

A customer disconnects one of the four 10 Mbps committed ATM-CRS Ethernet-based UNI Ports included in its ATM-CRS Term Discount Plan in the 39th month of a 60 month term commitment period. The customer included all four of these ports when it established its initial term plan commitment.

Using an illustrative undiscounted monthly rate of $689.01 for a 10 Mbps ATM-CRS Ethernet-based UNI Port, the Telephone Company would bill the customer a port discontinuance charge totaling $5,064.15 (i.e., $689.01 x 35% x 21 months).
16. **Public Packet Data Network (Cont'd)**

16.3 **Ethernet Transport Service**

16.3.1 **General**

Ethernet Transport Service (ETS) is a high speed data transport service that provides end-to-end transmission using Ethernet packet technology at transport speeds ranging from 2 Mbps to 1 Gbps, where available. ETS is ideal for transport of broadband multimedia traffic (i.e., voice, data and video) using variable length Ethernet packets with the ability to interconnect multiple locations using the Telephone Company’s ETS network. Ethernet packets generated by Ethernet-compatible customer premises equipment (CPE) are transmitted using available capacity on shared transmission paths through the Telephone Company’s ETS network to a pre-specified destination.

The ETS customer may use ETS to: (1) interconnect customer designated premises (CDPs) served by the Telephone Company’s ETS network, (2) interconnect with its local area network (LAN) to the Telephone Company’s ETS network and/or (3) interconnect its CDPs to an Ethernet network located outside of the Telephone Company’s serving territory.

16.3.2 **Service Description**

ETS is provided using a combination of ETS Channel Terminations (ETS CTs), ETS Ports, ETS Ethernet Virtual Connections (ETS EVCs), ETS Extended Ethernet Virtual Connections (ETS E-EVCs) and ETS Interconnected Ethernet Virtual Connections (ETS I-EVCs). As described below, ETS may be used in conjunction with Special Access High Capacity DS3 and Synchronous Optical Channel Service OC3 and OC12 Services as specified in Section 7, preceding, and with DSL Access Services as specified in Section 8, preceding.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.2 Service Description (Cont’d)

An ETS Port is required to provide the interface into the Telephone Company’s ETS network. ETS EVCs establish a shared transmission path between any two ETS Ports on the Telephone Company’s ETS network. ETS E-EVCs may be ordered to connect the Telephone Company’s ETS network to an adjacent telephone company’s Ethernet network. ETS I-EVCs may be ordered to connect the Telephone Company’s ETS network to a non-adjacent telephone company’s Ethernet network as described in Section 16.3.4(A)(5), below.
ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service

16.3.2 Service Description (Cont’d)

The transmission quality of ETS is not guaranteed and is offered to ETS customers at a best effort level. The Telephone Company will attempt to deliver all Ethernet packets received; however, network congestion may result in a loss of Ethernet packets. Transmission speeds using copper facilities may be affected by distance from the Telephone Company central office and other technical limitations in the Telephone Company’s copper network and are also not guaranteed.

Service is provided, where available, between CDPs and designated Telephone Company Serving Wire Centers (SWCs). ETS will be furnished where suitable facilities exist as determined by the Telephone Company. The Telephone Company will identify its ETS-equipped Serving Wire Centers (SWCs) in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. Tariff F.C.C. No. 4.

Rates and charges for ETS are specified in Section 17.4.8(C), following. The Telephone Company specific rate band assignment for the ETS rate elements is specified in the Special Access (SPA) column in (T) Section 17.5.1, following, or when applicable, as specified in Section 17.4.8(C)(9), following. The application of rates and charges for ETS is described later in this section.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service

16.3.3 Obligations of the Customer

In addition to the regulations described in other sections of this tariff, the following provisions apply to ETS:

(A) The ETS customer is responsible for providing the Telephone Company with the necessary information to provision ETS as specified in Section 5.2 Ordering Requirements, preceding.

(B) The ETS customer is responsible for providing and maintaining all required CPE, which is compatible with ETS and complies with the standards specified in Technical Reference IEEE Standard 802.3-2008, Part 3, Sections 1 through 5.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.4 Rate Regulations

This section contains the regulations governing the rates and charges that apply for ETS. Regulations governing the rates and charges for Special Access and DSL Access Services provided under this tariff used in conjunction with ETS are as specified in Sections 7 and 8, preceding.

The following diagrams depict generic views of the elements of ETS. In the first figure, the ETS customer’s CDPs are served by a single ETS SWC. ETS EVCs ordered between two ETS Ports in the same SWC are classified as ETS Intraswitch EVCs. The ETS customer orders the applicable ETS elements from the Telephone Company pursuant to the provisions specified in this section.

Figure 1

![Diagram of ETS elements and connections]

ETS Basic Port ETS SWC ETS Basic Port

CDP ETS CT ETS CT

ETS Intraswitch EVC

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David Stoll
Vice President/Chief Executive Officer
123 W. Orchard Street, P.O. Box 127
Delton, Michigan 49046
(269) 623-2311
dstoll@mei.net
16. **Public Packet Data Network (Cont’d)**

16.3 **Ethernet Transport Service (Cont’d)**

16.3.4 **Rate Regulations (Cont’d)**

In the second figure, the ETS customer’s CDPs are served by different ETS SWCs. ETS EVCs ordered between two ETS Ports in different SWCs are classified as ETS Interswitch EVCs. The ETS customer orders the applicable ETS elements from the Telephone Company pursuant to the provisions specified in this section.

**Figure 2**

```
ETS Basic Port  ETS SWC  ETS SWC  ETS Basic Port
          ↓             ↑            ↓             ↑
  CDP            ETS CT       ETS CT          CDP
```

**ETS Interswitch EVC**

In the third figure, one of the ETS customer’s CDPs is served by a non-ETS SWC. The ETS customer orders the applicable ETS elements from the Telephone Company pursuant to the provisions specified in this section and the applicable Special Access facilities pursuant to the provisions specified in Section 7, preceding.

**Figure 3**

```
ETS Basic Port  ETS SWC  ETS SWC  ETS Basic Port
          ↓             ↑             ↓             ↑
  CDP            ETS CT       ETS Interswitch EVC       CDP
          ↓             ↑             ↓             ↑
  ETS Interswitch EVC  ETS SWC  Non-ETS SWC
          ↓             ↑             ↓             ↑
  Special Access Channel Mileage Facility  Special Access Channel Mileage Termination
```

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Issued Date: July 11, 2014  
Effective Date: July 26, 2014

David Stoll  
Vice President/Chief Executive Officer  
123 W. Orchard Street, P.O. Box 127  
Delton, Michigan 49046  
(269) 623-2311  
dstoll@mei.net
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.4 Rate Regulations (Cont'd)

In the fourth figure, a multipoint configuration is depicted where the customer chose to order Special Access Service to an ETS SWC. The ETS customer orders the applicable ETS elements from the Telephone Company pursuant to the provisions specified in this section and the applicable Special Access facilities pursuant to the provisions specified in Section 7, preceding.

Figure 4
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.4 Rate Regulations (Cont'd)

In the fifth figure, one of the ETS customer’s CDPs is served by an adjacent telephone company’s Ethernet network. The ETS customer orders the applicable ETS elements from the Telephone Company pursuant to the provisions specified in this section. In addition, the ETS customer will order the applicable Ethernet service elements from the adjacent telephone company.

Figure 5

* If EC B is a non-NECA company, the application of charges will depend on its access tariff
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.4 Rate Regulations (Cont'd)

In the sixth figure, one of the ETS customer’s CDPs is served by a non-adjacent telephone company’s Ethernet network. When the number of airline miles between the ETS SWCs serving the ETS customer’s CDPs is greater than seventy-five, the ETS customer orders the applicable ETS elements from the Telephone Company pursuant to the provisions specified in this section and applicable Special Access facilities pursuant to the provisions specified in Section 7, preceding. In addition, the ETS customer will order the applicable special access service and Ethernet service elements from the interconnecting telephone companies.

Figure 6

* If EC B and C are non-NECA companies, the application of charges will depend on their access tariffs.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.4 Rate Regulations (Cont'd)

In the seventh figure, one of the ETS customer’s CDPs is served by a non-adjacent telephone company’s Ethernet network. When the number of airline miles between the ETS SWCs serving the ETS customer’s CDPs is equal to or less than seventy-five, the ETS customer orders the applicable ETS elements from the Telephone Company pursuant to the provisions specified in this section. In addition, the ETS customer will order the applicable Ethernet service elements from the non-adjacent telephone company.

Figure 7

* If EC B is a non-NECA company, the application of charges will depend on its access tariff.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.4 Rate Regulations (Cont'd)

(A) Rate Categories

The various ETS service elements are described below.

(1) ETS Channel Terminations (CTs)

An ETS CT provides the transport facility between the customer’s designated premises and an ETS Basic Port at the Telephone Company’s ETS SWC.

ETS CTs are available at bandwidth speeds of 2 Mbps, 5 Mbps, 10 Mbps, 20 Mbps, 50 Mbps, 100 Mbps, 250 Mbps, 500 Mbps, 750 Mbps and 1 Gbps. The ETS customer orders the type of ETS CT it needs based on its bandwidth requirements. Bandwidth speeds of 50 Mbps and above require use of a fiber loop facility, where such fiber facilities exist. ETS CTs are available only from suitably equipped ETS SWCs for connection to ETS Basic Ports.

A Special Access High Capacity DS3 or Synchronous Optical Channel Service OC3 or OC12 Channel Termination may also be used to connect a CDP to the Telephone Company’s ETS SWC for connection to an ETS Interconnection Port. The provisions for Special Access Channel Terminations are specified in Section 7, preceding.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(1) ETS Channel Terminations (CTs) (Cont'd)

Monthly and nonrecurring charges apply for each ETS CT ordered. The monthly recurring rate and nonrecurring charge are based upon the bandwidth capacity ordered and whether the CDP is located within 300 feet of the ETS SWC or more than 300 feet from the ETS SWC. Rates and charges are specified in Section 17.4.8(C)(1), following, or when applicable, as specified in Section 17.4.8(C)(9), following. The Telephone Company specific rate band assignment for the ETS Channel Termination rate element is specified in the Special Access (SPA) column in Section 17.5.1, following, or when applicable, in Section 17.4.8(C)(9), following.
16. Public Packet Data Network (Cont’d)

16.3 Ethernet Transport Service (Cont’d)

16.3.4 Rate Regulations (Cont’d)

(A) Rate Categories (Cont’d)

(2) ETS Ports

ETS Ports provide the interface at the Telephone Company’s ETS SWC for data traffic to and from the customer premises equipment as well as for connecting the Telephone Company’s ETS network with the Ethernet network of another telephone company.

An ETS Port receives Ethernet packets from the ETS customer’s Ethernet-compatible CPE, validates the addressing parameters contained in the packet headers, and transmits the packets into the ETS network. The ETS Port also receives Ethernet packets from the Telephone Company’s ETS network or from an Ethernet network located outside of the Telephone Company’s serving territory, validates the addressing parameters contained in the packet headers, and transmits the packets to the pre-designated CDP.

There are two types of ETS Ports available, i.e., ETS Basic Ports and ETS Interconnection Ports.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(2) ETS Ports (Cont'd)

(a) ETS Basic Ports provide the interface to the Telephone Company’s ETS network and do not include the required transport facility between the CDP and the Telephone Company’s ETS SWC.

ETS Basic Ports are available with bandwidth speeds of 2 Mbps, 5 Mbps, 10 Mbps, 20 Mbps, 50 Mbps, 100 Mbps, 250 Mbps, 500 Mbps, 750 Mbps and 1 Gbps. Required transport to the ETS Basic Port is provided using an ETS CT as described above. Each ETS Basic Port must be associated with a minimum of one ETS EVC, one ETS E-EVC, one ETS I-EVC or one optional DSL Access Service Connection function. An ETS Basic Port may be associated with more than one ETS EVC, ETS E-EVC or ETS I-EVC. The bandwidth speed of an ETS Basic Port must be equal to or greater than the bandwidth speed of the associated ETS CT. The bandwidth speed of an optional DSL Access Service Connection function must be equal to the bandwidth speed of the associated ETS Basic Port.
16. **Public Packet Data Network (Cont’d)**

16.3 **Ethernet Transport Service (Cont’d)**

16.3.4 **Rate Regulations (Cont’d)**

(A) **Rate Categories (Cont’d)**

(3) **ETS Ports (Cont’d)**

(b) ETS Interconnection Ports also provide the interface to the Telephone Company’s ETS network and do not include the required transport facility between the CDP and the Telephone Company’s ETS SWC. Used in conjunction with Special Access DS3, OC3 and/or OC12 Services, ETS Interconnection Ports permit the ETS customer to: 1) connect a CDP served by an ETS or non-ETS SWC to the Telephone Company’s ETS network or 2) interconnect the Telephone Company’s ETS network to an Ethernet network located in the serving territory of a non-adjacent telephone company.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont’d)

(2) ETS Ports (Cont’d)

ETS Interconnection Ports are available at bandwidth speeds of 44.736 Mbps (DS3), 155.52 Mbps (OC3) and 622.08 Mbps (OC12).

Required transport to the ETS Interconnection Port is provided using Special Access DS3, OC3 and/or OC12 Service facilities as described in Section 7, preceding. Each ETS Interconnection Port must be associated with a minimum of one ETS EVC, one ETS E-EVC, one ETS I-EVC or one optional DSL Access Service Connection function. An ETS Interconnection Port may be associated with more than one ETS EVC, ETS E-EVC or ETS I-EVC. The bandwidth speed of an ETS Interconnection Port must be equal to the bandwidth speed of the associated Special Access Service Channel Termination. The bandwidth speed of an optional DSL Access Service Connection function must be equal to the bandwidth speed of the associated ETS Interconnection Port.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont’d)

(2) ETS Ports (Cont’d)

Monthly and nonrecurring charges apply for each ETS Port ordered. The monthly recurring rate and nonrecurring charge are determined by the capacity and type of ETS Port ordered. Rates and charges are specified in Section 17.4.8(C)(2), following, or when applicable, as specified in Section 17.4.8(C)(9), following. The Telephone Company specific rate band assignment for the ETS Port rate element is specified in the Special Access (SPA) column in Section 17.5.1, following, or when applicable, as specified in Section 17.4.8(C)(9), following.
16. **Public Packet Data Network** (Cont'd)

16.3 **Ethernet Transport Service** (Cont'd)

16.3.4 **Rate Regulations** (Cont'd)

(A) **Rate Categories** (Cont’d)

(3) **ETS Ethernet Virtual Connections (ETS EVCs)**

ETS EVCs are logical associations established by the Telephone Company across a shared transmission path that allow the ETS customer to transmit packets between any two ETS Ports located on the Telephone Company’s ETS network. ETS EVCs are available in fixed bandwidth amounts of 2 Mbps, 5 Mbps, 10 Mbps, 20 Mbps, 50 Mbps, 100 Mbps, 250 Mbps, 500 Mbps, 750 Mbps and 1 Gbps. The Telephone Company will establish ETS EVCs based upon the bandwidth capacity specified by the ETS customer on its Access Order. When ETS EVCs are ordered between two ETS Ports in the same SWC, the ETS customer will be charged the ETS Intraswitch EVC rate. When ETS EVCs are ordered between ETS Ports that are in different SWCs within the Telephone Company’s serving territory, the ETS customer will be billed the ETS Interswitch EVC rate.

An ETS customer may choose to order one or more Class of Service (CoS) levels on an existing ETS EVC or when ordering a new ETS EVC.

A CoS level provides priority routing of the ETS customer’s traffic through the Telephone Company’s network. When the customer orders a CoS level, the Telephone Company will configure its network equipment to recognize and transmit customer traffic according to the user priority value(s) populated by the ETS customer’s CPE.
16. **Public Packet Data Network** (Cont'd)

16.3 **Ethernet Transport Service** (Cont'd)

16.3.4 **Rate Regulations** (Cont'd)

(A) **Rate Categories** (Cont’d)

(3) **ETS Ethernet Virtual Connections (ETS EVCs)** (Cont’d)

A CoS level is available for use only on an (ETS customer’s ETS Intraswitch or Interswitch EVC when provided between two ETS Basic Ports located within the Telephone Company’s serving territory.

The CoS levels of Real Time and Near Real Time are as described below:

- Real Time CoS supports applications that require minimal delay and low latency to facilitate steady data flow of user information through the ETS network.

Examples of applications requiring a Real Time CoS level may include voice, high quality video, and circuit emulation for higher speed special access services. When ordered by the ETS customer, the Telephone Company’s network will transport traffic as described in IEEE 802.1D-2004, Sections 7, 9, 17 and Annex G provided the ETS customer’s CPE populates the user priority value field with a value of 6.

When the ETS customer’s CPE populates its packets with a user priority value of 6, the Telephone Company will provide the highest level of priority routing through its network of those packets up to the Real Time CoS level bandwidth capacity ordered before routing any of the ETS customer’s other packets received with a user priority value of less than 6.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont’d)

(3) ETS Ethernet Virtual Connections (ETS EVCs) (Cont’d)

-Near Real Time CoS supports applications for which the data flow requires low delay variance and can tolerate some latency in ETS packet transmissions. Examples of applications requiring a Near Real Time CoS level may include priority business applications, multimedia transmissions and streaming video services.

When ordered by the ETS customer, the Telephone Company’s network will transport traffic as described in IEEE 802.1D-2004, Sections 7, 9, 17 and Annex G provided the ETS customer’s CPE populates the user priority value field with a value of 3, 4 or 5. When the ETS customer’s CPE populates its packets with a user priority value of 5, 4, or 3, the Telephone Company will provide priority routing through its network of those packets up to the Near Real Time CoS level bandwidth capacity ordered before routing any of the ETS customer’s other packets received with a user priority value of less than 3.

Unless otherwise requested by the customer and agreed upon by the Telephone Company, Near Real Time CoS level priority routing provides that:

1) packets received with a user priority value of 5 will receive higher priority routing through the Telephone Company’s network than packets received with user priority values of 4 or 3 and;

2) packets received with a user priority value of 4 will receive higher priority routing through the Telephone Company’s network than packets received with a user priority value of 3.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont’d)

(3) ETS Ethernet Virtual Connections (ETS EVCs) (Cont’d)

When an ETS customer orders a CoS, it must specify the CoS level(s) needed, the total bandwidth capacity for each CoS level and the associated ETS EVC(s). The ETS customer may order a CoS level to be established at the same time as the associated ETS Intraswitch or Interswitch EVC is established.

The ETS customer may also order a CoS level to be added to an existing associated ETS Intraswitch or Interswitch EVC.

An ETS customer may order multiple CoS levels for use on the same ETS EVC. The total bandwidth capacity ordered for all CoS levels associated with a single ETS EVC cannot exceed the bandwidth capacity of the ETS EVC. For example, an ETS customer with a 500 Mbps ETS Interswitch EVC between two 500 Mbps ETS Basic Ports could order 300 Mbps of Near Real Time CoS and 200 Mbps of Real Time CoS.

The ETS customer’s traffic will receive priority routing treatment up to the available bandwidth capacity of the CoS level ordered. Any ETS customer traffic received by the Telephone Company’s network beyond the available bandwidth capacity of the CoS level(s) ordered will be transported by the Telephone Company’s network at best effort.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont’d)

(4) ETS Ethernet Virtual Connections (ETS EVCs) (Cont’d)

If an ETS customer orders a CoS level with a bandwidth capacity that is less than the total bandwidth capacity of the associated ETS EVC, the remaining non-assigned capacity will be transported by the Telephone Company’s network at best effort. For example, an ETS customer with a 100 Mbps ETS Interswitch EVC between two 100 Mbps ETS Basic Ports orders 70 Mbps of Near Real Time CoS. If the ETS customer’s CPE populates the user priority value field with a value of 3 and transmits at the full capacity of the ETS EVC, the Telephone Company’s network would transport 70 Mbps of the ETS customer’s traffic using Near Real Time CoS routing treatment and the remaining non-assigned 30 Mbps at best effort.

The total bandwidth capacity of all CoS levels associated with one or more ETS EVCs connected to the same ETS Basic Port may not exceed the total bandwidth capacity available on that ETS Basic Port.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont’d)

(3) ETS Ethernet Virtual Connections (ETS EVCs) (Cont’d)

When a CoS level has been established on an associated ETS EVC and the user priority value field is populated with a value that is equal to or less than the CoS level ordered, the Telephone Company’s network will transport the ETS customer’s traffic using the user priority value populated. For example, if an ETS customer has a 250 Mbps ETS Intraswitch EVC, orders 100 Mbps of Real Time CoS (i.e., associated with user priority value of 6) and transmits 250 Mbps of traffic with a user priority value of 3 populated (i.e., Near Real Time CoS), the Telephone Company’s network would transport 100 Mbps of the ETS customer’s traffic using Near Real Time CoS routing treatment and the remaining non-assigned 150 Mbps at best effort.

When a CoS level has been established on an associated ETS EVC and the user priority value field is populated with a value greater than the CoS level ordered, the Telephone Company’s network will transport the ETS customer’s traffic using the user priority value of the CoS level ordered. For example, if an ETS customer has a 250 Mbps ETS Intraswitch EVC, orders 100 Mbps of Near Real Time CoS (i.e., associated with user priority value 3, 4 or 5) and transmits 250 Mbps of traffic with a user priority value of 6 populated (i.e., Real Time CoS), the Telephone Company’s network would transport 100 Mbps of the ETS customer’s traffic using Near Real Time CoS routing treatment and the remaining non-assigned 150 Mbps at best effort.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont’d)

(3) ETS Ethernet Virtual Connections (ETS EVCs) (Cont’d)

When a CoS level has been established on an associated ETS EVC and the user priority value field is not populated, the Telephone Company’s network will transport the ETS customer’s traffic at best effort.

When a CoS level has not been ordered for use on an associated ETS EVC, the Telephone Company’s network will transport the ETS customer’s traffic that transits the ETS EVC at best effort.

Monthly and nonrecurring charges apply for each ETS EVC ordered. The monthly recurring rate and nonrecurring charge are based upon the bandwidth capacity ordered and whether the associated ETS Ports are located within one SWC (Intraswitch) or between different SWCs (Interswitch). Rates and charges are specified in Section 17.4.8(C)(3), following, or when applicable, as specified in Section 17.4.8(C)(9), following. The Telephone Company specific rate band assignment for the ETS Ethernet Virtual Connection rate element is specified in the Special Access (SPA) column in Section 17.5. 1, following, or when applicable, as specified in Section 17.4.8(C)(9), following.
16. **Public Packet Data Network (Cont'd)**

16.3 **Ethernet Transport Service (Cont'd)**

16.3.4 **Rate Regulations (Cont'd)**

(A) **Rate Categories (Cont’d)**

(3) **ETS Ethernet Virtual Connections (ETS EVCs)(Cont’d)**

A monthly recurring charge applies based on the total bandwidth capacity of each CoS level ordered and the type (i.e., Intraswitch or Interswitch) and bandwidth capacity of the associated ETS EVC. The monthly recurring charge is calculated by multiplying the applicable per megabit rate for the specified CoS level, which is based upon the type (i.e., Intraswitch or Interswitch) and bandwidth capacity of the associated ETS EVC, by the number of megabits ordered. Rates are specified in Sections 17.4.8(C)(3)(a) and (b), following, or when applicable, as specified in Section 17.4.8(C)(9), following.

The Telephone Company specific rate band assignment for the ETS Class of Service rate element is specified in the Special Access(SPA) column in Section 17.5.1, following, or when applicable, in Section 17.4.8(C)(9), following.

As an example, an ETS customer with a single 100 Mbps ETS Interswitch EVC between two 100 Mbps ETS Basic Ports orders a total of 30 Mbps of Near Real Time CoS. The monthly charge would be calculated by multiplying the per megabit rate for the Near Real Time CoS level for the associated 100 Mbps ETS Interswitch EVC by 30. The monthly recurring charge for the CoS level in this example would apply in addition to the monthly recurring charges for the 100 Mbps ETS Interswitch EVC and two 100 Mbps ETS Basic Ports.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont’d)

(3) ETS Ethernet Virtual Connections (ETS EVCs) (Cont’d)

An Access Order Charge applies to establish the initial CoS level on an existing ETS EVC. Only one Access Order Charge would apply to establish multiple CoS levels on an existing ETS EVC with no existing CoS level on the same access order. An Access Order Charge does not apply to make CoS level changes on an existing ETS EVC that has at least one CoS level already established.

The ETS Design Change Charge will apply per ETS EVC, as described in Section 16.3.4(B)(2)(d), below, when an ETS customer elects to make one or more of the following changes on an existing ETS EVC that has at least one CoS level already established: (1) changing the bandwidth capacity of an existing CoS level; (2) adding an additional CoS level; (3) replacing one type of CoS level with another type of CoS level; or (4) removing an existing CoS level from the associated ETS EVC.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont’d)

(4) ETS Extended Ethernet Virtual Connections (ETS E-EVCS)

ETS E-EVCs are logical associations established by the Telephone Company across a shared transmission path that allow the ETS customer to transmit packets to and receive packets from an ETS Port located in the Telephone Company’s ETS network to another telephone company’s Ethernet network located in an adjacent serving territory. ETS E-EVCs can be established between two ETS Basic Ports, between two ETS Interconnection Ports or between an ETS Basic Port and an ETS Interconnection Port. ETS E-EVCs are available in fixed bandwidth amounts of 2 Mbps, 5 Mbps, 10 Mbps, 20 Mbps, 50 Mbps, 100 Mbps, 250 Mbps, 500 Mbps, 750 Mbps and 1 Gbps. The Telephone Company will establish ETS E-EVCs based upon the bandwidth capacity specified by the ETS customer on its Access Order.
16. **Public Packet Data Network (Cont'd)**

16.3 **Ethernet Transport Service (Cont'd)**

16.3.4 **Rate Regulations (Cont'd)**

(A) **Rate Categories (Cont’d)**

(4) **ETS Extended Ethernet Virtual Connections (ETS E-EVCS) (Cont’d)**

Monthly and nonrecurring charges apply for each ETS E-EVC ordered. The monthly recurring rate and nonrecurring charge are based upon the bandwidth capacity of the ETS E-EVC ordered. Rates and charges are specified in Section 17.4.8(C)(4), following, or when applicable, as specified in Section 17.4.8(C)(9), following. The Telephone Company specific rate band assignment for the ETS Extended Ethernet Virtual Connection rate element is specified in the Special Access (SPA) column in Section 17.5.1, following, or when applicable, as specified in in Section 17.4.8(C)(9), following.

(5) **ETS Interconnected Ethernet Virtual Connections (ETS I-EVCS)**

ETS I-EVCs are logical associations established by the Telephone Company across a shared transmission path that allow the ETS customer to transmit packets to and receive packets from an ETS Port located in the Telephone Company’s ETS network to another telephone company’s Ethernet network located in a non-adjacent serving territory.
16. **Public Packet Data Network** (Cont'd)

16.3 **Ethernet Transport Service** (Cont'd)

16.3.4 **Rate Regulations** (Cont'd)

(A) **Rate Categories** (Cont’d)

(5) **ETS Interconnected Ethernet Virtual Connections (ETS I-EVCS)** (Cont’d)

ETS I-EVCs can only be used when the airline distance between the ETS SWCs serving the ETS customer’s CDPs is seventy-five miles or less. When the airline distance is greater than seventy-five miles, the ETS customer will use a combination of ETS elements and Special Access Service elements as depicted in Figure 6, above, to connect to its CDP in the non-adjacent serving territory. The Telephone Company will determine the airline distance between the ETS SWCs using the V&H Coordinates method, as described in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.

ETS I-EVCs can be established between two ETS Basic Ports, between two ETS Interconnection Ports or between an ETS Basic Port and an ETS Interconnection Port. ETS I-EVCs are available in fixed bandwidth amounts of 2 Mbps, 5 Mbps, 10 Mbps, 20 Mbps, 50 Mbps, 100 Mbps, 250 Mbps, 500 Mbps, 750 Mbps and 1 Gbps. The Telephone Company will establish ETS I-EVCs based upon the bandwidth Capacity specified by the ETS customer on its Access Order.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont’d)

(5) ETS Interconnected Ethernet Virtual Connections (ETS I-EVCS) (Cont’d)

Monthly and nonrecurring charges apply for each ETS I-EVC based upon the bandwidth capacity ordered by the ETS customer and whether the airline distance between the ETS SWCs serving the ETS customer’s CDPs is: 1) less than or equal to fifty miles or 2) between fifty-one and seventy-five miles. Rates and charges are specified in Section 17.4.8(C)(5), following, or when applicable, as specified in Section 17.4.8(C)(9), following.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont’d)

(6) Optional Features and Functions

(a) DSL Access Service Connection

Where available, ETS Basic or Interconnection Ports may be equipped with the DSL Access Service Connection function. The function provides for the interconnection of ETS with ADSL Access Service as described in Section 8.1, preceding, and with SDSL Access Service as described in Section 8.2, preceding, provided by the Telephone Company under this tariff. The function also provides for the interconnection of ETS with a wireline broadband Internet transmission service provided on a non-tariffed, common carrier basis. This optional function allows the ETS customer to receive ADSL, SDSL, and/or wireline broadband Internet transmission service data traffic from and transmit ADSL, SDSL, and/or wireline broadband Internet transmission service data traffic to its end user customers.

The speed of the DSL Access Service Connection function ordered by the ETS customer must equal the speed of the associated ETS Port.
16. Public Packet Data Network (Cont’d)

16.3 Ethernet Transport Service (Cont’d)

16.3.4 Rate Regulations (Cont’d)

(A) Rate Categories (Cont’d)

(6) Optional Features and Functions (Cont’d)

(a) DSL Access Service Connection (Cont’d)

As described in Sections 8.1 and 8.2, preceding, the DSL Access Service Connection Point may be located within the serving territory of the Telephone Company, or in the serving territory of an adjacent telephone company when used in conjunction with ETS.

The availability of the DSL Access Service Connection function is designated by the Telephone Company in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. Tariff F.C.C. No. 4.

A nonrecurring charge applies per port to equip the ETS Port with the DSL Access Service Connection function. Rates and charges are specified in Section 17.4.8(C)(6)(a)(i) and (ii), following, or when applicable, as specified in Section 17.4.8(C)(9), following.
16. Public Packet Data Network (Cont’d)

16.3 Ethernet Transport Service (Cont’d)

16.3.4 Rate Regulations (Cont’d)

(A) Rate Categories (Cont’d)

(6) Optional Features and Functions (Cont’d)

(a) DSL Access Service Connection (Cont’d)

(i) Where suitable facilities exist, an ETS customer that requires the ability to send high speed multimedia transmissions may also order an ETS MultiMedia Virtual Circuit Channel (ETS MM-VCC) between its CDP and the premises of its end user customer, provided such end user customer’s premises is equipped with ADSL Access Service provided by the Telephone Company under this tariff as described in Section 8.1, preceding. ETS MM-VCCs are only available when the ETS customer’s CDP, the ETS customer’s end user premises and the Telephone Company’s DSL Access Service Connection Point SWC are all located within the serving territory of the Telephone Company. ETS MM-VCCs do not increase the bandwidth capacity of ETS CTs, ETS Ports, ETS EVCs and/or Special Access Service Channel Terminations, Channel Mileage Facility and Channel Mileage Terminations used by the ETS customer to connect its CDP to the DSL Access Service Connection Point SWC.
16. Public Packet Data Network (Cont’d)

16.3 Ethernet Transport Service (Cont’d)

16.3.4 Rate Regulations (Cont’d)

(A) Rate Categories (Cont’d)

(6) Optional Features and Functions (Cont’d)

(a) DSL Access Service Connection (Cont’d)

Transmission speed across the ETS MM-VCC is not guaranteed and may be affected by factors that affect the actual speeds delivered, including the ADSL Access Service customer’s distance from the Telephone Company SWC, condition of the facilities, and any capacity limitations in the ETS customer’s network design.

At each premises to which the ETS customer wants to transmit multimedia content using an ETS MM-VCC, the ETS customer must specify on its Access Order its end user customer’s premises location and the total number of 10 Mbps bandwidth capacity increments required to that location. For example, an ETS customer requires an additional 40 Mbps of bandwidth capacity to one of its end user customers. On its Access Order to the Telephone Company, the ETS customer would specify the end user customer premises address and order one ETS MM-VCC made up of four 10 Mbps increments.
16. Public Packet Data Network (Cont’d)

16.3 Ethernet Transport Service (Cont’d)

16.3.4 Rate Regulations (Cont’d)

(A) Rate Categories (Cont’d)

(6) Optional Features and Functions (Cont’d)

(a) DSL Access Service Connection (Cont’d)

In the above example, the Telephone Company would bill the ETS customer for one ETS MM-VCC nonrecurring charge and one Access Order Charge. The monthly recurring rate for this ETS MM-VCC would be calculated at four times the 10 Mbps increment rate.

Monthly and nonrecurring charges apply to each ETS MM-VCC established by the Telephone Company in addition to any applicable Access Order Charges specified in Section 5.4.1, preceding. The ETS customer may order multiple ETS MM-VCCs to multiple end users’ locations on a single Access Order, in which case only one Access Order Charge would apply for that order in addition to the applicable nonrecurring charge for each ETS MM-VCC established. The ETS MM-VCC charges apply in addition to the nonrecurring charge for equipping the ETS Port with the DSL Access Service Connection function. Rates and charges are specified in Section 17.4.8(C)(6)(a)(iii), following, or when applicable, as specified in Section 17.4.8(C)(9), following.

The Telephone Company specific rate band assignment for the ETS Multimedia Virtual Circuit Channel rate element is specified in the Special Access (SPA) column in Section 17.5.1, following, or when applicable, as specified in Section 17.4.8(C)(9), following.
16. Public Packet Data Network (Cont’d)

16.3 Ethernet Transport Service (Cont’d)

16.3.4 Rate Regulations (Cont’d)

(A) Rate Categories (Cont’d)

(6) Optional Features and Functions (Cont’d)

(a) DSL Access Service Connection (Cont’d)

The Telephone Company will waive the ETS MM-VCC monthly rate when the local exchange telephone service, ADSL Access Service and ETS MM-VCC are provided from the same serving wire center where the Telephone Company has located its DSL Access Service Connection Point. The ETS MM-VCC nonrecurring charge will apply.

When an ETS customer elects to change the bandwidth capacity of an existing ETS MM-VCC or to remove an existing ETS MM-VCC from its associated ADSL Access Service line, the ETS MM-VCC nonrecurring charge will not apply. In lieu of such charge, the ETS Design Change Charge will apply, as described in Section 16.3.4(B)(2)(d), following.

When an ETS customer disconnects an ETS MM-VCC and the associated ADSL Access Service line at the same time, neither the ETS MM-VCC nonrecurring charge nor the ETS Design Change Charge will apply.
16. Public Packet Data Network (Cont’d)

16.3 Ethernet Transport Service (Cont’d)

16.3.4 Rate Regulations (Cont’d)

(A) Rate Categories (Cont’d)

(6) Optional Features and Functions (Cont’d)

(a) DSL Access Service Connection (Cont’d)

(ii) Where suitable facilities exist, an ETS customer that requires the ability to transmit and receive low speed data using virtual local area network tagged frames may also order an ETS Low Bit Rate Virtual Circuit Channel (ETS LBR-VCC) between its CDP and the premises of its end user customer, provided such end user customer’s premises is equipped with ADSL or SDSL Access Service provided by the Telephone Company under this tariff as described in Sections 8.1 and 8.2, preceding. This optional function allows the customer to transmit and receive tagged frames which were formatted by the customer’s CPE in conformance with the standards specified in Technical Reference, IEEE Std 802.1Q – 2005, Sections 5 through 12 and Annexes E and G. ETS LBR-VCCs are only available when the ETS customer’s CDP, the ETS customer’s end user premises and the Telephone Company’s DSL Access Service Connection Point SWC are all located within the serving territory of the Telephone Company.

ETS LBR-VCCs do not increase the bandwidth capacity of ETS CTs, ETS Ports, ETS EVCs and/or Special Access Service Channel Terminations, Channel Mileage Facility and Channel Mileage Terminations used by the ETS customer to connect its CDP to the DSL Access Service Connection Point SWC.
16. Public Packet Data Network (Cont’d)

16.3 Ethernet Transport Service (Cont’d)

16.3.4 Rate Regulations (Cont’d)

(A) Rate Categories (Cont’d)

(6) Optional Features and Functions (Cont’d)

(a) DSL Access Service Connection (Cont’d)

Transmission speed across the ETS LBR-VCC is not guaranteed and may be affected by factors that affect the actual speeds delivered, including the ADSL or SDSL Access Service customer’s distance from the Telephone Company SWC, condition of the facilities, and any capacity limitations in the ETS customer’s network design.

At each premises to which the ETS customer wants to transmit and receive low speed data using an ETS LBR-VCC, the ETS customer must specify on its Access Order its end user customer’s premises location and the total number of 64 kbps bandwidth capacity increments required to that location. For example, an ETS customer requires an additional 128 kbps of bandwidth capacity to one of its end user customers. On its Access Order to the Telephone Company, the ETS customer would specify the end user customer premises address and order one ETS LBR-VCC made up of two 64 kbps increments.
ACCESS SERVICE

16. **Public Packet Data Network (Cont’d)**

16.3 **Ethernet Transport Service (Cont’d)**

16.3.4 **Rate Regulations (Cont’d)**

(A) **Rate Categories (Cont’d)**

(6) **Optional Features and Functions (Cont’d)**

(a) **DSL Access Service Connection (Cont'd)**

In the above example, the Telephone Company would bill the ETS customer for one ETS LBR-VCC nonrecurring charge and one Access Order Charge. The monthly recurring rate for this ETS LBR-VCC would be calculated at two times the 64 kbps increment rate.

Monthly and nonrecurring charges apply to each ETS LBR-VCC established by the Telephone Company in addition to any applicable Access Order Charges specified in Section 5.4.1, preceding. The ETS customer may order multiple ETS LBR-VCCs to multiple end users’ locations on a single Access Order, in which case only one Access Order Charge would apply for that order in addition to the applicable nonrecurring charge for each ETS LBR-VCC established. The ETS LBR-VCC charges apply in addition to the nonrecurring charge for equipping the ETS Port with the DSL Access Service Connection function. Rates and charges are specified in Section 17.4.8(C)(6)(a)(iv), following, or when applicable, as specified in Section 17.4.8(C)(9), following.
16. Public Packet Data Network (Cont’d)

16.3 Ethernet Transport Service (Cont’d)

16.3.4 Rate Regulations (Cont’d)

(A) Rate Categories (Cont’d)

(6) Optional Features and Functions (Cont’d)

(a) DSL Access Service Connection (Cont'd)

When an ETS customer elects to change the bandwidth capacity of an existing ETS LBR-VCC or to remove an existing ETS LBR-VCC from its associated ADSL or SDSL Access Service line, the ETS LBR-VCC nonrecurring charge will not apply. In lieu of such charge, the ETS Design Change Charge will apply, as described in (d), below.

When an ETS customer disconnects an ETS LBR-VCC and the associated ADSL or SDSL Access Service line at the same time, neither the ETS LBR-VCC nonrecurring charge nor the ETS Design Change Charge will apply.
16. Public Packet Data Network (Cont’d)

16.3 Ethernet Transport Service (Cont’d)

16.3.4 Rate Regulations (Cont’d)

(A) Rate Categories (Cont’d)

(6) Optional Features and Functions (Cont’d)

(b) ETS Port Protection

Where suitable facilities exist, an ETS customer that requires stand-by capability between an ETS Basic Port at the Telephone Company’s ETS SWC and its CDP may order the ETS Port Protection feature. This feature establishes a stand-by ETS Basic Port, associated stand-by ETS CT and dedicated capacity to be activated should a failure occur in the Primary ETS Basic Port at the Telephone Company’s ETS SWC or associated ETS CT between the CDP and the ETS SWC. The ETS switch will automatically redirect the ETS customer’s traffic to the stand-by ETS Basic Port and associated stand-by ETS CT as well as to any EVC(s) (i.e., Intraswitch, Interswitch, Extended and/or Interconnected), assigned CoS levels, and, if applicable, the DSL Access Service Connection function, ETS MM-VCCs and ETS LBR-VCCs associated with the Primary ETS Basic Port. When ordered by the ETS customer, the Telephone Company’s network will redirect traffic as described in IEEE 802.1D-2004, Section 17.

For purposes of this section, the Primary ETS Basic Port is the ETS Basic Port on which the customer orders the establishment of the ETS Port Protection feature. The stand-by ETS Basic Port provides the same functionality and bandwidth capacity as the Primary ETS Basic Port. The stand-by ETS CT provides the same functionality and bandwidth capacity as the associated ETS CT for the Primary ETS Basic Port. In addition to any applicable Access Order Charges specified in Section 5.4.1, preceding, monthly and nonrecurring charges apply for each ETS Port Protection feature established on an existing or new Primary ETS Basic Port. The monthly and nonrecurring charges are based upon whether the CDP is located within 300 feet of the ETS SWC or more than 300 feet from the ETS SWC.
16. Public Packet Data Network (Cont’d)

16.3 Ethernet Transport Service (Cont’d)

16.3.4 Rate Regulations (Cont’d)

(A) Rate Categories (Cont’d)

(6) Optional Features and Functions (Cont’d)

(b) ETS Port Protection (Cont’d)

Rates and charges are specified in Section 17.4.8(C)(6)(b), following, or when applicable, as specified in Section 17.4.8(C)(9), following.

The ETS customer specifies on the order the Primary ETS Basic Port on which the ETS Port Protection feature is to be established. An Access Order Charge, per order, applies to establish the ETS Port Protection feature. When the ETS customer orders the ETS Port Protection feature at the same time as it orders the associated Primary ETS Basic Port, the Access Order Charge will not apply. The ETS customer may order the ETS Port Protection feature for multiple Primary ETS Basic Ports on a single Access Order, in which case only one Access Order Charge would apply for that order in addition to the applicable ETS Port Protection nonrecurring charge for each feature established on each Primary ETS Basic Port.
16. Public Packet Data Network (Cont’d)

16.3 Ethernet Transport Service (Cont’d)

16.3.4 Rate Regulations (Cont’d)

(A) Rate Categories (Cont’d)

(6) Optional Features and Functions (Cont’d)

(b) ETS Port Protection (Cont’d)

The ETS Port Protection feature will automatically be discontinued when the associated Primary ETS Basic Port is disconnected. Neither the ETS Port Protection nonrecurring charge nor the Access Order Charge applies for the discontinuance of the ETS Port Protection feature.

When the ETS customer elects to increase the bandwidth capacity on an existing ETS Basic Port equipped with the ETS Port Protection feature, the ETS Design Change Charge, as described in Section 16.3.4(B)(2)(d), following, will apply per ETS Port Protection feature in lieu of the ETS Port Protection nonrecurring charge.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.4 Rate Regulations (Cont'd)

(B) Types of Rates and Charges

There are two types of rates and charges. They are monthly rates and nonrecurring charges. The rates and charges are described below:

(1) Monthly Rates

Monthly rates are recurring rates that apply each month or fraction thereof when an ETS service element is provided. For billing purposes, each month is considered to have 30 days.

(2) Nonrecurring Charges

Nonrecurring charges are one-time charges that apply for specific work activity (i.e., installation or change to an existing service). The types of nonrecurring charges that apply for ETS are installation of service, service rearrangements, moves and design changes.

Except as specified below, these charges are in addition to the Access Order Charge as specified in Section 17.4.1, following.

(a) Installation of Service

Nonrecurring charges apply for installation of ETS CTs, ETS Ports, ETS EVCs, ETS E-EVCs, ETS I-EVCs and ETS Optional Features and Functions ordered by the ETS customer.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.4 Rate Regulations (Cont'd)

(B) Types of Rates and Charges (Cont’d)

(2) Nonrecurring Charges (Cont’d)

(b) Service Rearrangements

Service rearrangements are changes to existing (i.e., installed) services, which may be administrative only in nature as set forth below or, that involve an actual physical change to the service.

When the ETS customer elects to decrease the bandwidth capacity on existing ETS Ports, associated DSL Access Service Connection functions (where applicable), and/or associated ETS CTs, the request will be considered a discontinuance of service for the former capacity and start of service for the new capacity. Associated nonrecurring (i.e., installation) charges will apply, including the ETS Port Protection feature nonrecurring charge, if applicable. New minimum period requirements will be established for the new ETS elements. The ETS customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued ETS elements.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.4 Rate Regulations (Cont'd)

(B) Types of Rates and Charges (Cont’d)

(2) Nonrecurring Charges (Cont’d)

(b) Service Rearrangements (Cont’d)

When the ETS customer elects to increase the bandwidth capacity on existing ETS Ports, associated DSL Access Service Connection functions (where applicable), and/or associated ETS CTs, the ETS Design Change Charge described in (d), below, will apply per ETS element changed. New minimum period requirements will be established for the higher capacity ETS elements. Any outstanding minimum period charges associated with the lower capacity ETS elements that would otherwise be applicable for the bandwidth capacity increases described in this paragraph will be waived. Nonrecurring charges will also be waived.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.4 Rate Regulations (Cont'd)

(B) Types of Rates and Charges (Cont'd)

(2) Nonrecurring Charges (Cont’d)

(b) Service Rearrangements (Cont’d)

When the ETS customer elects to increase the bandwidth capacity on an existing ETS Basic Port equipped with the ETS Port Protection feature, the ETS Design Change Charge as described in (d), below, will apply per ETS Basic Port Protection feature in lieu of the ETS Port Protection nonrecurring charge.

For example, if an ETS customer elected to increase the bandwidth capacity on its 50 Mbps ETS CT and 50 Mbps ETS Basic Port equipped with ETS Port Protection, three ETS Design Change Charges would apply.

When the ETS customer elects to change the bandwidth capacity on existing ETS EVCs, ETS E-EVCs, ETS I-EVCs ETS MM-VCCs and/or ETS LBR-VCCs (i.e., the customer requests an increase or decrease in capacity), the ETS Design Change Charge described in (d), below, will apply per ETS element changed.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.4 Rate Regulations (Cont'd)

(B) Types of Rates and Charges (Cont’d)

(2) Nonrecurring Charges (Cont’d)

(b) Service Rearrangements (Cont’d)

When the ETS customer elects to remove existing ETS EVCs, ETS E-EVCs, and/or ETS I-EVCs, the ETS Design Change Charge described in (d), below, will apply per ETS EVC, ETS E-EVC or ETS I-EVC removed.

The ETS Design Change Charge will apply per ETS EVC, as described in (d), below, when an ETS customer elects to make one or more of the following changes on an existing ETS EVC that has at least one CoS level already established: (1) changing the bandwidth capacity of an existing CoS level; (2) adding an additional CoS level; (3) replacing one type of CoS level with another type of CoS level; or (4) removing an existing CoS level from the associated ETS EVC. Only one ETS Design Change Charge will apply when more than one of the above changes is made to the same associated ETS EVC at the same time on the same access order.
16. **Public Packet Data Network (Cont'd)**

16.3 **Ethernet Transport Service (Cont'd)**

16.3.4 **Rate Regulations (Cont'd)**

(B) **Types of Rates and Charges (Cont’d)**

(2) **Nonrecurring Charges (Cont’d)**

(b) **Service Rearrangements (Cont’d)**

When the ETS customer elects to remove an existing ETS MM-VCC from its associated ADSL Access Service line, the ETS Design Change Charge described in (d), below, will apply per ETS MM-VCC removed.

When the ETS customer elects to remove an existing ETS LBR-VCC from its associated ADSL or SDSL Access Service line, the ETS Design Change Charge described in (d), below, will apply per ETS LBR-VCC removed.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.4 Rate Regulations (Cont'd)

(B) Types of Rates and Charges (Cont’d)

(2) Nonrecurring Charges (Cont’d)

(b) Service Arrangements (Cont’d)

Administrative changes will be made without charge(s) to the ETS customer. Administrative changes are as follows:

- Change of customer name,
- Change of customer or customer’s end user premises address when the change of address is not a result of physical relocation of equipment,
- Change in billing data (name, address, or contact name or telephone number),
- Change of agency authorization,
- Change of customer circuit identification,
- Change of billing account number,
- Change of customer or customer’s end user contact name or telephone number, and
- Change of jurisdiction
16. Public Packet Data Network (Cont’d)

16.3 Ethernet Transport Service (Cont’d)

16.3.4 Rate Regulations (Cont’d)

(B) Types of Rates and Charges (Cont’d)

(2) Nonrecurring Charges (Cont’d)

(c) Moves

A move involves a change in the physical location of one of the following:

- The Point of Termination at the customer’s premises
- The customer’s premises

The charges for moving ETS elements are dependent on whether the move is to a different location within the same building, to a different building within the same SWC, or to a different building in a different SWC. The charges specified below apply in addition to any applicable charges for moving any applicable Special Access Services as specified in Section 7.2.3, preceding.

(i) Moves Within the Same Building

ETS Basic and Interconnection Ports, ETS EVCs, ETS E-EVCs, and ETS I-EVCs are not impacted when an ETS customer moves its Point of Termination to a different location within the same building. The charge for moving an ETS CT within the same building will be an amount equal to one half of the nonrecurring (i.e., installation) charge for the ETS CT. There will be no change in the minimum period requirements.
16. **Public Packet Data Network** (Cont’d)

16.3 **Ethernet Transport Service** (Cont’d)

16.3.4 **Rate Regulations** (Cont’d)

(B) **Types of Rates and Charges** (Cont’d)

(2) **Nonrecurring Charges** (Cont’d)

(c) **Moves** (Cont’d)

(ii) **Moves To a Different Building Within the Same SWC**

ETS Basic and Interconnection Ports, ETS EVCs, ETS E-EVCs and ETS I-EVCs are not impacted when an ETS customer moves its Point of Termination to a different building within the same SWC. The move of an ETS CT will be treated as a discontinuance and start of service. Associated nonrecurring (i.e., installation) charges will apply. New minimum period requirements will be established for the new services. The ETS customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued service.

(ii) **Moves to a Different Building in a Different SWC**

A move to a different building in a different SWC will be treated as a discontinuance start of service of all associated ETS elements.
16. Public Packet Data Network (Cont’d)

16.3 Ethernet Transport Service (Cont’d)

16.3.4 Rate Regulations (Cont’d)

(B) Types of Rates and Charges (Cont’d)

(2) Nonrecurring Charges (Cont’d)

(c) Moves (Cont’d)

(iii) Moves to a Different Building in a Different SWC (Cont’d)

Associated nonrecurring (i.e., installation) charges will apply, including the ETS Port Protection feature nonrecurring charge, if applicable. New minimum period requirements will be established for the new services. The ETS customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued service.
16. **Public Packet Data Network (Cont'd)**

16.3 **Ethernet Transport Service (Cont'd)**

16.3.4 **Rate Regulations (Cont'd)**

(B) **Types of Rates and Charges (Cont’d)**

(2) **Nonrecurring Charges (Cont’d)**

(d) **ETS Design Changes**

As described in (b), above, the ETS Design Change Charge specified in Section 17.4.8(C)(6)(a)(v), following, or when applicable, as specified in Section 17.4.8(C)(9), following, will apply when the ETS customer elects to: (1) change the bandwidth capacity of existing ETS EVCs, ETS E-EVCs, ETS I-EVCs, ETS MM-VCCs and/or ETS LBR-VCCs; (2) remove existing ETS EVCs, ETS E-EVCs, or ETS I-EVCs; (3) remove an existing ETS MM-VCC from its associated ADSL Access Service line; 4) remove an existing ETS LBR-VCC from its associated ADSL or SDSL Access Service line; or (5) increase the bandwidth on existing ETS Ports, existing ETS Basic Ports equipped with the ETS Port Protection feature, associated DSL Access Service Connection Functions, where applicable, and/or associated ETS CTs.

The ETS Design Change Charge will apply per ETS EVC when the ETS customer elects to: (1) change the bandwidth capacity of an existing CoS level; (2) add an additional CoS level; (3) replace one type of CoS level with another type of CoS level; or (4) remove an existing CoS level from the associated ETS EVC.

Only one ETS Design Change Charge will apply when more than one of the above changes is made to the same associated ETS EVC at the same time on the same access order.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.4 Rate Regulations (Cont'd)

(B) Types of Rates and Charges (Cont’d)

(2) Nonrecurring Charges (Cont’d)

(d) ETS Design Changes (Cont’d)

When applicable, the ETS Design Change Charge applies in lieu of the ETS EVC, ETS E-EVC, ETS I-EVC, ETS MM-VCC or ETS LBR-VCC nonrecurring charge.

The Access Order Charge will not apply when the ETS Design Change Charge is applicable.

(C) Minimum Periods

The minimum period for ETS service elements provided to an ETS customer and for which charges are applicable is:

- Twelve months for ETS Basic Ports, ETS Interconnection Ports, ETS Channel Terminations and

- One month for all other ETS elements.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.5 ETS Term Discount Plan

An optional term discount plan is available for Ethernet Transport Service (ETS). Under the ETS Term Discount Plan, the monthly rates for eligible ETS service elements are reduced by a fixed percentage. The amount of the discount percentage differs based on the length of the term commitment period selected by the ETS customer.

ETS may be ordered at the customer’s option on a month-to-month basis or, under a single term commitment period of either 36 months or 60 months. The customer must notify the Telephone Company in writing of the length of its selected term commitment period. For purposes of this plan, all ETS Basic and ETS Interconnection Ports included in a customer’s ETS Term Discount Plan are referred to as committed ETS Ports. To be included in an ETS Term Discount Plan, all committed ETS Ports must be ordered for the same term commitment period (i.e., all 36 months or all 60 months) and remain in-service at the same bandwidth capacity throughout the entire term commitment period. ETS Ports installed after the establishment of the customer’s ETS Term Discount Plan may be ordered on a month-to-month basis or added as additional committed ETS Ports to a customer’s existing term commitment period as described in (A), below.

Access Order Charges as described in Section 5.4.1, preceding, do not apply to establish a new or make any changes to an existing ETS Term Discount Plan.
16. Public Packet Data Network (Cont’d)

16.3 Ethernet Transport Service (Cont’d)

16.3.5 ETS Term Discount Plan (Cont’d)

The monthly rates for ETS service elements are set forth in Sections 17.4.8(C)(1) through (C)(6), following, or when applicable, as specified in Section 17.4.8(C)(9), following. The term discount percentages for the ETS Term Discount Plan are set forth in Section 17.4.8(C)(7), following. The ETS Term Discount Plan is only available from those Telephone Companies listed in Section 17.3.10(A)(1), following.

The term discount percentage for the customer’s selected term commitment period applies to all committed ETS Ports provided within the Telephone Company’s operating territory. The term discount percentage also applies to the following eligible ETS elements when these elements are provided within the Telephone Company’s operating territory and associated with a committed ETS Port: 1) ETS Channel Terminations (ETS CTs); 2) ETS Ethernet Virtual Connections (ETS EVCs) and associated Class of Service (CoS) levels, where applicable; 3) ETS Extended Ethernet Virtual Connections (ETS E-EVCs); 4) ETS Interconnected Ethernet Virtual Connections (ETS I-EVCs); 5) ETS MultiMedia Virtual Circuit Channels (ETS MM-VCCs), 6) ETS Low Bit Rate Virtual Circuit Channels (ETS LBR-VCCs) and 7) the ETS Port Protection feature. Since there are no bandwidth or in-service requirements for ETS CTs, ETS EVCs, ETS E-EVCs, ETS I-EVCs, ETS MM-VCCs, ETS LBR-VCCs and the ETS Port Protection feature associated with committed ETS Ports under the ETS Term Discount Plan, customer ordered disconnects of or changes to the number or bandwidth capacities for these elements do not affect the customer’s ETS Term Discount Plan.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.5 ETS Term Discount Plan (Cont’d)

The term discount percentage does not apply to: 1) ETS Ports ordered on a month-to-month basis; 2) ETS CTs, ETS EVCs and associated CoS levels, where applicable, ETS E-EVCs, ETS I-EVCs, ETS MM-VCCs and ETS LBR-VCCs that are not associated with a committed ETS Port; 3) ETS nonrecurring charges; and 4) special access services connected to an ETS Interconnection Port.

Except as specified in (A)-(C), below, discontinuance charges will apply when the customer fails to satisfy the term commitment period or the in-service requirements for its committed ETS Ports.

The term discount percentage set forth in Section 17.4.8(C)(7), following, will not be subject to Telephone Company initiated decreases during the customer’s selected term commitment period.

If a term discount percentage increase occurs during the term of an existing ETS Term Discount Plan, the increased percentage will be applied automatically for the remainder of the customer’s existing term commitment period.

At the end of the term commitment period, the customer may subscribe to a new ETS Term Discount Plan commitment period or revert to the undiscounted monthly rates and nonrecurring charges specified in Sections 17.4.8(C)(1) through (C)(6), following. If the customer does not notify the Telephone Company in writing of its choice by the end of its existing term commitment period, the Telephone Company will automatically convert the customer’s ETS billing to the undiscounted monthly rates and nonrecurring charges specified in Sections 17.4.8(C)(1) through (C)(6), following. An Access Order Charge will not apply when a customer at the end of its existing term commitment period subscribes to a replacement ETS Term Discount Plan or reverts to month-to-month rates.
16. **Public Packet Data Network (Cont'd)**

16.3 **Ethernet Transport Service (Cont'd)**

16.3.5 **ETS Term Discount Plan (Cont’d)**

(A) **ETS Port Additions**

An ETS Term Discount Plan customer will choose one of the following options when ordering a new ETS Port during its existing term commitment period:

1. Add the new ETS Port to its existing ETS Term Discount Plan provided: 1) the customer commits to retain the newly installed ETS Port in-service at the same bandwidth capacity for the remainder of the existing term commitment period and 2) the ETS Port is being added before the last year of an existing term commitment period. The term commitment period of the customer’s existing ETS Term Discount Plan will continue uninterrupted. During the last year of the commitment period, ETS Ports may not be added to an existing term commitment period.

2. Order the new ETS Port on a month-to-month basis. No term discount percentage would apply to the newly installed ETS Port. The term commitment period of the customer’s existing ETS Term Discount Plan will continue uninterrupted.

3. Replace the existing ETS Term Discount Plan in its entirety with a new ETS Term Discount Plan as described in (C), below.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.5 ETS Term Discount Plan (Cont’d)

(B) Committed ETS Port Replacements

(1) An ETS Term Discount Plan customer may disconnect a committed ETS Port before the end of its existing term commitment period and replace it with one or more newly installed committed ETS Port(s) without the application of a discontinuance charge as described in (D), below, provided: 1) the bandwidth capacity of the replacement committed ETS Port(s) is equal to or greater than the bandwidth capacity of the disconnected committed ETS Port; 2) the customer commits to retain the replacement committed ETS Port(s) in-service at the same bandwidth capacity for the remainder of the existing term commitment period; 3) the replacement committed ETS Port(s) is added to the existing term commitment before the last year of an existing term commitment period; and 4) the customer’s orders for the disconnect of the originally committed ETS Port and installation of the replacement committed ETS Port(s) are submitted to the Telephone Company at the same time and include cross references as described in Section 5.2.8, preceding.
16. Public Packet Data Network (Cont’d)

16.3 Ethernet Transport Service (Cont’d)

16.3.5 ETS Term Discount Plan (Cont’d)

(B) Committed ETS Port Replacements (Cont’d)

(2) If the bandwidth capacity of the newly installed committed ETS Port(s) is less than the bandwidth capacity of the disconnected committed ETS Port, the disconnected committed ETS Port will be subject to a discontinuance charge as described in (D), below. The newly installed port(s) can be added as a committed ETS Port to the existing term commitment period or ordered on a month-to-month basis as described in (A), above.

(3) Since newly installed ETS Ports cannot be added to an existing term commitment period during the last year of the commitment period, an existing committed ETS Port disconnected during the last year of the commitment period cannot be replaced as described in (B)(1), above. The disconnected committed ETS Port will be subject to a discontinuance charge as described in (D), below. During the last year of the term commitment period, newly installed ETS Ports can be ordered as described in (A), above.
16. Public Packet Data Network (Cont’d)

16.3 Ethernet Transport Service (Cont’d)

16.3.5 ETS Term Discount Plan (Cont’d)

(C) ETS Term Discount Plan Replacements

(1) The customer may replace an existing ETS Term Discount Plan in its entirety with a new ETS Term Discount Plan without the application of a discontinuance charge as described in (D), below, provided: 1) the term commitment period of the new ETS Term Discount Plan meets or exceeds the number of months remaining in the customer’s existing ETS term commitment period and 2) the bandwidth capacity of the committed ETS Ports under the new ETS Term Discount Plan meets or exceeds the bandwidth capacity of the committed ETS Ports in the customer’s existing ETS term commitment period.

The term discount percentage applicable for the replacement ETS Term Discount Plan will apply on a going forward basis based on the customer’s written request to establish a new ETS Term Discount Plan commitment period under this provision.
16. Public Packet Data Network (Cont’d)

16.3 Ethernet Transport Service (Cont’d)

16.3.5 ETS Term Discount Plan (Cont’d)

(C) ETS Term Discount Plan Replacements (Cont’d)

(1) (Cont’d)

For example, a customer with an existing 36 month term commitment period and 50 Mbps of bandwidth capacity for its committed ETS Ports can replace that term commitment in its entirety with a new 36 month or 60 month term commitment period at any time during the existing term commitment period without the application of a discontinuance charge provided the bandwidth capacity of the customer’s committed ETS Ports under the new term commitment period is at least 50 Mbps.

(2) When the term commitment period of a replacement ETS Term Discount Plan does not meet or exceed the number of months remaining in the customer’s existing ETS Term Discount Plan commitment period, a discontinuance charge as described in (D), below, will apply.
16. Public Packet Data Network (Cont’d)

16.3 Ethernet Transport Service (Cont’d)

16.3.5 ETS Term Discount Plan (Cont’d)

(C) ETS Term Discount Plan Replacements (Cont’d)

(3) When the term commitment period of the new ETS Term Discount Plan meets or exceeds the number of months remaining in the customer’s existing ETS term commitment period, but the bandwidth capacity of the customer’s committed ETS Ports under the new term commitment period is less than the bandwidth capacity of the committed ETS Ports under the customer’s existing term commitment period, the following provisions will apply.

(a) When the total monthly undiscounted charges for the number and type of committed ETS Ports to be included in the customer’s replacement ETS Term Discount Plan is equal to or greater than the total monthly undiscounted charges for the number and type of committed ETS Ports included in the customer’s existing ETS Term Discount Plan, the customer will be permitted to replace its existing ETS Term Discount Plan without the application of either a discontinuance charge as described in (D), below, or a commitment shortfall charge as described in (b), below.
16. **Public Packet Data Network (Cont’d)**

16.3 **Ethernet Transport Service (Cont’d)**

16.3.5 **ETS Term Discount Plan (Cont’d)**

(C) **ETS Term Discount Plan Replacements (Cont’d)**

(3) (Cont’d)

(b) When the total monthly undiscounted charges for the number and type of committed ETS Ports to be included in the customer’s replacement ETS Term Discount Plan is less than the total monthly undiscounted charges for the number and type of committed ETS Ports included in the customer’s existing ETS Term Discount Plan, the customer will be permitted to replace its existing ETS Term Discount Plan under this provision, however, a commitment shortfall charge will apply. The commitment shortfall charge will apply in lieu of a discontinuance charge as described in (D), below, and will be calculated as follows:

**Step 1:** Determine the difference between the total monthly undiscounted charges for the number and type of committed ETS Ports included in the customer’s existing ETS Term Discount Plan and the total monthly undiscounted charges for the number and type of committed ETS Ports to be included in the customer’s replacement ETS Term Discount Plan.
16. Public Packet Data Network (Cont’d)

16.3 Ethernet Transport Service (Cont’d)

16.3.5 ETS Term Discount Plan (Cont’d)

(C) ETS Term Discount Plan Replacements (Cont’d)

(3) (b) (Cont’d)

Step 2: Multiply the result from Step 1 by 35%.

Step 3: Multiply the result from Step 2 times the number of months remaining in the existing term commitment period.

For example, a customer elects to replace its existing 36 month ETS Term Discount Plan in its entirety in the 22nd month of the existing term commitment period with a new 36 month ETS Term Discount Plan. The existing term plan commitment includes a total bandwidth capacity requirement of 300 Mbps for the customer’s six 50 Mbps committed ETS Basic Ports. In the replacement ETS Term Discount Plan, the customer will only be including two 100 Mbps committed ETS Basic Ports for a total bandwidth capacity of 200 Mbps. Although the customer satisfies the term commitment length replacement requirement with the new ETS Term Discount Plan, it does not satisfy the bandwidth capacity replacement requirement and the total monthly undiscounted charges under the new term commitment period are less than the total monthly undiscounted charges under the existing term commitment period.
16. Public Packet Data Network (Cont’d)

16.3 Ethernet Transport Service (Cont’d)

16.3.5 ETS Term Discount Plan (Cont’d)

(C) ETS Term Discount Plan Replacements (Cont’d)

(3) (b) (Cont’d)

Using illustrative undiscounted monthly rates of $275.00 for a 50 Mbps ETS Basic Port and $330.00 for a 100 Mbps ETS Basic Port, the Telephone Company would bill the customer a commitment shortfall charge totaling $4,851.00 based on:

Step 1: $1,650.00 (i.e., $275.00 x 6 ports) - $660.00 (i.e., $330.00 x 2 ports) = $990.00

Step 2: $990.00 x 35% = $346.50

Step 3: $346.50 x 14 months = $4,851.00

(D) Discontinuance Charges

Except as provided for in (B) and (C), above, discontinuance charges will apply when: 1) the customer disconnects a committed ETS Port prior to the end of the term commitment period; 2) the customer disconnects a committed ETS Port prior to the end of the term commitment period and the replacement committed ETS Port(s) does not satisfy the requirements specified in (B), above; 3) the customer discontinues an existing ETS Term Discount Plan in its entirety prior to the end of the term commitment period; or 4) the customer replaces an existing ETS Term Discount Plan with a new ETS Term Discount Plan that does not satisfy the requirements specified in (C), above.
16. Public Packet Data Network (Cont’d)

16.3 Ethernet Transport Service (Cont’d)

16.3.5 ETS Term Discount Plan (Cont’d)

(D) Discontinuance Charges (Cont’d)

The discontinuance charge will be equal to 35% of the total undiscounted monthly rate for each committed ETS Port included in the customer’s ETS Term Discount Plan for each month remaining in the unsatisfied term commitment period. Minimum service period charges as specified in Section 16.3.4(C), preceding, would also apply, if applicable.

The following examples illustrate how the Telephone Company will calculate the applicable discontinuance charge.

Example 1:

A customer discontinues its existing ETS Term Discount Plan in its entirety in the 20th month of a 36 month term commitment period. The customer included three 100 Mbps committed ETS Basic Ports when it established its initial term plan commitment.

Using an illustrative undiscounted monthly rate of $330.00 for a 100 Mbps ETS Basic Port, the Telephone Company would bill the customer a term plan discontinuance charge totaling $5,544.00 (i.e., $330.00 x 35% x 3 ports x 16 months).
16. Public Packet Data Network (Cont’d)

16.3 Ethernet Transport Service (Cont’d)

16.3.5 ETS Term Discount Plan (Cont’d)

(D) Discontinuance Charges (Cont’d)

Example 2

A customer disconnects one of the four 50 Mbps committed ETS Basic Ports included in its ETS Term Discount Plan in the 39th month of a 60 month term commitment period. The customer included all four of these ports when it established its initial term plan commitment.

Using an illustrative undiscounted monthly rate of $275.00 for a 50 Mbps ETS Basic Port, the Telephone Company would bill the customer a port discontinuance charge totaling $2,021.25 (i.e., $275.00 x 35% x 21 months).
16. **Public Packet Data Network (Cont’d)**

16.3 **Ethernet Transport Service (Cont’d)**

16.3.5 **ETS Term Discount Plan (Cont’d)**

**(E) ETS Volume Discount Plan**

The ETS Volume Discount Plan (ETS VDP) is an optional pricing plan that provides the ETS Term Discount Plan customer with an additional discount applied against the monthly charges for its in-service committed ETS Basic and Interconnection Ports when the customer has at least five committed ETS Ports in-service within the Telephone Company’s operating territory.

In order to subscribe to and retain the ETS VDP, the customer must have an ETS Term Discount Plan commitment with the Telephone Company. The ETS Term Discount Plan customer must notify the Telephone Company in writing it wants to establish an ETS VDP. The customer may request an ETS VDP at the same time as it establishes its ETS Term Discount Plan commitment or at any time prior to the expiration of an existing ETS Term Discount Plan. The ETS VDP will continue for the balance of the customer’s ETS Term Discount Plan commitment.

Each month on the bill date, the Telephone Company will determine the number of the customer’s committed ETS Basic and Interconnection Ports in-service. If that number falls below five, the customer will not be eligible for the ETS VDP discount that month. When the number of committed ETS Basic and Interconnection Ports in-service is at least five, the ETS VDP discount will be applied for that month after the ETS Term Discount Plan discount for the customer’s selected term length is applied.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont’d)

16.3.5 ETS Term Discount Plan (Cont’d)

(E) ETS Volume Discount Plan (Cont’d)

The ETS VDP discount does not apply to: (1) ETS Ports ordered on a month-to-month basis (i.e., non-committed ETS Ports), (2) any other ETS monthly charges, (3) any ETS nonrecurring charges, or (4) any monthly or nonrecurring charges for special access services connected to a committed ETS Interconnection Port.

Access Order Charges as described in Section 5.4.1, preceding, do not apply to establish a new ETS VDP or to terminate an existing ETS VDP.

The ETS VDP discount is specified in Section 17.4.8(C)(8), following.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.5 ETS Term Discount Plan (Cont’d)

(F) ETS Fixed Rate Option

Where offered, the ETS Fixed Rate Option (ETS FRO) provides the ETS Term Discount Plan customer with stabilized rates that will apply to the customer’s ETS service elements throughout the length of the customer’s selected ETS Term Discount Plan commitment period.

When the customer subscribes to an ETS FRO, the stabilized rates for the ETS service elements included under an ETS FRO plan will not be subject to any Telephone Company initiated rate increases and decreases during the customer’s selected term commitment period.

The ETS FRO is only available from those Telephone Companies listed in Section 17.4.8(C)(9), following, which offer the ETS FRO during the availability window specified.

The ETS FRO is only available when the customer establishes a new 36 month or 60 month ETS Term Discount Plan commitment with the Telephone Company. An existing ETS Term Discount Plan customer wishing to subscribe to an available ETS FRO may replace its existing term plan commitment with a new 36 month or 60 month ETS Term Discount Plan commitment. If applicable, minimum period charges, commitment shortfall charges, and/or term plan discontinuance charges as described in (C) and (D), above, would apply to the customer’s ETS Term Discount Plan being replaced, and would be calculated using the monthly rates specified in Sections 17.4.8(C)(1) through (C)(6), following.
16. Public Packet Data Network (Cont'd)

16.3 Ethernet Transport Service (Cont'd)

16.3.5 ETS Term Discount Plan (Cont’d)

(F) ETS Fixed Rate Option (Cont’d)

In order to subscribe to an available ETS FRO, the customer must notify the Telephone Company in writing during the time period specified in that ETS FRO plan that it wishes to establish a new 36 month or 60 month ETS Term Discount Plan with ETS FRO stabilized rates.

The stabilized rates specified in Section 17.4.8(C)(9), following, for an available ETS FRO apply in lieu of the non-stabilized rates specified in Sections 17.4.8(C)(1) through (C)(6), following. The ETS FRO stabilized rates will apply to the customer’s ETS service elements only during the 36 month or 60 month commitment period established by the customer at the time it subscribes to the ETS FRO plan.

Except as provided herein, all other provisions related to the ETS Term Discount Plan as specified in Section 16.3.5 apply to an ETS Term Discount Plan customer that subscribes to an ETS FRO plan.

An ETS Term Discount Plan customer with ETS FRO stabilized rates may replace or discontinue its) ETS Term Discount Plan at any time during its selected term commitment period subject to the provisions described in (C) and (D), above. If applicable, minimum period charges, commitment shortfall charges, and/or term plan discontinuance charges as described in (C) and (D), above, apply and would be calculated using the monthly rates specified in the ETS FRO plan to which the customer subscribed.
16. Public Packet Data Network (Cont’d)

16.3 Ethernet Transport Service (Cont’d)

16.3.5 ETS Term Discount Plan (Cont’d)

(F) ETS Fixed Rate Option (Cont’d)

An ETS Term Discount Plan customer with ETS FRO stabilized rates may not renew or extend its ETSFRO plan subscription beyond the end of the term commitment period selected at the time it subscribed to the ETS FRO plan. At the end of the customer’s term commitment period, an ETS Term Discount Plan customer with ETS FRO stabilized rates may choose to:

- subscribe to a new ETS Term Discount Plan commitment period with the monthly rates and nonrecurring charges specified in Sections 17.4.8(C)(1) through (C)(6), following;

- subscribe to a new ETS Term Discount Plan commitment period with ETS FRO stabilized rates, if an alternative ETS FRO plan is available at that time, as specified in Section 17.4.8(C)(9), following; or

- revert to the undiscounted monthly rates and nonrecurring charges specified in Sections 17.4.8(C)(1) through (C)(6), following.

If the customer does not notify the Telephone Company in writing of its choice by the end of its existing term commitment period, the Telephone Company will automatically convert the customer’s ETS billing for current and future ETS service elements to the monthly rates and nonrecurring charges specified in Sections 17.4.8(C)(1) through (C)(6), following.
16. **Public Packet Data Network (Cont'd)**

16.3 **Ethernet Transport Service (Cont'd)**

16.3.5 **ETS Term Discount Plan (Cont’d)**

(F) **ETS Fixed Rate Option (Cont’d)**

An Access Order Charge does not apply to establish a new or discontinue an existing ETS FRO. An Access Order Charge also does not apply when at the end of the customer’s ETS Term Discount Plan the customer subscribes to a new ETS Term Discount Plan or reverts to billing using the undiscounted monthly rates and nonrecurring charges specified in Sections 17.4.8(C)(1) through (C)(6), following.
16. Public Packet Data Network (Cont'd)

16.4 Internet Protocol Gateway Access Service

16.4.1 General

Internet Protocol Gateway Access Service (IPG) is an optional two-way packet transport service that provides an end-to-end transmission path using packet technology at transport speeds of either 1.544 Mbps or 44.736 Mbps, where available. IPG enables the customer to interconnect its Internet Protocol (IP) based network with the Telephone Company’s switched network at a Telephone Company provided IP gateway. IPG is only available to connect the customer’s designated premises (CDP) to a Telephone Company provided IP gateway serving wire center (IPG SWC) when both the CDP and IPG SWC are located within the Telephone Company’s serving territory.

IPG provides the customer with voice transmission and call set up signaling paths between its CDP and the IPG SWC. Available for use in conjunction with Feature Group D (FGD) Switched Access Service as described in Section 6.8.1, preceding, IPG provides the customer with the ability to deliver interexchange voice traffic originated on or transported across its IP based network for termination to the Telephone Company’s local exchange service subscribers and to accept interexchange voice traffic originated on or transported across the Telephone Company’s network.

16.4.2 Service Description

As described below, IPG is provided using a combination of IPG Transport and IPG Ports. IPG can only be used in conjunction with FGD Switched Access Service, which is ordered separately by the IPG customer.
16. Public Packet Data Network (Cont’d)

16.4 Internet Protocol Gateway Access Service (Cont’d)

16.4.2 Service Description (Cont’d)

IPG Transport is required to provide the connection between the CDP and Telephone Company IPG SWC. IPG Transport consists of an IPG Transport Termination and, where required, an IPG Transport Mileage Facility and IPG Transport Mileage Termination. Which IPG Transport rate elements apply will depend on where in its network the Telephone Company deploys its IP gateway. An IPG Port is required to provide the interface at the IPG SWC to the Telephone Company’s switched network.

The transmission quality of IPG is not guaranteed and is offered to the IPG customer at a best effort level. The Telephone Company will attempt to deliver all interexchange voice traffic received that was originated on or transported across the IPG customer’s IP based network.

The Telephone Company will provide the IPG customer accurate call signaling data for interexchange voice traffic that originates on or is transported across the Telephone Company’s network. The call signaling data will either: 1) conform to an active 10-digit North American Numbering Plan or directory number, which is associated with the geographic location of the originating calling party (i.e., Calling Party Number and/or Automatic Number Identification) or 2) represent IP equivalent call signaling that is mutually agreed upon by the IPG customer and Telephone Company at the time the customer places its order for IPG.

Service is provided, where available, between CDPs and designated Telephone Company IPG SWCs located within the Telephone Company’s serving territory. IPG will be furnished where suitable facilities exist as determined by the Telephone Company. The Telephone Company will identify its IPG SWCs in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.
16. Public Packet Data Network (Cont’d)

16.4 Internet Protocol Gateway Access Service (Cont’d)

16.4.2 Service Description (Cont’d)

Rates and charges for IPG are specified in Section 17.4.8(D), following. The Telephone Company specific rate band assignment for the IPG rate elements is specified in the Special Access (SPA) column in Section 17.5.1, following. The application of rates and charges for IPG is described later in this section.

16.4.3 Obligations of the Customer

In addition to the regulations described in other sections of this tariff, the following provisions apply to IPG.

(A) The IPG customer is responsible for providing the Telephone Company with the necessary information to provision IPG as specified in Section 5.2 Ordering Requirements, preceding.

(B) The IPG customer is responsible for providing and maintaining all required CPE, which is compatible with IPG and the customer selected signaling interface and bearer channel format that comply with the requirements specified in the following Technical References:

- IETF RFC 3261 – June 2002;
- IETF RFC 3262 - June 2002;
- IETF RFC 3263 – June 2002;
- IETF RFC 3264 – June 2002;
- IETF RFC 3265 – June 2002;
- IETF RFC 3550 – July 2003;
- ITU-T G.711 – November 1988;
- ITU-T G.723.1 – May 2006;
- ITU-T G.7041/Y.1303 – August 2005;
- ITU-T H.225.0 – May 2006;
- ITU-T H.245 – June 2008; and/or
16. Public Packet Data Network (Cont'd)

16.4 Internet Protocol Gateway Access Service (Cont’d)

16.4.3 Obligations of the Customer (Cont’d)

(B) The IPG customer is responsible for passing to the Telephone Company accurate call signaling data that will enable the Telephone Company to accurately bill for the associated terminating FGD Switched Access Service network usage. Such call signaling data must either: 1) conform to an active 10-digit North American Numbering Plan or directory number, which is associated with the geographic location of the originating calling party (i.e., Calling Party Number and/or Automatic Number Identification) or 2) represent IP equivalent call signaling that is mutually agreed upon by the IPG customer and Telephone Company at the time the customer places its order for IPG.

16.4.4 Rate Regulations

This section contains the regulations governing the rates and charges that apply for IPG. Regulations governing the rates and charges for FGD Switched Access Service provided under this tariff used in conjunction with IPG are as specified in Section 6.8.1, preceding. The following diagrams depict generic views of the elements of IPG.
16. **Public Packet Data Network (Cont'd)**

16.4 **Internet Protocol Gateway Access Service (Cont’d)**

16.4.4 **Rate Regulations (Cont’d)**

In the first figure, the IPG customer’s CDP is served by the Telephone Company’s IPG SWC. The Telephone Company deployed its IP gateway at its access tandem office. The IPG customer obtains the ability to deliver traffic originated on or transported across its IP based network for termination to local exchange service subscribers served by end offices subtending this access tandem office and to accept traffic originated on or transported across the Telephone Company’s network. The IPG customer orders the applicable IPG service elements from the Telephone Company pursuant to the provisions specified in this section and the applicable FGD Switched Access Service elements pursuant to the provisions specified in Section 6.8.1, preceding.

**Figure 1**

![Diagram of IPG service connections](image)

- **FGD Switched Access Service**
  - Tandem Switched Facility
  - Tandem Switched Termination
  - Tandem Switching
  - Local Switching
  - Information Surcharge

- **IPG**
  - IPG Transport Termination
  - IPG Port
16. Public Packet Data Network (Cont'd)

16.4 Internet Protocol Gateway Access Service (Cont’d)

16.4.4 Rate Regulations (Cont’d)

In the second figure, the IPG customer’s CDP is served by a SWC that is not the IPG SWC. The Telephone Company deployed its IP gateway at its access tandem office. The IPG customer obtains the ability to deliver traffic originated on or transported across its IP based network for termination to local exchange service subscribers served by end offices subtending this access tandem office and to accept traffic originated on or transported across the Telephone Company’s network. The IPG customer orders the applicable IPG service elements from the Telephone Company pursuant to the provisions specified in this section and the applicable FGD Switched Access Service elements pursuant to the provisions specified in Section 6.8.1, preceding.

**Figure 2**

- Tandem Switched Facility
- Tandem Switched Termination
- Tandem Switching
- Local Switching
- Information Surcharge

- IPG Transport Termination
- IPG Transport Mileage Facility
- IPG Transport Mileage Termination
- IPG Port
16. **Public Packet Data Network (Cont'd)**

16.4 **Internet Protocol Gateway Access Service (Cont’d)**

16.4.4 **Rate Regulations (Cont’d)**

In the third figure, the IPG customer’s CDP is served by a SWC that is not the IPG SWC. The Telephone Company deployed its IP gateway at its end office. The IPG customer obtains the ability to deliver traffic originated on or transported across its IP based network for termination to local exchange service subscribers served by this end office and to accept traffic originated on or transported across the Telephone Company’s network. The IPG customer orders the applicable IPG service elements from the Telephone Company pursuant to the provisions specified in this section and the applicable FGD Switched Access Service elements pursuant to the provisions specified in Section 6.8.1, preceding.

**Figure 3**

![Diagram of IPG and FGD Switched Access Service elements]
16. Public Packet Data Network (Cont’d)

16.4 Internet Protocol Gateway Access Service (Cont’d)

16.4.4 Rate Regulations (Cont’d)

In the fourth figure, the IPG customer’s CDP is served by a SWC that is not the IPG SWC. The Telephone Company deployed its IP gateway at its host office. The IPG customer obtains the ability to deliver traffic originated on or transported across its IP based network for termination to local exchange service subscribers served by this host office and its subpending remote offices and to accept traffic originated on or transported across the Telephone Company’s network. The IPG customer orders the applicable IPG service elements from the Telephone Company pursuant to the provisions specified in this section and the applicable FGD Switched Access Service elements pursuant to the provisions specified in Section 6.8.1, preceding.

Figure 4

- Local Switching
- Information Surcharge

- IPG Transport Termination
- IPG Transport Mileage Facility
- IPG Transport Mileage Termination
- IPG Port
16. Public Packet Data Network (Cont’d)

16.4 Internet Protocol Gateway Access Service (Cont’d)

16.4.4 Rate Regulations (Cont’d)

(A) Rate Categories

IPG service elements are described below. Rates and charges are specified in Section 17.4.8(D), following. The Telephone Company specific rate band assignment for all IPG service elements is specified in the Special Access (SPA) column in Section 17.5.1, following.

(1) IPG Transport Termination (TT)

An IPG TT provides the transport facility between the customer’s designated premises and the Telephone Company’s SWC. The IPG TT rate element is designed to recover the costs associated with this transport facility.

IPG TTs are available at bandwidth speeds of 1.544 Mbps and 44.736 Mbps. The IPG customer orders the quantity and type of IPG TT it needs based on its bandwidth requirements. An IPG TT may be connected to: 1) an IPG Port when the IPG SWC is the SWC serving the customer’s designated premises or 2) an IPG Transport Mileage Facility and IPG Transport Mileage Termination when the SWC serving the customer’s designated premises is not IPG equipped.

Monthly and nonrecurring charges apply for each IPG TT ordered. The charges are based upon the bandwidth capacity ordered by the customer. The IPG TT will apply even if the customer’s designated premises and the IPG SWC are located in the same Telephone Company building.
16. Public Packet Data Network (Cont'd)

16.4 Internet Protocol Gateway Access Service (Cont’d)

16.4.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(2) IPG Transport Mileage Facility (TMF)

IPG TMF is required when the SWC serving the customer’s designated premises is not IPG equipped. The IPG TMF provides the transport facility between the SWC serving the customer’s designated premises and the Telephone Company’s IPG SWC. The IPG TMF rate element is designed to recover the costs associated with this transport facility.

IPG TMF is available at bandwidth speeds of 1.544 Mbps and 44.736 Mbps. The IPG customer orders the quantity and type of IPG TMF it needs based on its bandwidth requirements.

A monthly charge applies for each IPG TMF ordered. The monthly charge for each IPG TMF is based upon the bandwidth speed ordered and the number of airline miles between the SWC serving the customer’s designated premises and the Telephone Company’s IPG SWC. To determine the applicable monthly charge, first compute the airline mileage using the V&H coordinates method described in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4. When the calculation results in a fraction of a mile, always round up to the next whole mile before determining the total airline mileage. Once the total airline mileage for each IPG TMF is determined, multiply the number of airline miles times the IPG Transport Mileage Facility per mile rate for the bandwidth speed ordered.
16. Public Packet Data Network (Cont'd)

16.4 Internet Protocol Gateway Access Service (Cont’d)

16.4.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(3) IPG Transport Mileage Termination (TMT)

An IPG TMT is required whenever the customer orders IPG TMF as described in (2), above. The IPG TMT provides the circuit equipment needed to terminate an IPG TMF at the SWC serving the customer’s designated premises. The IPG TMT rate element is designed to recover the costs associated with this circuit equipment.

IPG TMT is available at bandwidth speeds of 1.544 Mbps and 44.736 Mbps.

For each IPG TMF ordered by the customer, one IPG TMT at the same speed as the associated IPG TMF applies. A monthly charge applies for each IPG TMT based upon the bandwidth speed ordered by the customer.
16. Public Packet Data Network (Cont'd)

16.4 Internet Protocol Gateway Access Service (Cont’d)

16.4.4 Rate Regulations (Cont'd)

(A) Rate Categories (Cont'd)

(4) IPG Port

An IPG Port provides network and signaling interfaces at the Telephone Company’s IPG SWC. The IPG Port also provides for the establishment of a trunk-side bearer channel transmission path to allow voice call information to be passed between the customer’s IP based network and the Telephone Company’s switched network. The IPG Port rate element is designed to recover the costs associated with providing the interface for the bearer channel transmission path.

IPG Ports are available with bandwidth speeds of 1.544 Mbps and 44.736 Mbps. Required IPG Transport into the IPG Port is provided using either: 1) an IPG TT when the SWC serving the customer’s designated premises is IPG equipped or 2) a combination of an IPG TT, an IPG TMF and an IPG TMT when the SWC serving the customer’s designated premises is not IPG equipped. The bandwidth speed of an IPG Port must be equal to the bandwidth speed of the associated IPG Transport.

A monthly charge applies for each IPG Port ordered. The monthly charge for each IPG Port is based upon the bandwidth speed ordered by the customer.
16. Public Packet Data Network (Cont’d)

16.4 Internet Protocol Gateway Access Service (Cont’d)

16.4.4 Rate Regulations (Cont’d)

(B) Types of Rates and Charges

There are two types of rates and charges applicable to IPG. They are monthly rates and nonrecurring charges as described below.

(1) Monthly Rates

Monthly rates are recurring rates that apply each month or fraction thereof when an IPG service element is provided. For billing purposes, each month is considered to have 30 days.

(2) Nonrecurring Charges

Nonrecurring charges are one-time charges that apply for specific work activity (i.e., installation or change to an existing service). The types of nonrecurring charges that apply for IPG are installation of service, service rearrangements and moves.

Except as specified below, these charges are in addition to the Access Order Charge as specified in Section 17.4.1, following.

(a) Installation of Service

Nonrecurring charges apply for the installation of IPG Transport Terminations.
16. Public Packet Data Network (Cont’d)

16.4 Internet Protocol Gateway Access Service (Cont’d)

16.4.4 Rate Regulations (Cont’d)

(B) Types of Rates and Charges (Cont’d)

(2) Nonrecurring Charges (Cont’d)

(b) Service Rearrangements

Service rearrangements are changes to existing (i.e., installed) services, which may be administrative only in nature as set forth below or, that involve an actual physical change to the service.

When the IPG customer elects to change the bandwidth capacity on existing IPG Ports and associated IPG Transport, the request will be considered a discontinuance of service for the former capacity and start of service for the new capacity. Associated nonrecurring (i.e., installation) charges will apply. New minimum period requirements will be established for the new IPG service elements. The IPG customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued IPG service elements, if applicable.

Following the initial installation of service, the IPG customer may request a change to its existing signaling interface and/or bearer channel format provided the requested signaling interface and/or bearer channel format conforms to the transmission standards specified in the Technical References listed in Section 16.4.3(B), above. The Telephone Company and IPG customer will work cooperatively to ensure that proper call addressing and billing information will continue to be exchanged as described in Section 16.4.3(C), above, after the requested change is made. An Access Order Charge per order will apply for this type of request.
16. Public Packet Data Network (Cont'd)

16.4 Internet Protocol Gateway Access Service (Cont’d)

16.4.4 Rate Regulations (Cont’d)

(B) Types of Rates and Charges (Cont’d)

(2) Nonrecurring Charges (Cont’d)

(b) Service Rearrangements (Cont’d)

Administrative changes will be made without charge(s) to the IPG customer. Administrative changes are as follows:

- Change of customer name,
- Change of customer or customer’s end user premises address when the change of address is not a result of physical relocation of equipment,
- Change in billing data (name, address, or contact name or telephone number),
- Change of agency authorization,
- Change of customer circuit identification,
- Change of billing account number,
- Change of customer or customer’s end user contact name or telephone number, and
- Change of jurisdiction.
16. Public Packet Data Network (Cont'd)

16.4 Internet Protocol Gateway Access Service (Cont’d)

16.4.4 Rate Regulations (Cont'd)

(B) Types of Rates and Charges (Cont’d)

(2) Nonrecurring Charges (Cont’d)

(c) Moves

A move involves a change in the physical location of one of the following:

- The Point of Termination at the customer’s premises
- The customer’s premises

The charges for moving IPG service elements are dependent on whether the move is to a different location within the same building, to a different building within the same SWC, or to a different building in a different SWC.

(i) Moves Within the Same Building

IPG Ports and, where required, IPG TMFs and IPG TMTs are not impacted when the IPG customer moves its Point of Termination to a different location within the same building. The charge for moving an IPG TT to a new location within the same building will be an amount equal to one half of the nonrecurring (i.e., installation) charge for the IPG TT. There will be no change in the minimum period requirements.
16. Public Packet Data Network (Cont’d)

16.4 Internet Protocol Gateway Access Service (Cont’d)

16.4.4 Rate Regulations (Cont’d)

(B) Types of Rates and Charges (Cont’d)

(2) Nonrecurring Charges (Cont’d)

(c) Moves (Cont’d)

(ii) Moves To a Different Building Within the Same SWC

IPG Ports and, where required, IPG TMFs and IPG TMTs are not impacted when the IPG customer moves its Point of Termination to a different building within the same SWC. The move of an IPG TT will be treated as a discontinuance and start of service. A nonrecurring (i.e., installation) charge will apply per IPG TT. A new minimum period requirement will be established for the IPG TT. The IPG customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued IPG TT, if applicable.
16. Public Packet Data Network (Cont’d)

16.4 Internet Protocol Gateway Access Service (Cont’d)

16.4.4 Rate Regulations (Cont’d)

(B) Types of Rates and Charges (Cont’d)

(2) Nonrecurring Charges (Cont’d)

(c) Moves (Cont’d)

(iii) Moves to a Different Building in a Different SWC

A move to a different building in a different SWC will be treated as a discontinuance and start of service of all associated IPG elements. Associated nonrecurring (i.e., installation) charges will apply. New minimum period requirements will be established for the new IPG service elements. The IPG customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued IPG service elements, if applicable.

(C) Minimum Periods

The minimum period for all IPG service elements provided to the IPG customer and for which charges are applicable is twelve (12) months.
17. Rates and Charges

Section 17 contains the rates and charges billable by issuing carrier MEI Telecom, Inc. for interstate access services, the terms and conditions of such services being set forth in Sections 1 through 16 of this Tariff. Pursuant to 47 CFR § 61.26(e), MEI has established rates for its interstate switched access services that are not above the rates in the NECA Access Tariff, No. 5, assuming the highest NECA rate band for local switching.

17.1 Common Line Access Service, Federal Universal Service Charge, ISDN Line Ports and DS1 Line Port

17.1.1 End User Access Service

Regulations concerning End User Access Service are set forth in Section 4, preceding. The rates for End User Common Line Access Service are as shown below:

(A) End User Common Line (EUCL) – Residence
- Individual line or trunk, each $6.50

(B) End User Common Line (EUCL) – Single Line Business
- Individual line or trunk, each $6.50

(C) End User Common Line (EUCL) – Multiline Business
(including Centrex CO and CO-Like ordered on or after July 28, 1983)
- Individual line or trunk $9.20
17. Rates and Charges (Cont’d)

17.1 Common Line Access Service, Federal Universal Service Charge, ISDN Line Ports and DS1 Line Port (Cont’d)

17.1.2 Federal Universal Service Charge (FUSC)

Regulations concerning the Federal Universal Service Charge are set forth in Section 3.1, preceding.

<table>
<thead>
<tr>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) FUSC Surcharge Factor</td>
</tr>
<tr>
<td>(B) MLB EUCL FUSC Surcharge Factor</td>
</tr>
</tbody>
</table>

17.1.3 ISDN Line Ports

Regulations concerning the Federal Universal Service Charge are set forth in Section 3.2, preceding.

<table>
<thead>
<tr>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) ISDN BRI Line Port</td>
</tr>
<tr>
<td>• per arrangement      $2.23</td>
</tr>
<tr>
<td>(B) ISDN PRI Line Port</td>
</tr>
<tr>
<td>• per arrangement      $23.51</td>
</tr>
</tbody>
</table>

17.1.4 DS1 Line Port (N)(x)

Regulations concerning the Federal Universal Service Charge are set forth in Section 3.3, preceding.

<table>
<thead>
<tr>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) DS1 Line Port</td>
</tr>
<tr>
<td>• per DS1 (1.544 Mbps) channel service $23.51</td>
</tr>
</tbody>
</table>

* The current FUSC Surcharge Factor Percentage applicable to this Tariff is found in the current National Exchange Carriers Association (NECA) Tariff FCC No. 5, Section 17.1.3 (A).
### Access Service

17. Rates and Charges (Cont’d)

17.2 Switched Access Service

<table>
<thead>
<tr>
<th>Nonrecurring Charges</th>
<th>Rate</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong> Local Transport</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Installation Per Entrance Facility:</td>
<td>$467.46</td>
<td>6.4.1(B)(1)</td>
</tr>
<tr>
<td>• Voice Grade Two-Wire</td>
<td>$467.46</td>
<td></td>
</tr>
<tr>
<td>• Voice Grade Four-Wire</td>
<td>$467.46</td>
<td></td>
</tr>
<tr>
<td>• High Capacity DS1</td>
<td>$342.80</td>
<td></td>
</tr>
<tr>
<td>• High Capacity DS3</td>
<td>$462.26</td>
<td></td>
</tr>
<tr>
<td>• Synchronous Optical Channel OC3</td>
<td>$373.96</td>
<td></td>
</tr>
<tr>
<td><strong>B</strong> Interim NXX Translation Per Order</td>
<td>$228.53</td>
<td>6.4.1(B)(2)</td>
</tr>
<tr>
<td>• Per LATA or Market Area</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C</strong> FGD Conversion of Multifrequency Address Signaling to SS7 Signaling</td>
<td>$459.14</td>
<td>6.4.1(B)(3)</td>
</tr>
<tr>
<td>• Per 24 Trunks Converted or Fraction thereof on a Per Order Basis</td>
<td>$459.14</td>
<td></td>
</tr>
<tr>
<td><strong>D</strong> Trunk Activation Per Order</td>
<td>$476.80</td>
<td>6.4.1(B)(1)</td>
</tr>
<tr>
<td>• Per 24 Trunks Activated or Fraction thereof, on a Per Order Basis</td>
<td>$476.80</td>
<td></td>
</tr>
<tr>
<td><strong>E</strong> Flexible Automatic Number Identification (Flex ANI)</td>
<td>None</td>
<td>6.10.1(A)</td>
</tr>
<tr>
<td>• Per End Office, Per CIC</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## 17. Rates and Charges (Cont’d)

### 17.2 Switched Access Service (Cont’d)

#### 17.2.2 Local Transport

<table>
<thead>
<tr>
<th>Premium Access</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrance Facility, Per Termination</td>
<td>6.1.3(A)(1)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Monthly Rate</th>
<th>Voice Grade 2-Wire</th>
<th>Voice Grade 4-Wire</th>
<th>High Capacity DS1</th>
<th>High Capacity DS3</th>
<th>Synchronous Optical Channel OC3</th>
<th>Synchronous Optical Channel OC12</th>
</tr>
</thead>
<tbody>
<tr>
<td>$84.87</td>
<td>$135.81</td>
<td>$413.77</td>
<td>$3,777.98</td>
<td>$3,852.42</td>
<td>$4,113.14</td>
<td></td>
</tr>
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</table>

**Tariff Section Reference**

### Direct Trunked Transport

**Tariff Section Reference**

<table>
<thead>
<tr>
<th>Monthly Rate</th>
<th>Voice Grade 2-Wire</th>
<th>Voice Grade 4-Wire</th>
<th>High Capacity DS1</th>
<th>High Capacity DS3</th>
<th>Synchronous Optical Channel OC3</th>
<th>Synchronous Optical Channel OC12</th>
</tr>
</thead>
<tbody>
<tr>
<td>$6.05</td>
<td>$6.05</td>
<td>$28.35</td>
<td>$246.94</td>
<td></td>
<td>$264.34</td>
<td>$331.79</td>
</tr>
</tbody>
</table>

Issued Date: July 11, 2014  
Effective Date: July 26, 2014
17. **Rates and Charges (Cont’d)**

17.2 **Switched Access Service (Cont’d)**

17.2.2 **Local Transport (Cont’d)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Tariff Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Trunked Transport (Cont’d)</td>
<td>6.1.3(A)(2)</td>
</tr>
<tr>
<td>Direct Trunked Termination, Per Termination</td>
<td></td>
</tr>
</tbody>
</table>

### Monthly Rate

<table>
<thead>
<tr>
<th>Voice Grade</th>
<th>Voice Grade</th>
<th>High Capacity</th>
<th>High Capacity</th>
<th>Synchronous Optical Channel</th>
<th>Synchronous Optical Channel</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Wire</td>
<td>4-Wire</td>
<td>DS1</td>
<td>DS3</td>
<td>OC3</td>
<td>OC12</td>
</tr>
<tr>
<td>$60.75</td>
<td>$60.75</td>
<td>$147.09</td>
<td>$944.48</td>
<td>$983.41</td>
<td>$2,141.16</td>
</tr>
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</table>
17. Rates and Charges (Cont’d)

17.2 Switched Access Service (Cont’d)

17.2.2 Local Transport (Cont’d)

Premium Access (Cont’d)

Multiplexing, Per Arrangement

<table>
<thead>
<tr>
<th>Section Reference</th>
<th>Monthly Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DS3 to DS1</td>
</tr>
<tr>
<td></td>
<td>$861.73</td>
</tr>
</tbody>
</table>

Customer Node, Per Node

<table>
<thead>
<tr>
<th>Section Reference</th>
<th>Monthly Rate</th>
<th>Nonrecurring Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OC3 155.52 Mbps</td>
<td>OC12 622.08 Mbps</td>
</tr>
<tr>
<td></td>
<td>$894.54</td>
<td>$2,584.27</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$664.83</td>
</tr>
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</table>
### 17. Rates and Charges (Cont’d)

17.2 Switched Access Service (Cont’d)

17.2.2 Local Transport (Cont’d)

<table>
<thead>
<tr>
<th>Premium Access (Cont’d)</th>
<th>Tariff Section Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Premises Port, Per Port</td>
<td>6.1.3(A)(7)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Monthly Rate</th>
<th>Nonrecurring Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>OC3 - 155.52 Mbps</td>
<td>$293.52</td>
<td>None</td>
</tr>
<tr>
<td>STS-1 - 51.84 Mbps</td>
<td>$352.42</td>
<td>$664.83</td>
</tr>
<tr>
<td>DS3 - 44.736 Mbps</td>
<td>$352.42</td>
<td>$664.83</td>
</tr>
<tr>
<td>DS1 - 1.544 Mbps</td>
<td>$90.33</td>
<td>$664.83</td>
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</tbody>
</table>
17. **Rates and Charges (Cont’d)**

17.2 **Switched Access Service (Cont’d)**

17.2.2 **Local Transport (Cont’d)**

<table>
<thead>
<tr>
<th>Premium Access (Cont’d)</th>
<th>Tariff Section Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add/Drop Multiplexing Central Office Port, Per Port</td>
<td>6.1.3(A)(6)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Monthly Rate</th>
<th>OC3</th>
<th>DS3</th>
<th>DS1</th>
</tr>
</thead>
<tbody>
<tr>
<td>155.52 Mbps</td>
<td>$293.52</td>
<td>44.736 Mbps</td>
<td>$180.71</td>
</tr>
</tbody>
</table>
## Rates and Charges (Cont’d)

### Switched Access Service (Cont’d)

<table>
<thead>
<tr>
<th>Local Transport (Cont’d)</th>
<th>Rate</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Premium Access (Cont’d)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Tandem Switched Transport</td>
<td></td>
<td>6.1.3(A)(3)</td>
</tr>
<tr>
<td>• Tandem Switched Facility</td>
<td>$0.000418</td>
<td></td>
</tr>
<tr>
<td>• Tandem Switched Termination</td>
<td>$0.002171</td>
<td></td>
</tr>
<tr>
<td>• Tandem Switching</td>
<td>$0.005476</td>
<td></td>
</tr>
<tr>
<td>- Network Blocking - Per Blocked Call</td>
<td></td>
<td>6.8.6</td>
</tr>
<tr>
<td>• Applied to FGD</td>
<td>$0.0159</td>
<td></td>
</tr>
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</table>
17. **Rates and Charges (Cont’d)**

17.2  **Switched Access Service (Cont’d)**

<table>
<thead>
<tr>
<th>Reference</th>
<th>Tariff Section Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A)</td>
<td>6.10.3(C)</td>
</tr>
</tbody>
</table>

**17.2.2 Local Transport (Cont’d)**

<table>
<thead>
<tr>
<th>(1) Signalong Network Access Link</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Monthly Rate</strong></td>
<td><strong>Nonrecurring Charge</strong></td>
</tr>
<tr>
<td>Signaling Mileage Per Mile</td>
<td>Signaling Mileage Per Termination</td>
</tr>
<tr>
<td>$8.14</td>
<td>$81.78</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(2) STP Port, Per Port</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Monthly Rate</strong></td>
<td></td>
</tr>
<tr>
<td>$807.20</td>
<td></td>
</tr>
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</table>

**17.2.2 Local Transport (Cont’d)**

<table>
<thead>
<tr>
<th>(B) 800 Data Base Access Service Queries, Per Query</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic</td>
<td>$0.0055</td>
</tr>
<tr>
<td>Vertical Feature</td>
<td>$0.0061</td>
</tr>
</tbody>
</table>
17. Rates and Charges (Cont’d)

17.2 Switched Access Service (Cont’d)

17.2.3 End Office

(A) Local Switching

Premium

- Terminating, Per Access Minute
  $0.003567 (R)

- Originating, Per Access Minute
  $0.046644

Non-Premium

- Terminating, Per Access Minute
  $0.003567 (R)

- Originating, Per Access Minute
  $0.020990

(B) Information Surcharge

Premium Per 100 Access Minutes $0.0513

Non-Premium Per 100 Access Minutes $0.0231

17.2.4 RESERVED FOR FUTURE USE
17. Rates and Charges (Cont’d)

17.2 Switched Access Service (Cont’d)

17.2.5 Directory Assistance Service

RESERVED FOR FUTURE USE
### Rates and Charges (Cont’d)

#### 17.2 Switched Access Service (Cont’d)

17.2.6 Assumed Minutes of Use

RESERVED FOR FUTURE USE

<table>
<thead>
<tr>
<th>Rate</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per Call Transferred</td>
<td>$0.4766</td>
</tr>
</tbody>
</table>
17. Rates and Charges (Cont’d)

17.3 Special Access Service

As specified in Section 7, preceding, Special Access Services are offered on an Individual Case Basis (ICB).
## Rates and Charges (Cont’d)

### 17.4 Other Services

#### 17.4.1 Access Ordering

<table>
<thead>
<tr>
<th>Charge Description</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Access Order Charge</strong></td>
<td>$86.00</td>
</tr>
<tr>
<td><strong>Service Date Change Charge</strong></td>
<td>$60.00</td>
</tr>
<tr>
<td><strong>Design Change Charge</strong></td>
<td>$84.00</td>
</tr>
<tr>
<td><strong>Miscellaneous Service Order Charge</strong></td>
<td>$123.00</td>
</tr>
</tbody>
</table>

A Service Date Change Charge will apply, on a per order per occurrence basis, for each service date changed. The Access Order Charge as specified in 17.4.1(A) preceding does not apply. The applicable charge is:

- **Service Date Change Charge, per order** $60.00
- **Design Change Charge, per order** $84.00

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David Stoll
Vice President/Chief Executive Officer
123 W. Orchard Street, P.O. Box 127
Delton, Michigan 49046
(269) 623-2311
dstoll@mei.net
17. **Rates and Charges** (Cont’d)

17.4 **Other Services** (Cont’d)

17.4.2 **Additional Engineering**

<table>
<thead>
<tr>
<th>Additional Engineering Periods</th>
<th>Each Half Hour or Fraction Thereof</th>
<th>Tariff Section Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) Basic Time per engineer normally scheduled working hours</td>
<td>$31.03</td>
<td>13.1</td>
</tr>
<tr>
<td>(B) Overtime per engineer outside of normally scheduled working hours</td>
<td>$46.55</td>
<td>13.1</td>
</tr>
<tr>
<td>(C) Premium Time outside of schedule work day, per engineer</td>
<td>$62.06</td>
<td>13.1</td>
</tr>
</tbody>
</table>
17. Rates and Charges (Cont’d)

17.4 Other Services (Cont’d)

17.4.3 Additional Labor

<table>
<thead>
<tr>
<th>Additional Labor Periods</th>
<th>Each Half Hour or Fraction Thereof</th>
<th>Tariff Section Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) Installation or Repair</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Overtime, outside of normally scheduled working hours on a scheduled work day, per technician</td>
<td>$47.57*</td>
<td>13.2.1 &amp; 13.2.2</td>
</tr>
<tr>
<td>• Premium Time, outside of scheduled work day, per technician</td>
<td>$63.42*</td>
<td>13.2.1 &amp; 13.2.2</td>
</tr>
<tr>
<td>(B) Standby</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Basic time, normally scheduled working hours, per technician</td>
<td>$21.18*</td>
<td>13.2.3</td>
</tr>
<tr>
<td>• Overtime, outside of normally scheduled working hours on a scheduled work day, per technician</td>
<td>$31.77*</td>
<td>13.2.3</td>
</tr>
<tr>
<td>• Premium Time, outside of scheduled work day, per technician</td>
<td>$42.36*</td>
<td>13.2.3</td>
</tr>
</tbody>
</table>

* A call out of a Telephone Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours.
17. **Rates and Charges (Cont’d)**

17.4 **Other Services (Cont’d)**

17.4.3 **Additional Labor (Cont’d)**

<table>
<thead>
<tr>
<th>Additional Labor Periods</th>
<th>Installation and Repair Technician</th>
<th>Central Office Maintenance Technician</th>
<th>Tariff Section Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>(C) Testing and Maintenance with other Telephone Companies, or Other Labor:</td>
<td>$31.71</td>
<td>$34.66</td>
<td>13.2.4 &amp; 13.2.5</td>
</tr>
<tr>
<td>• Basic Time per technician normally scheduled working hours;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Overtime per technician outside of normally scheduled working hours on a scheduled work day</td>
<td>$47.57*</td>
<td>$51.99*</td>
<td>13.2.4 &amp; 13.2.5</td>
</tr>
<tr>
<td>• Premium Time per technician outside of scheduled work day</td>
<td>$63.42*</td>
<td>$69.32*</td>
<td>13.2.4 &amp; 13.2.5</td>
</tr>
</tbody>
</table>

* A call out of a Telephone Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours.
17. Rates and Charges (Cont’d)

17.4 Other Services (Cont’d)

17.4.4 Miscellaneous Services

(A) Additional Cooperative Acceptance Testing - Switched Access

<table>
<thead>
<tr>
<th>Testing Periods</th>
<th>Each Half Hour or Fraction Thereof</th>
<th>Tariff Section Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Time, Overtime*, and Premium Time*</td>
<td>See the rates for Additional Labor as set forth in 17.4.3(C)</td>
<td>13.3.1(A)(1)</td>
</tr>
</tbody>
</table>

(B) Additional Automatic Testing - Switched Access

<table>
<thead>
<tr>
<th>To First Point of Switching</th>
<th>Additional Tests</th>
<th>Per Test Per Transmission Path</th>
<th>Tariff Section Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gain-Slope Tests</td>
<td>$2.89</td>
<td>13.3.1(A)(2)</td>
</tr>
<tr>
<td></td>
<td>C-Notched Noise Tests</td>
<td>$2.89</td>
<td>13.3.1(A)(2)</td>
</tr>
<tr>
<td></td>
<td>1004 Hz Loss**</td>
<td>$2.89</td>
<td>13.3.1(A)(2)</td>
</tr>
<tr>
<td></td>
<td>C-Message Noise**</td>
<td>$2.89</td>
<td>13.3.1(A)(2)</td>
</tr>
<tr>
<td></td>
<td>Balance (return loss)**</td>
<td>$2.89</td>
<td>13.3.1(A)(2)</td>
</tr>
</tbody>
</table>

* A call out of a Telephone Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours.

** 1004 Hz Loss, C-Message Noise and Balance are non-chargeable routine tests, however, they may be requested on an as needed or more than routine scheduled basis, in which case the charges herein apply.
## 17. Rates and Charges (Cont’d)

### 17.4 Other Services (Cont’d)

#### 17.4.4 Miscellaneous Services (Cont'd)

(C) Additional Manual Testing - Switched Access

To First Point of Switching

<table>
<thead>
<tr>
<th>Additional Tests</th>
<th>Each Half Hour or Fraction Thereof</th>
<th>Tariff Section Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gain-Slope, C-Notched Noise and any other agreed to tests, per technician</td>
<td>See the rates for Additional tests, per Labor as set forth in 17.4.3(C) preceding</td>
<td>13.3.1(A)(3)</td>
</tr>
</tbody>
</table>

(D) Additional Cooperative Acceptance Testing – Special Access

<table>
<thead>
<tr>
<th>Testing Periods</th>
<th>Each Half Hour or Fraction Thereof</th>
<th>Tariff Section Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Time, Overtime* and Premium Time*</td>
<td>See the rates for Additional Labor as set forth in 17.4.3(C) preceding.</td>
<td>13.3.1(B)(1)</td>
</tr>
</tbody>
</table>

* A call out of a Telephone Company employee at a time not consecutive
17. Rates and Charges (Cont’d)

17.4 Other Services (Cont’d)

17.4.4 Miscellaneous Services (Cont’d)

(E) Additional Manual Testing - Special Access

<table>
<thead>
<tr>
<th>Testing Periods</th>
<th>Each Half Hour or Fraction Thereof</th>
<th>Tariff Section Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Time, Overtime*</td>
<td>See the rates for Additional Labor as set forth in 17.4.3(C)</td>
<td>13.3.1(B)(2)</td>
</tr>
<tr>
<td>and Premium Time*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(F) Maintenance of Service

<table>
<thead>
<tr>
<th>Maintenance of Service Periods</th>
<th>Each Half Hour or Fraction Thereof</th>
<th>Tariff Section Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Time, Overtime*</td>
<td>See the rates for Additional Labor as set forth in 17.4.3(C)</td>
<td>13.3.2</td>
</tr>
<tr>
<td>and Premium Time*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* A call out of a Telephone Company employee at a time not consecutive.
17. Rates and Charges (Cont'd)

17.4 Other Services (Cont'd)

17.4.4 Miscellaneous Services (Cont'd)

(G) Telecommunications Service Priority

<table>
<thead>
<tr>
<th>Nonrecurring Charge</th>
<th>Tariff Section Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per Service Arranged:</td>
<td>$54.63</td>
</tr>
</tbody>
</table>

(H) Controller Arrangement

<table>
<thead>
<tr>
<th>Monthly Rate</th>
<th>Tariff Section Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Arrangement:</td>
<td>$100.00</td>
</tr>
</tbody>
</table>
17. Rates and Charges (Cont'd)

17.4 Other Services (Cont'd)

17.4.4 Miscellaneous Services (Cont'd)

<table>
<thead>
<tr>
<th>Nonrecurring Charge</th>
<th>Tariff Section Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>(I) Presubscribed Interexchange Carrier (PIC) Change Charge*</td>
<td>13.4(J)</td>
</tr>
</tbody>
</table>

* This charge is generally billed to the end user who is the subscriber to the Telephone Exchange Service. In those instances where the IC both requests the PIC change, and requests the associated charge be billed to it, the Telephone Company will bill the IC. In the event the subscriber is incorrectly presubscribed due to mis-assignment on the part of the Telephone Company, no charge shall apply. In the event the subscriber denies requesting a PIC change, the Telephone Company will credit the subscriber’s account for the PIC Change Charge associated with the alleged unauthorized change, if such charge was billed to the subscriber. The Telephone Company will then bill the IC responsible for the alleged unauthorized change a PIC Change Charge to return the subscriber to its previous authorized carrier and, if initially billed to the subscriber, the PIC Change Charge for the alleged unauthorized change.

Per Telephone Exchange Service Line or trunk for each interLATA PIC change:

(1) Submitted using manual methods $5.50
(2) Submitted using electronic methods $1.25
(3) Submitted using manual methods when both the interLATA PIC and intraLATA PIC selections are changed simultaneously $2.75
(4) Submitted using electronic methods when both the interLATA PIC and intraLATA PIC selections are changed simultaneously $0.63

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David Stoll
Vice President/Chief Executive Officer
123 W. Orchard Street, P.O. Box 127
Delton, Michigan 49046
(269) 623-2311
dstoll@mei.net
17. **Rates and Charges (Cont'd)**

17.4 **Other Services (Cont'd)**

17.4.4 **Miscellaneous Services (Cont'd)**

<table>
<thead>
<tr>
<th>Nonrecurring Charge</th>
<th>Tariff Section Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(J)</strong> Blocking Service*</td>
<td></td>
</tr>
<tr>
<td>• Per exchange service line, or trunk</td>
<td>$11.20</td>
</tr>
<tr>
<td><strong>(K)</strong> Billing Name and Address Service</td>
<td></td>
</tr>
<tr>
<td>• Per BNA Order</td>
<td>$50.94</td>
</tr>
<tr>
<td>• Per BNA Record</td>
<td>$0.33</td>
</tr>
<tr>
<td>• Optional Magnetic Tape Charge-Per Magnetic Tape</td>
<td>$91.44</td>
</tr>
<tr>
<td>• Optional Format Programming Charge-Per each half hour or Fraction thereof</td>
<td>$37.20</td>
</tr>
<tr>
<td><strong>(L)</strong> Originating Line Screening (OLS) Service</td>
<td></td>
</tr>
<tr>
<td>Per exchange service line</td>
<td>$ 7.95</td>
</tr>
<tr>
<td><strong>(M)</strong> Coin Supervision Additive Service</td>
<td></td>
</tr>
<tr>
<td>Per exchange service line</td>
<td>$ 2.21</td>
</tr>
</tbody>
</table>

* Blocking access to 900 Service is offered to all subscribers at no charge at the time telephone service is established at a new number and for 60 days thereafter.
17. Rates and Charges (Cont'd)

17.4 Other Services (Cont'd)

17.4.4 Miscellaneous Services (Cont'd)

(P) Local Number Portability (LNP) End User Charge

[RESERVED FOR FUTURE USE]

(Q) Local Number Portability (LNP) Query Service

<table>
<thead>
<tr>
<th>Rate</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0.0050</td>
<td>13.11.2(D)</td>
</tr>
<tr>
<td>$50.00</td>
<td>13.11.2(D)</td>
</tr>
<tr>
<td>$300.00</td>
<td>13.11.2(D)</td>
</tr>
</tbody>
</table>
17. Rates and Charges (Cont'd)

17.4 Other Services (Cont'd)

17.4.5 Special Federal Government Access Services

[RESERVED FOR FUTURE USE]
17. Rates and Charges (Cont'd)

17.4 Other Services (Cont'd)

17.4.6 Special Facilities Routing of Access Services

(A) Diversity

For each service provided in accordance with 11.1.1. preceding, the rates and charges will be developed on an individual case basis.

(B) Avoidance

For each service provided in accordance with 11.1.2 preceding, the rates and charges will be developed on an individual case basis.

(C) Diversity and Avoidance Combined

For each service provided in accordance with 11.1.1 and 11.1.2 preceding, combined, the rates and charges will be developed on an individual case basis.

(D) Cable-Only Facilities

For each service provided in accordance with 11.1.4 preceding, the rates and charges will be developed on an individual case basis.
17. Rates and Charges (Cont'd)

17.4 Other Services (Cont'd)

17.4.7 Specialized Service or Arrangements

[RESERVED FOR FUTURE USE]
## 17. Rates and Charges (Cont'd)

### 17.4 Other Services (Cont'd)

#### 17.4.8 Public Packet Data Network

(A) Frame Relay Access Service Regulations concerning Frame Relay Service are set forth in Section 16.1, preceding.

**Connections**

1. Frame Relay Access Connection (FRAC), Per FRAC

<table>
<thead>
<tr>
<th>Monthly Rate</th>
<th>Nonrecurring Charge – All</th>
</tr>
</thead>
<tbody>
<tr>
<td>56.0 kbps</td>
<td>64.0 kbps</td>
</tr>
<tr>
<td>$471.94</td>
<td>$471.94</td>
</tr>
<tr>
<td></td>
<td>$345.00</td>
</tr>
</tbody>
</table>
## Rates and Charges (Cont'd)

### 17.4 Other Services (Cont'd)

#### 17.4.8 Public Packet Data Network (Cont’d)

##### (A) Frame Relay Access Service (Cont’d)

Connections (Cont’d)

<table>
<thead>
<tr>
<th>Frame Relay Access Connection (FRAC), Per FRAC (Cont’d)</th>
<th>Monthly Rate</th>
<th>Nonrecurring Charge</th>
<th>Monthly Rate</th>
<th>Nonrecurring Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.544 Mbps</td>
<td>44.736 Mbps</td>
<td></td>
<td>44.736 Mbps</td>
<td></td>
</tr>
<tr>
<td>$1,003.82</td>
<td>$7,450.41</td>
<td>$345.00</td>
<td>$345.00</td>
<td>$345.00</td>
</tr>
</tbody>
</table>

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David Stoll  
Vice President/Chief Executive Officer  
123 W. Orchard Street, P.O. Box 127  
Delton, Michigan 49046  
(269) 623-2311  
dstoll@mei.net
17. **Rates and Charges (Cont'd)**

17.4 **Other Services (Cont'd)**

17.4.8 **Public Packet Data Network (Cont’d)**

(A) **Frame Relay Access Service (Cont’d)**

**Connections (Cont’d)**

(2) **Frame Relay Inter-network Connection (FRIC), Per FRIC**

<table>
<thead>
<tr>
<th>Monthly Rate</th>
<th>Nonrecurring Charge</th>
<th>Monthly Rate</th>
<th>Nonrecurring Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.544 Mbps</td>
<td>$1,003.82</td>
<td>44.736 Mbps</td>
<td>$7,450.41</td>
</tr>
<tr>
<td>$1,003.82</td>
<td>$345.00</td>
<td>$7,450.41</td>
<td>$345.00</td>
</tr>
</tbody>
</table>
## Rates and Charges (Cont'd)

### 17.4 Other Services (Cont'd)

#### 17.4.8 Public Packet Data Network (Cont’d)

(A) **Frame Relay Access Service** (Cont’d)

**Connections** (Cont’d)

(3) **End User Port, Per Port**

<table>
<thead>
<tr>
<th>Speed</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>56.0 kbps</td>
<td>$192.42</td>
</tr>
<tr>
<td>64.0 kbps</td>
<td>$192.42</td>
</tr>
<tr>
<td>1.544 Mbps</td>
<td>$448.10</td>
</tr>
<tr>
<td>44.736 Mbps</td>
<td>$3,413.00</td>
</tr>
</tbody>
</table>
17. Rates and Charges (Cont'd)

17.4 Other Services (Cont'd)

17.4.8 Public Packet Data Network (Cont’d)

(A) Frame Relay Access Service (Cont’d)

Connections (Cont’d)

(4) Inter-network Customer Port, Per Port

<table>
<thead>
<tr>
<th>Monthly Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.544 Mbps</td>
</tr>
<tr>
<td>$448.10</td>
</tr>
</tbody>
</table>

(5) Optional Rate Plan, Term Discounts

<table>
<thead>
<tr>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>36 Months</td>
</tr>
<tr>
<td>60 Months</td>
</tr>
<tr>
<td>10%</td>
</tr>
<tr>
<td>20%</td>
</tr>
</tbody>
</table>
17. Rates and Charges (Cont’d)

17.4 Other Services (Cont’d)

17.4.8 Public Packet Data Network (Cont’d)

(A) Frame Relay Access Service (Cont’d)

(6) Permanent Virtual Connections (PVCs)

(a) Standard CIR

<table>
<thead>
<tr>
<th>Monthly Rate</th>
<th>8 kbps</th>
<th>16 kbps</th>
<th>28 kbps</th>
<th>32 kbps</th>
<th>56 kbps</th>
<th>64 kbps</th>
</tr>
</thead>
<tbody>
<tr>
<td>$13.74</td>
<td>$13.74</td>
<td>$16.48</td>
<td>$16.48</td>
<td>$19.27</td>
<td>$19.27</td>
<td></td>
</tr>
</tbody>
</table>
17. **Rates and Charges (Cont’d)**

17.4 **Other Services (Cont’d)**

17.4.8 **Public Packet Data Network (Cont’d)**

(A) **Frame Relay Access Service (Cont’d)**

(6) **Permanent Virtual Connections (PVCs) (Cont’d)**

(a) **Standard CIR (Cont’d)**

<table>
<thead>
<tr>
<th>Monthly Rate</th>
<th>128 kbps</th>
<th>192 kbps</th>
<th>256 kbps</th>
<th>384 kbps</th>
<th>512 kbps</th>
<th>768 kbps</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$24.69</td>
<td>$32.99</td>
<td>$38.49</td>
<td>$55.00</td>
<td>$76.95</td>
<td>$98.96</td>
</tr>
</tbody>
</table>
## Rates and Charges (Cont'd)

### 17.4 Other Services (Cont'd)

#### 17.4.8 Public Packet Data Network (Cont’d)

**(A) Frame Relay Access Service (Cont’d)**

**(6) Permanent Virtual Connections (PVCs) (Cont’d)**

**(b) Extended CIR**

<table>
<thead>
<tr>
<th>Monthly Rate</th>
<th>8 kbps</th>
<th>16 kbps</th>
<th>28 kbps</th>
<th>32 kbps</th>
<th>56 kbps</th>
<th>64 kbps</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>$16.48</strong></td>
<td><strong>$16.48</strong></td>
<td><strong>$20.88</strong></td>
<td><strong>$20.88</strong></td>
<td><strong>$40.77</strong></td>
<td><strong>$40.77</strong></td>
<td></td>
</tr>
</tbody>
</table>
17. Rates and Charges (Cont'd)

17.4 Other Services (Cont'd)

17.4.8 Public Packet Data Network (Cont’d)

(A) Frame Relay Access Service (Cont’d)

(6) Permanent Virtual Connections (PVCs) (Cont’d)

(b) Extended CIR (Cont’d)

<table>
<thead>
<tr>
<th>Monthly Rate</th>
<th>128 kbps</th>
<th>192 kbps</th>
<th>256 kbps</th>
<th>384 kbps</th>
<th>512 kbps</th>
<th>768kbps</th>
</tr>
</thead>
<tbody>
<tr>
<td>128 kbps</td>
<td>$89.34</td>
<td>$120.24</td>
<td>$159.91</td>
<td>$256.11</td>
<td>$319.88</td>
<td>$478.83</td>
</tr>
</tbody>
</table>

(7) PVC Installation Charge Nonrecurring Charge: $64.00

(8) PVC Rearrangement Charge Nonrecurring Charge: $32.00
17. Rates and Charges (Cont'd)

17.4 Other Services (Cont'd)

17.4.8 Public Packet Data Network (Cont’d)

(B) Asynchronous Transfer Mode Cell Relay Access Service

Regulations concerning Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS) are set forth in Section 16.2, preceding.

<table>
<thead>
<tr>
<th>Ports</th>
<th>Monthly Rate</th>
<th>Nonrecurring Charge</th>
<th>Monthly Rate</th>
<th>Nonrecurring Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Per Basic UNI or NNI Port</td>
<td>1.544 Mbps</td>
<td>$1,228.58</td>
<td>44.736 Mbps</td>
<td>$6,825.19</td>
</tr>
<tr>
<td>1.544 Mbps</td>
<td>$390.00</td>
<td></td>
<td>44.736 Mbps</td>
<td>$390.00</td>
</tr>
</tbody>
</table>
17. **Rates and Charges (Cont'd)**

17.4 **Other Services (Cont'd)**

17.4.8 **Public Packet Data Network (Cont’d)**

(B) **Asynchronous Transfer Mode Cell Relay Access Service (Cont’d)**

(1) **Ports (Cont’d)**

(a) **Per Basic UNI or NNI Port (Cont’d)**

<table>
<thead>
<tr>
<th>Monthly Rate</th>
<th>Nonrecurring Charge</th>
<th>Monthly Rate</th>
<th>Nonrecurring Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>155.52 Mbps</td>
<td>$10,575.76</td>
<td>622.08 Mbps</td>
<td>$15,351.24</td>
</tr>
<tr>
<td>$10,575.76</td>
<td>$390.00</td>
<td>$15,351.24</td>
<td>$390.00</td>
</tr>
</tbody>
</table>
17. Rates and Charges (Cont'd)

17.4 Other Services (Cont'd)

17.4.8 Public Packet Data Network (Cont’d)

(B) Asynchronous Transfer Mode Cell Relay Access Service (Cont’d)

(1) Ports (Cont’d)

(b) Per Ethernet-based UNI or NNI Port

<table>
<thead>
<tr>
<th>Monthly Rate 10 Mbps</th>
<th>Nonrecurring Charge</th>
<th>Monthly Rate 100 Mbps</th>
<th>Nonrecurring Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,892.26</td>
<td>$1,780.00</td>
<td>$3,571.00</td>
<td>$1,780.00</td>
</tr>
</tbody>
</table>
17. **Rates and Charges (Cont'd)**

17.4 **Other Services (Cont'd)**

17.4.8 **Public Packet Data Network (Cont’d)**

(B) **Asynchronous Transfer Mode Cell Relay Access Service (Cont’d)**

(1) **Ports (Cont’d)**

(b) **Per Ethernet-based UNI or NNI Port (Cont’d)**

<table>
<thead>
<tr>
<th>Monthly Rate</th>
<th>Nonrecurring Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Gbps</td>
<td></td>
</tr>
<tr>
<td>$6,905.47</td>
<td>$3,233.00</td>
</tr>
</tbody>
</table>
17. Rates and Charges (Cont’d)

17.4 Other Services (Cont’d)

17.4.8 Public Packet Data Network (Cont’d)

(B) Asynchronous Transfer Mode Cell Relay Access Service (Cont’d)

(2) Virtual Paths

(a) Path Charge, Per Path

<table>
<thead>
<tr>
<th>Monthly Rate</th>
<th>Nonrecurring Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>$13.74</td>
<td>$64.00</td>
</tr>
</tbody>
</table>
17. Rates and Charges (Cont'd)

17.4 Other Services (Cont'd)

17.4.8 Public Packet Data Network (Cont'd)

(B) Asynchronous Transfer Mode Cell Relay Access Service (Cont’d)

(2) Virtual Paths (Cont’d)

(b) Capacity Charge, Per Megabit of Capacity, Per Path

Traffic Routing Prioritization Parameter:

<table>
<thead>
<tr>
<th>Monthly Rate</th>
<th>Path size 1 to 50 Mbps</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBR</td>
<td>VBR-rt</td>
</tr>
<tr>
<td>$79.04</td>
<td>$63.24</td>
</tr>
</tbody>
</table>
17. Rates and Charges (Cont'd)

17.4 Other Services (Cont'd)

17.4.8 Public Packet Data Network (Cont’d)

(B) Asynchronous Transfer Mode Cell Relay Access Service (Cont’d)

(2) Virtual Paths (Cont’d)

(b) Capacity Charge, Per Megabit of Capacity, Per Path (Cont’d)

Traffic Routing Prioritization Parameter (Cont’d)

<table>
<thead>
<tr>
<th>Path size 51 to 150 Mbps</th>
<th>CBR</th>
<th>VBR-rt</th>
<th>VBR-nrt</th>
<th>UBR</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBR</td>
<td>$71.14</td>
<td>$55.34</td>
<td>$39.53</td>
<td>$31.60</td>
</tr>
</tbody>
</table>
17. Rates and Charges (Cont'd)

17.4 Other Services (Cont'd)

17.4.8 Public Packet Data Network (Cont'd)

(B) Asynchronous Transfer Mode Cell Relay Access Service (Cont’d)

(2) Virtual Paths (Cont’d)

(b) Capacity Charge, Per Megabit of Capacity, Per Path (Cont’d)

Traffic Routing Prioritization Parameter (Cont’d)

<table>
<thead>
<tr>
<th>Monthly Rate</th>
<th>Path Size Over 150 Mbps</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBR</td>
<td>VBR-rt</td>
</tr>
<tr>
<td>$55.34</td>
<td>$39.53</td>
</tr>
</tbody>
</table>
17. Rates and Charges (Cont'd)

17.4 Other Services (Cont'd)

17.4.8 Public Packet Data Network (Cont'd)

(B) Asynchronous Transfer Mode Cell Relay Access Service (Cont’d)

(3) Virtual Circuit Channels, Per Virtual Circuit Channel

<table>
<thead>
<tr>
<th>Monthly Rate</th>
<th>Nonrecurring Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>$14.90</td>
<td>$64.00</td>
</tr>
</tbody>
</table>
17. **Rates and Charges (Cont'd)**

17.4 **Other Services (Cont'd)**

17.4.8 **Public Packet Data Network (Cont'd)**

(B) **Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)**

(4) Optional Features and Functions

(a) DSL Access Service Connection

(i) **Per Basic UNI or NNI Port Equipped**

<table>
<thead>
<tr>
<th>Port Speed</th>
<th>Nonrecurring Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.544 Mbps</td>
<td>$450.00</td>
</tr>
<tr>
<td>44.736 Mbps</td>
<td>$650.00</td>
</tr>
<tr>
<td>155.52 Mbps</td>
<td>$1,200.00</td>
</tr>
<tr>
<td>622.08 Mbps</td>
<td>$1,608.00</td>
</tr>
</tbody>
</table>

(ii) **Per Ethernet-based UNI or NNI Port Equipped**

<table>
<thead>
<tr>
<th>Port Speed</th>
<th>Nonrecurring Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 Mbps</td>
<td>$450.00</td>
</tr>
<tr>
<td>100 Mbps</td>
<td>$650.00</td>
</tr>
<tr>
<td>1 Gbps</td>
<td>$1,608.00</td>
</tr>
</tbody>
</table>
17. Rates and Charges (Cont'd)

17.4 Other Services (Cont'd)

17.4.8 Public Packet Data Network (Cont’d)

(B) Asynchronous Transfer Mode Cell Relay Access Service (Cont’d)

(4) Optional Features and Functions (Cont’d)

(a) DSL Access Service Connection (Cont’d)

(iii) Per 1 Mbps DSL VCC

<table>
<thead>
<tr>
<th>Monthly Rate</th>
<th>Nonrecurring Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>$89.28</td>
<td>$64.00</td>
</tr>
</tbody>
</table>
### Rates and Charges (Cont'd)

#### 17.4 Other Services (Cont'd)

17.4.8 Public Packet Data Network (Cont’d)

<table>
<thead>
<tr>
<th>Optional Features and Functions (Cont’d)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) DSL Access Service Connection (Cont’d)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(iv) Per MM-VCC</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Monthly Rate</th>
<th>Per 1 Mbps</th>
<th>Per 4 Mbps</th>
<th>Nonrecurring Charge Per MM-VCC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Increment</td>
<td>Increment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$5.87</td>
<td>$11.37</td>
<td>$7.00</td>
</tr>
</tbody>
</table>
17. Rates and Charges (Cont'd)

17.4 Other Services (Cont'd)

17.4.8 Public Packet Data Network (Cont'd)

(B) Asynchronous Transfer Mode Cell Relay Service (Cont'd)

(4) Optional Features and Functions (Cont’d)

(a) DSL Access Service Connection (Cont’d)

(v) Per MM–VCC Design Change

Nonrecurring Charge $6.00

(5) ATM-CRS Term Discount Plan

<table>
<thead>
<tr>
<th>Term Commitment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>36 months</td>
<td>10%</td>
</tr>
<tr>
<td>60 months</td>
<td>20%</td>
</tr>
</tbody>
</table>
17. Rates and Charges (Cont'd)
17.4 Other Services (Cont'd)
17.4.8 Public Packet Data Network (Cont'd)

(C) Ethernet Transport Service

[RESERVED FOR FUTURE USE]
17. Rates and Charges (Cont'd)

17.4 Other Services (Cont'd)

17.4.9 Digital Subscriber Line Access Services

[RESERVED FOR FUTURE USE]
17. Rates and Charges (Cont'd)

17.5 Rate Tables

17.5.1 Multiline Business End User Common Line (MLB EUCL), Special Access (SPA), Local Switching (LS), Local Transport (LT), and Tandem Switched Transport (TST) Rate Bands

[RESERVED FOR FUTURE USE]
17. **Rates and Charges (Cont'd)**

17.6 **DSL Access Services Availability**

[RESERVED FOR FUTURE USE]
17. Rates and Charges (Cont'd)

17.7 Federal Universal Service Charge

[RESERVED FOR FUTURE USE]